# The I list the second s

Apple Macintosh Graphics, Word, Page, and Data Processing **BOOK** from Square One

by William W. Flint

The Mac Idiot Book

Apple Macintosh Graphics, Word, Page, and Data Processing from Square One for the Complete Idiot

by William W. Flint

March 30, 1987



-

#### Copyright © 1987 by Kern International, Inc.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher. Printed in the United States of America.

ISBN 0-940254-72-7

.

# The Mac Idiot Book Table of Contents

.

Ĵ

Read First: What the Right Mac Software can do for you Read Second: How to Use this Book	ii iv
MacPaint	1
Thunderscan	21
MacDraw	29
SuperPaint	45
MacWrite	71
Word	85
ReadySetGo	109
Excel	125
File	149
BASIC	161
The Desktop	171
How to Copy	187
Hurry up Mac	195
Integrating Multiple Applications	205
MacDisasters	215
ImageWriter	225
LaserWriter and AppleTalk	235
Appendix	
Historical Background	247
MacPaint vs MacDraw vs SuperPaint	249
MacWrite vs Word vs RSG	251
File vs Excel	253
Fonts	255
Desk Accessories	263
Index	269

# The Mac Idiot Book

Read First: What the right Mac software can do for you....

Software tells a computer how to do things. A particular piece of software is called an <u>application</u>. Mac applications

come on 3.5" plastic disks that look like this:

When you are ready to begin, you turn Mac on, and insert the disk in the slot under his face.

# Graphics

When you use the computer to draw pictures you are doing <u>oraphics</u>. *MacPaint, MacDraw,* and *SuperPaint* are graphics applications for the Mac. They can draw beautiful pictures to be electronically "pasted" into other documents. Mac remembers *MacPaint* pictures in terms of little dots called <u>pixels</u>. Mac remembers *MacDraw* pictures in terms of sets of lines called <u>objects</u>. *SuperPaint* is a superior synthesis of the two. The differences are further discussed in the appendix.

# Word Processing

When you use the computer to write you are doing word processing. MacWrite and Word are two different word processing applications for the Mac.

MacWrite is a little easier to learn and use. Word 3.0 does more than MacWrite. Most of this book was written using Word. The differences are further discussed in the appendix.

# **Page Processing**

Putting processed words and graphics together in a multi-column newspaper, poster, or newsletter is called page processing.

This very page was set up using ReadySetGo 3.0 (RSG), an excellent page processor.

# **Data Processing**

When you use Mac to manipulate numbers, or organize, update, and store information which might be kept in card files, tables or lists, it is called <u>data processing</u>. *Excel* and *File* are data processing applications.

Excel can manipulate massive quantities of words and numbers. Excel can use the numbers to make attractive graphs, tables, and charts for use in other documents

You can use *File* or other <u>database</u> applications to organize, update, and store types of information which might also be kept in card files, tables or lists. This information can be accessed, sorted, and printed according to any criteria you want to use.

# The Mac Idiot Book Read Second: How to Use this Book

# 1. Get a 3.5" Macintosh disk containing an application you would like to learn.

Also, you may need to get three or more <u>blank</u> 3.5" disks or 3.5" disks which you don't mind erasing, and the **Mac Plus** or **512 Enhanced** *System Tools* disk with <u>finder 5.3</u> or better. If you don't have *System Tools*, you may be able to talk your Apple dealer or a Mac owner into putting a copy of *System Tools* onto one of your blank disks. (Any of the first nine chapters will explain how to tell whether or not you have finder 5.3 or better.) You may need the blank disks to make copies (<u>backups</u>) of your applications and your work. You may need the *System Tools* to update and modify the application copies to suit your particular needs. The "**How to Copy**" chapter tells you how to copy and modify your application master disk to make it usable. A copied, modified version of an application disk is called a <u>work disk</u>. If someone has already blessed you with a work disk, you don't need to do "**How to Copy**" immediately; but...

You will eventually need to make backups because disks "crash" from time to time; and you don't want a disk that crashes to be your only copy of an a document you have spent hours creating, or an application master disk. If you do not consistently make backups for everything you do on the Mac, you will be very sorry, sooner or later.

### 2. Find a Macintosh computer you can use.

Without a working Mac in front of you, much of what you read in this book will be incomprehensible.

Also, a second external disk drive is not mandatory, but it will often make your computing life easier. A printer will be absolutely essential when you come to the point where you want to print what you have created.

#### 3. Turn to the chapter for the application you obtained in step 1.

#### 4. Do what the chapter tells you to do.

Do what the book tells you to do, when it tells you to do it; don't try to read the book like a novel. The book makes sense only if you do what it tells you to do, when it tells you to do it.

# 5. Give yourself time to "play" with an application.

When you get to the end of a chapter, take the time to play and experiment with what you have learned. "Play" is essential to mastering any computer, and you can't hurt Mac with normal mouse and keyboard activity.

"The Desktop" chapter contains a general introduction to the Mac, and it will tell you some other essential details you will need sooner or later. The six chapters after "The Desktop" contain more Mac background informaticn. Read them when you feel the need.





This chapter assumes that you want to do "freehand" computer sketches or drawings that can be "erased" and modified one little bit at a time; or you want to modify pictures that have been created by some other means.<sup>1</sup>

1. In order to get started, you'll need a Macintosh computer, and a work disk with *MacPaint* on it. (If your only copy of *MacPaint* is a master disk, you need to study the **"How to Copy"** chapter first, and make a second work disk copy. It is dangerous to use your only copy of an application: what will you do if you damage it?)

a.) Connect the power cord and mouse to the back of the Mac. If you have an ImageWriter printer, or an external disk drive, or you have access to an AppleTalk system, connect them too. Study the little icons (pictures) above the connectors in the back of the Mac: they will help you to decide which peripheral (accessory) connects where. (If you use it, the AppleTalk connector <u>must</u> be plugged into the port below the printer icon.) Plug your Mac into a surge protector or a grounded (three prong) wall outlet.

b.) Plug the keyboard into the jack at the base of the front of the Mac. Make sure the keyboard's plugs are right side up when you insert them, or you will bend the keyboard plug contacts.

c.) Turn it on. The off-on switch is just above the power cord connection in the back. The Mac will "beep" when you turn it on.

d.) Adjust the brightness. You can feel the knurled brightness knob under the ledge just below the apple logo, on the lower left front side of the computer. Don't turn the brightness any higher than necessary to see comfortably. The lower you keep the brightness, the longer the "picture tube" will last.

2. Hold the *MacPaint* work disk the way it is in this little picture: 🗂 but with your right thumb over the label. Slide it all the way into the disc slot below the screen, until it snaps in and the disc drive starts to click and hum.

The computer is gathering system information from the disk which is necessary for its operation; this process is sometimes called "booting the system." Any disk that "boots the system" is called a <u>startup disk</u>. A startup disk must have a system file on it. If Mac spits the disk out when you try to insert it, it's because the disk doesn't have a system file, or the disk is defective.)

# 1 MacPaint

<sup>&</sup>lt;sup>1</sup>*MacPaint* also allows you to modify pictures commercially created by graphics software vendors; modify real pictures electronically copied using *Thunderscan*; or modify "photos" of the computer screen created by pressing **B** -shift-3.

After about 18 seconds, the disk drive will stop and the screen will look like this:



The <u>menu bar</u> containing the words **file Edit Diew Special** is across the top of the screen. The <u>desktop</u>, which is the rest of the screen below the menu bar, should be blank except for the <u>disk icon</u> and <u>trash icon</u> on the right side. (If the desktop looks instead like the screen diagram below, no harm has been done. Someone left it that way when they last quit.)

3. There should be a <u>pointer</u>: A somewhere on the screen. The pointer moves around on the computer desktop when you roll the mouse around on a real table top. Move the mouse to position the tip of the pointer in the center of the disk icon and "<u>double-click</u>" (tickaticka) the mouse button without moving the mouse. This <u>opens</u> the disk's <u>directory window</u>; and now your screen should look something like this:



The icons in the <u>directory window</u> above represent the computer files which are recorded on the disk:

#### MacPaint 2

a.) The <u>application icons</u> represent files which tell the computer how to do something; in this case, how to do *MacPaint* graphics.

b.) Icons with a "dog-eared" (bent -over) corner represent <u>documents</u> which you create with applications like *MacPaint*.

c.) The <u>system folder</u> contains the <u>System</u> which tells Mac how to be a computer. The system also holds the <u>fonts</u> (type faces); and the <u>desk accessories</u> which are discussed int the appendix. Double-click the System Folder, and open it up:

Ś	File Edi	t View	Special		
	📄 Work	Disk 📃			
		📕 Syste	m Folder		ו≣
	9 items	303	K in disk	97K availat	ole
	System	Finder	Clipboard File	e Scrapbook File	
R	LaserWriter	▶ Laser Prep	Image Writer		<b>♦</b>
R				¢	Ð

d.) The <u>Finder</u> creates the desktop and the icons which allow you to find your way around in the Mac.

e.) The <u>Clipboard File</u> is an electronic "clipboard" which allows you to "carry" words or pictures from one document to another. The clipboard will only hold one picture at a time.

f.) The <u>Scrapbook File</u> is a place you can store words and pictures to use over and over in different documents. The scrapbook will hold many different pictures at once.

g.) The <u>LaserWriter</u> and <u>ImageWriter</u> are printer "drivers." If you want the computer to print documents on paper, you must have a driver for the printer you want to use. If you will be the first to use a LaserWriter printer after it has been turned on in the morning, you will also need a <u>Laser Prep</u>. If the printer driver you want is missing, see the **"How to Copy'** chapter. 4. Close the <u>system folder</u> window by putting the tip of the pointer in the <u>close box</u>, and clicking once, without moving the mouse. (This is called "<u>clicking on</u>" the close box.)

Note: The box in the lower right corner of each window is called a "Size Box" If you put the tip of the pointer in it, and then hold the mouse button down while you "drag" the size box, you can change the shape of the window. Also, you can move the entire window by using this same strategy to "click and drag" the title bar around. This manipulation of windows can be quite useful when you are trying to arrange things so that you can see the contents of more than one window at once. Some windows have a "zoom" box in the their upper right corner. If you click on it, it will "toggle" the window between full size, and some other size you may have selected with the "Size Box."



5. Click and hold the mouse button, while you attempt to drag down the word View in the menu bar. A list should appear beneath it. The word View will not drag, but as you pull the pointer down, each line in the list is highlighted (blackened) in sequence. When the line **by Size** is highlighted, release the mouse button. (This process is called "pulling down" View to by Size.) The icons in the directory window should change into a list of the files and applications arranged in order of size, largest first. (The size is measured in "k." You may have to adjust the size box to see it.) If you wish, you can instead rearrange the list alphabetically by pulling down View to by Name, etc. Try it, then change the window back to by Icon.

6. The Apple menu, **(**, lists <u>desk accessories</u> on your disk, such as the **Scrapbook** and **Chooser**. Use **Chooser** before you begin, to prepare Mac for the kind of printing he will do when you are ready to print your creation: pull down **(**) to **Chooser**. When the Chooser window appears....

a.) If you will be using a LaserWriter or an ImageWriter connected to the AppleTalk network, <u>click on the "active" button</u>, the printer icon, and the printer's name, if they do not "highlight" when you click on them, then something is wrong.



If the printer icon isn't there, you need to go back to step 3g If the printer's name isn't there, or if it refuses to highlight (white print on black) when you click on it, then the printer is not turned on; or the printer and(or) your Mac are not connected to the AppleTalk network.

b.) If you will be printing on an ImageWriter connected to your Mac only, click the "Inactive" button for AppleTalk; then click on the ImageWriter icon, and click on the icon of the printer port to which the printer is connected. You can tell which port by looking to see where the ImageWriter plugs into Mac's back.



c.) Click the Chooser's close box.

Note: If your Chooser doesn't look like the one in the diagram, pull down **s** to About the Finder. A little card should appear that tells you the finder is number 5.3. (If it's not, you need to replace the system, finder, and printer driver icons. "How to Copy" tells how to to this.) Put the little card away by clicking on it.

7. Double click the *MacPaint* application icon. When the *MacPaint* window.opens, it should look something like this:



8. Play with the text.

a.) Click on the text tool, [A]. Click again on the upper middle of the screen.

b.) Type "Apple." The <u>menu bar</u> you see across the top works the same way as the menu bar on the desk top. Pull down Font Size to 72. Pull down Style to Outline.

c.) Click on the <u>grabber</u>, <u>Click</u> and drag any where on the <u>worksheet</u> to pull "Apple" to the center of the <u>window</u>.

d.) Click a <u>pattern</u> other than black from the <u>Pattern Palette</u>. The <u>Selected Fill</u> <u>Pattern</u> should change to the pattern you chose.

e.) Click on the <u>paint bucket</u>, Dut the very tip of the spilling paint in the hollow space inside of the letter "!" in "Apple". Click <u>ONCE</u>. The hollow space should fill with your selected pattern. If the paint "spills" pull down Edit to Undo.

f.) Click on the eraser, . Erase (click and drag over) the letter "s" in "Apple".

MacPaint 6

g.) Click on the <u>selection rectangle</u>. Click and drag from a point above and to the left of "Appl" to a point below and to its right. There should be an animated dotted line rectangle (like an old theater marquee) around the word "Appl".

h.) Pull down Edit to Rotate. What happened? Pull down Edit to Flip Vertical. What happened? Pull down Edit to Flip Horizontal. What happened?

i.) Click on the <u>lasso</u>, Carefully click and drag the tiny little piece of rope that dangles off of the lasso's knot, in a circle completely around the "A" in "Appl". Now the animated dotted line should "outline" the letter "A".

i.) Do not click yet, but position the lasso inside the letter "A". The lasso should turn into a mouse arrow. Click and drag the "A" from place to place.

j.) Press the option key, and drag the "A" some more. There should be <u>two</u> letter "A's" now. Click the fattest line from the <u>Line and Border Widths</u> box.
Press <u>both</u> option and **B** (command) while you drag the "A" around some more. A whole trail of "A's" should appear.

The width of the line checked in the <u>Line and Border Widths</u> box controls the spacing between the "A's".

k.) Pull down Edit to Cut. Pull down Edit to Paste. What happened? Drag the selected (lassoed) "A" around some more. Press backspace. The selected "A" is gone for good. Double-click the eraser. Everything is gone for good.

Everything you did with the "A" except steps a and b can be done with <u>any</u> image in the *MacPaint* drawing window. Now lets look at some other tools:

9. Learn about the pencil and FatBits:

a.) Click the pencil, [n]. Write your name by clicking and dragging the pencil in the window. You will get better with a little practice.

b.) Place the tip of the pencil over a particular portion of your name which you would like to see in more detail. Press the command button and click. (**B** - **click**) Now you are in <u>FatBits</u>. FatBits allows you to see and modify your picture one <u>pixel</u> at a time!

c.) You can use your pencil in FatBits to click pixels in and out of existence. Try it! The little box in the upper left hand corner of the window shows you an actual-sized picture of what is going on.

If you start to drag the pencil when it is on white it will make black. If you start to drag the pencil when it is on black it will make white. This is true whether or not you are in FatBits. All of the other tools will work in Fat-Bits too.

d.) Pressing the **Option** button will toggle the pencil into a grabber. Then you can use it to drag another portion of your FatBits drawing into sight.

e.) Double-click on the pencil to get out of FatBits.

10. Try the paint brush and make some custom erasers:

a.) Click on a different pattern. Click on the paint brush Paint (drag) a line under your name with it.

b.) Double-click the paint brush. Click on a different brush shape in the box that appears. Try painting with your new brush shape.

c.) Click on the white pattern. Now your brush is a custom-shaped eraser. You can make an eraser one pixel wide if you click the one pixel brush shape.

d.) Or if you double-click the brush, and pick the biggest square brush shape, you will have a transparent eraser that will allow you to see what you are about to erase before you click.

11. Pick another pattern if you like. Click on the spray can Sprav paint a rectangle around your underlined name.

You can make the paint transparent if you press the **36** (command) button while you spray. This works for the paint bucket and brush too.

12. Click on the hollow rectangular enclosed shape

<u>tool</u> ,L	
----------------	--

a.) Make a second rectangle around the spray painted rectangle. (Click and drag, upper left to lower right.)

b.) Try a <u>filled</u> enclosed shape tool. Make a filled shape.

c.) Click another border width, and try yet another enclosed shape tool.

MacPaint 8 The border width you select controls the widths of lines made by <u>any</u> line-making tool (including the enclosed shape tools) except the pencil. If you hold the option button down while you use any of these tools, the border will be in your selected pattern instead of black.

If you want a patterned shape with <u>no border</u>, click on the dotted line "....." border. It represents no border at all.

The bottom two "enclosed" shape tools are not restricted to enclosed shapes. The heart-shaped tool allows "freehand" lines of any selected width or pattern. The "crushed box" (polygon) tool allows you to draw a series of connected lines: click each time you want to change direction. Double-click when you are done.

13. In order to do things to an image, you select parts of it with either the lasso, by or the selection rectangle, You can do the following things to an image when it is selected with either of these tools:

a.) Click and drag the image anywhere in the window.

b.) <u>Duplicate it</u>: press option as you click and drag; click again each time you want to leave another copy of the image in your trail.

c.) <u>Leave a continuous trail of images</u>: press both option and **36** (command) as you click and drag. The spacing between the images is controlled by the line width in the <u>Line and Border Widths</u> selection box.

d.) <u>Paste your drawing elsewhere</u>: you can pull down **Edit** to **Copy** or **Cut**. Then use the grabber to move the worksheet; or quit and move to *Word* or *Mac-Paint*. Then you can pull down **Edit** to **Paste**, and paste your drawing wherever you like.

i.) When you **Paste** within *MacPaint*, you can make the item you have **Cut** conform to a particular shape by making a new selection rectangle to "receive" the pasted drawing.

ii.) If you have **Cut** or **Copied** text from *MacWrite* or *Word*, and you want to paste it in *MacPaint.*, you can prepare a selection rectangle to receive it. When you paste, the text will "flow" to fit the selection rectangle. You can drag the corners of the rectangle to change its shape, and the text will "reflow" to fit the new shape. You can select new fonts, sizes and styles while the selection rectangle is "active" and the text within will change accordingly! But <u>beware</u>, once your pasted text is "deselected" you cannot select it again, so be sure to do it right the first time!

e.) Eliminate the selected image by any of the following:

i.) Pull down Edit to Cut. This puts it in the "clipboard" and you can bring it back later by pulling down Edit to Paste. The catch is that you can only have one thing in the clipboard at a time. So if you like what's in the clipboard, and you don't want to eliminate it with a second Cut, do either of the next two as an alternate:

ii.) Pull down Edit to Clear.

iii.) Press backspace.

1

14. But there are big differences between the lasso and the selection rectangle:

a.) After you have clicked on the lasso, you can click and drag it in a circle around the target object. The lasso "tightens" to select <u>only</u> the target object.

Actually, you do not have to make a complete circle with the lasso: it is sufficient to get it about three-fourths of the way around the circle. (The tiny little piece of rope that dangles off of the lasso's knot is the "hot" point that generates the lasso "rope".)

b.) You can drag lassoed objects over the top of patterns or other objects, so they appear to be "behind" the lassoed object.

<u>To superimpose letters</u> such as Q, R, O, P, over a pattern or other objects, so they will show through the interior portion of the letter, you must intentionally create a "leak" in the letter, so the pattern beneath can "leak" through to the enclosed space within the letter. Then select the letters with the lasso as you normally would and drag them over the pattern.

c.) After you have clicked on the selection rectangle, iou can click and drag from upper left to lower right to make a selection rectangle around a target object. You are stuck with the rectangular shape and it selects <u>everything</u> inside the rectangle, including the empty space.

So you cannot use the selection rectangle to superimpose one object over another. The "empty" space will obliterate any pattern or other objects which are "under" the rectangle.

d.) However, objects can be rotated, flipped, stretched, and have their edges traced, when they are selected with the selection rectangle. The lasso can't do any of these things. You already saw how to rotate and flip in step 2. Here's how to stretch images, and trace edges:

Press command and move the mouse pointer just inside the selection rectangle, then click and drag to stretch the selected object. If you pull at

a corner, you can stretch it in two directions at once. If you want to maintain a constant length to width ratio, press <u>both</u> command and shift while you stretch.

If you want to stretch an object to full page 8" X10" size, **Cut** and **Paste** it into *Word* or *MacWrite*. Then you can stretch it to the max by dragging on the "handles"; the tiny black squares in the corners.

<u>Trace Edges</u> is awesome! Try it and see why! Select an object with the "marquee," then pull down Edit to Trace Edges or use **E**\_-E. Try shift-**E** for shadows.

But why should I continue to run on this way; you get the idea! People seem to gravitate naturally to *MacPaint*; and only few minutes of instruction seem necessary in order to learn most of *MacPaint's* fundamentals independently. Go ahead and play with *MacPaint* on you own; that's the best way to learn about it. But when you're done playing, come back and read the rest of this chapter. There are a few other facts that may be worth knowing:

15. When you start to create something you think you might want to save, pull down **File** to **Save**. A <u>dialog box</u> will appear with the <u>insertion point</u> winking in the small rectangle under the words "save current document as:" Type the name of the paper (document) you are going to write, the way you want it listed in the computer's directory (Make the name short, but memorable). The letters will flow out behind the moving insertion point. Click on the save button. The dialog box will go away, and the name you have selected will take the place of "untitled" on the <u>title bar</u>.

Warning: Save what you write. If you don't, you will probably lose all your work. To save, pull down File to Save every ten minutes or every time you get up to get coffee or go to the bathroom. The disk drive will hum for a few seconds while the computer stores your work on the disk. It's cheap insurance!!!

Note: if you want to change the title of a document, do it when you are back on the desktop. Click and drag through the title under the document icon. The mouse pointer will turn into an I-beam. Now type the new name. Click elsewhere on the desktop to make the change permanent.

16. Pull down **File** to **Page Setup...** A dialog box titled **LaserWriter** or **ImageWriter**, depending upon which printer you selected with the **Chooser**, should appear. If you don't want to change anything, click the "ok" button, and the dialog box should go away.

Note: If you you are using the <u>ImageWriter</u>, you should click **Tall Adjusted** in the **Page Setup...**dialog box. (This degrades the print quality slightly, but greatly improves the picture quality.)

17. When you are ready to quit <u>DO NOT</u> turn off the computer. If you turn off the computer without going through proper shutdown procedure, you may lose hours of work, or even damage your disk.

11 MacPaint

a.) When you are ready to quit, pull down **File** to **Quit**. If you have not saved already, a dialog box will ask you if you want to save your work. Click "yes" or "no." After the disk drive hums briefly, the desktop will reappear. If you can already see the desktop, skip this step.

b.) Once you are back to the desktop, the best way to quit is to pull down **Special** to **Shut Down**. This ejects all disks and <u>resets</u> the computer. If you are done, you can turn off the computer; or if you want change startup disks and do something totally different with the computer, you can reboot with a different startup disk.

c.) You can also quit by dragging the disk into the trash. After Mac spits out the disk, turn him off.

d.) If you want to keep the present disk as the startup disk, and keep its directory window on the screen; perhaps while you copy a file from one disk to another, select (click on) the disk icon, and pull down **File** to **Eject**, or type **B** -E. Mac will spit out the disk that was selected.

18. When you want to go back to work on the same drawing, boot the system, and open the directory window. There should be a document icon there with the name you gave your paper in step 15. Reopen your drawing by double-clicking that icon.

19. When you are ready to print; Save; then do the following:

a.) Make sure the printer is turned on:

i.) If you are using a LaserWriter, the On/Off switch is on the left end, just around the backside corner from the Power Cord Socket:



The green light on the front flashes as the LaserWriter warms up; then the yellow light starts flashing to show that the LaserWriter is processing a test print. The LaserWriter should deliver its own test print within two minutes. The yellow light will go out when the LaserWriter delivers the

# MacPaint 12

1

test print. When the green light is on steady, the LaserWriter is ready to print.

ii.) <u>If you are using an **ImageWriter**</u>, turn it on by depressing the on/off button, which is on the right side of the ImageWriter's top. Three green lights adjacent to the on/off button should come on. If you are using an old ImageWriter, there will be only two green lights. (If you don't get the right number of green lights, or the ImageWriter needs paper, and you don't know what to do, read the "**ImageWriter**" chapter.)

b.) Pull down File to Print. When the dialog box appears click the "ok" button. It may take a minute or two, but if all goes well, Mac ought to start printing.

c.) In case of difficulty...

i.) ...if nothing happens, you may have skipped steps 3, 6, or 9: that is, you must have printer driver icon for the printer you intend to use present in your system folder; the AppleTalk "on-off" switch must be set the right way and the appropriate printer and port must have been selected in **Chooser**; and **File** must have been pulled down to **Page Setup...** 

ii.) ...if something goes wrong during the ImageWriter printing process, first. turn off the printer by pressing its on/off button; then press **%** - . (command-period). (Mac will tell you to stop the printing by pressing **%** - . only, but this turns out to be much too slow.)

20. <u>To avoid excessive use of the mouse</u>: Use the keyboard command letters instead, which appear to the right of many of the options in the pull down menus. There are dozens of other keyboard commands as well, which are listed in the **"Hurry up"** chapter of this book, and the Apple literature.

21. <u>There are three ways to move your *MacPaint* graphics into other documents</u>: you can use the clipboard, **Art Grabber** +, or the **Scrapbook**.

a.) <u>Clipboard</u>: when the other document is on the same disk with your *MacPaint* creation:

i.) Pull down Edit to Copy. Quit MacPaint.

ii.) Open your other document; click where you want the graphic to be, then pull down **Edit** to **Paste**. Your graphic should appear.

b.) <u>Art Grabber +</u>: If the graphic already exists on your disk as a *MacPaint* document, you can use **Art Grabber** to "grab" it while you are working within the other document.

i.) Pull down **d** to **Art Grabber+**. The word "**Grabber+**" will appear on the menu bar.

ii.) Pull down **Grabber+** to **Open**. A directory of your *MacPaint* documents will appear. You may need to open a folder to get at them. Double click on the title of the *MacPaint* document you want. It will appear in the **Art Grabber** window.

iii.) Click and drag the "+" mouse pointer from the upper left corner to the lower right corner of the part of the *MacPaint* document you want to use. Pull down **Edit** to **Copy**. Click the close box of the **Art Grabber** window.

iv.) Click where you want the graphic to be. Pull down Edit to Paste.

c.) <u>Scrapbook</u>: when the other document is on the same disk with your *Mac-Paint* creation:

i.) Select the portion of the graphic which you want to transfer; and **Cut**(or **Copy**) it.

ii.) Pull down **d** to **Scrapbook**, and when the scrapbook window opens, **Paste** your item. Click the close box.

If there are several different portions you would like to paste, repeat steps i. and ii. Each time you paste into the scrapbook, another page is created. This is an advantage over the clipboard, because the clipboard will only accept one portion at a time. Once you have pasted something into the scrapbook, it is safe; you can do anything else you might want to do: use the clipboard, quit for the day, or take a vacation. What you paste in the scrapbook is safely stored on the disk, it will not disappear when the power goes off, like things which are stored in the clipboard.

iii.) When you are ready to paste the **Scrapbook**-stored graphic into the other document, pull down **(** to **Scrapbook**; and, when the scrapbook appears, page through it, by clicking on the scroll bar below its window, until you find the graphic you want.

iv.) Cut (or Copy) the item from the scrapbook. Click the close box.

v.) Click in the other document where you want your *MacPaint* graphic to be, and **Paste**.

22. <u>To save a "changed" document without destroying the original</u>: pull down **File** to **Save As...**. Type in the new name for your changed document. Click the "save" button.

#### 23. Disasters, problems and solutions:

a.) If you make a mistake, you can undo your <u>last</u> action by pulling down **Edit** to **Undo**. But the catch is <u>if you make even **ONE**</u> attempt to fix your mistake before you try **Undo**, all you can "Undo" is your attempt. So when you screw up, <u>get your hands off of the mouse and the keyboard</u>. Stop, think, be cool. Then undo.

b.) If you pull down File to Save every ten minutes or so, and a disaster happens, you can pull down File to Revert, and your picture will "revert" to the way is was the last time you saved it

c.) Leaks can be a disaster: If you are attempting to fill the interior of an object from the paint bucket, and the object leaks, you will cover your entire drawing with the pattern from the bucket. If you accidentally click the mouse more than once (and this is not unlikely, because the paint bucket often suffers from "delayed action"), you will not be able to use **undo** and your drawing will be destroyed. (Unless you have saved recently!)

d.) Do not use the paint bucket while in **FatBits**. It's too easy to spill it through a leak without knowing it. If this happens, your work will be ruined. (Unless you have saved recently!)

e.) <u>If there is a power failure</u> while you are working in *MacPaint.....*, after the power comes back on, and you have rebooted the system and opened the directory window:

do not trash any unusual icons that may have appeared;

do not attempt to restart by clicking your MacPaint file icon.

Instead, double-click the *MacPaint* application icon. With luck, your work will reappear under the file name "rescue." Save and continue working.

f.) <u>After you have pasted a drawing in *Word* or *MacWrite*: be careful not to type anything while the drawing is still selected. It will disappear.</u>

g.) If your mouse seems to have become jerky and insensitive, the **Grid** probably got turned on by accident. Pull down the **Goodies** menu and see. If **Grid** has a check next to it, pull down **Goodies** to **Grid**, and turn it off.

24. For precise positioning of letters and parts of your drawing:

a.) Pull down Goodies to Grid. This sets up invisible grid lines on MacPaint, and the text, etc. will align only on the grid lines.

b.) If you use the shift key when you drag, you can only drag horizontally or vertically; you can only draw lines in directions that are whole number multiples of

# 15 MacPaint

45<sup>o</sup>, and you can only make squares and circles (as opposed to rectangles and ovals). When used this way, the shift key is said to <u>constrain</u> the tools.

This is particularly valuable when you want to erase next to a long horizontal or vertical edge: Position the eraser exactly where you want to begin; then press the shift key, while you click and drag in the general direction you want to go. The eraser will move in a <u>precisely</u> vertical or horizontal direction, and your shaky human hand won't accidentally wipe out part of the edge.

#### 25. If you are typing text in MacPaint :

a.) Make sure you have the font, style, and size the way you want them before you "deselect" (click on something else). You can't change them later.

b.) If you want to change to a different font or style or size, as you are typing text, <u>press</u> Enter<u>then</u> change the font; otherwise all your text will change to the newly selected font.

c.) You can pull down **Style** to **Align Left, Center,** or **Right** to get the text to be centered, say for a title page; or aligned on the left margin, etc.

d.) You can increase the font size without leaving the keyboard by typing "**%** ->" (command->). Guess how to <u>decrease</u> the font size!

But there is a problem with this: the best looking fonts are the ones that appear in **outline** form when you pull down the **Font Size** menu (These are the fonts that are actually installed in Mac's system file.). If you use the above keyboard command to change font sizes, there's no quick way to tell whether you are using the installed (good-looking) fonts.

e.) You can change fonts themselves by typing **36 -shift->**.

f.) When you **Paste** text into *MacPaint* that was **Cut** from *Word* or *MacWrite*, you lose the formatting. That is, all the special fonts, sizes, and styles are wiped out during the transfer. You can get around this by directly converting your-*Word* or *MacWrite* screen into a *MacPaint* document (titled "screen 0") by typing **36** -shift-3. Cut and paste what you want from "screen 0."

g.) If you want a "tighter" spacing for shadowed text, or a "3-D" effect, type **\* -** shift-E, while your plain text is selected.

#### 26. When you draw lines in MacPaint :

a.) All lines, no matter how you draw them, except pencil lines can be drawn in the selected pattern instead of black: press option when you draw the lines.

b.) You can pour paint "into" <u>any</u> line, including pencil lines, by precisely positioning the tip of the paint "drip" from the paint bucket on the line before you click. This may take some practice.

c.) Shift constrains the direction of the line and polygon (squashed box) tools to multiples of 45 degrees. Shift constrains the direction of the pencil to horizontal and vertical.

But you really don't need to constrain the line or polygon tools to draw multiples of 45 degrees: you can "eyeball" it. The only truly "straight" lines in *MacPaint* are multiples of 45 degrees; all others have a "stair step" look to them. All you have to do is twiddle with the endpoint of the line until the line looks straight. When it looks straight, it is at a multiple of 45 degrees.

#### d.) To draw dotted lines:

Method 1: Lasso a dot, and drag it with the **3** -option buttons pressed. To draw horizontal and vertical lines, drag the dot with the **9** -option-shift buttons pressed. This method takes practice to get uniform dot spacing.

<u>Method 2</u>: Select a diagonal strip pattern. Double-click the brush. Click on the single dot brush pattern. Drag the brush wherever you want dotted lines. To draw horizontal and vertical lines, drag the brush with the **shift** button pressed. This method works best for horizontal and vertical lines, and will not work at all for diagonal lines.

#### 27. To draw concentric circles (one circle centered inside of another):

a.) Click the pencil, then click a single dot. This dot will be the upper left corner of an imaginary box which exactly contains the outer circle.

b.) Click the circle tool.

c.) Position the crosshairs exactly on the dot. The crosshairs will be white in the center if they are exactly on the dot.

d.) Press **shift** and drag the outer circle from upper left (on the dot) to lower right.

e.) Click the line tool.

f.) Position the crosshairs exactly (white center) on the dot again.

g.) Press shift and drag a diagonal, 45 degree line from upper left (on the dot) to lower right. The line will pass through the center of the circle.

#### 17 MacPaint

h.) Now decide where on the diagonal you want to have the upper left corner of a smaller imaginary box that will exactly contain the inner circle. Click the pencil. Then press the **X** button and click the pencil at your chosen point to go to FatBits.

i.) While you are in FatBits, click a one pixel gap in the diagonal line at your chosen point. Count how many pixels the gap is from from the outer circle.

j.) Press option and use the grabber to drag the worksheet until the opposite side of the outer circle is visible in FatBits. Count the same number of pixels from this side to the circle, and click a one pixel gap there. Double-click the pencil to get out of FatBits.

k.) Click the circle tool.

I.) Position the crosshairs exactly on the upper left gap. The crosshairs will be black in the center if they are exactly on the gap.

m.) Press **shift** and drag the new inner circle from upper left (on the gap), until the crosshairs are on the lower right gap.

28. You can <u>edit a pattern</u> by double-clicking on the pattern sample you would like to change, and playing with the FatBits in the pattern edit box which appears.

a.) If you don't like your creation, click the Cancel button.

b.) If you want to use your created pattern for this work session only, click "ok". But the pattern will revert to the original when you quit from *MacPaint*.

c.) If you create a pattern you especially like, cut and paste a sample of it to the scrapbook. To get it back again, cut and paste the pattern from the scrapbook into the *MacPaint* window, and click on it while the pattern edit box is open.

29. <u>To see the entire 8" X 10" worksheet</u>, **Show Page** by double-clicking on the grabber. The dotted-line rectangle in the little picture of the worksheet which appears, represents the present position of the drawing window.

a.) You can move the drawing window's location on the worksheet by clicking and dragging anywhere <u>inside</u> the dotted-line rectangle.

b.) You can slide the whole worksheet around, to center your work on the the page etc., <u>but beware</u>: if you "spill" your work off the edge of the page, it will be lost forever. (Unless you click the **Cancel** button while the worksheet is still displayed!)

c.) Click "ok" to escape from Show Page.

30. <u>To save space on your *MacPaint* disk</u>, you can combine many little **MacPaint** pictures on one 8" X 10" worksheet. List the names of the little pictures under **Get Info** for the file icon of that worksheet. If you want a picture "catalog" of the whole page, do a "**S** -shift-3" while in **Show Page**, then modify and use the "screen 0" *MacPaint* document that is produced as your catalog.





This is a digitized photograph of my mother, taken when she was about 18 years old:



I digitized it by inserting a Xerox copy of the old photograph into an ImageWriter printer which had a *Thunderscan* <u>Scanner Cartridge</u> installed, rather than a normal ribbon cartridge. The Mac had *Thunderscan* software in it, which ordered the ImageWriter/Scanner combination to scan (in effect, "look at") the photo line by line. The differences in light intensity which the scanner saw were recorded in the Mac as a <u>grey</u> <u>map</u>: a collection of thousands of dots. The collection was enhanced by the *Thunderscan* software, then saved as a *MacPaint* document, which I pasted into this chapter.

If you want to use *Thunderscan* to digitize photos or line drawings for pasting into *RSG, Word,* or *MacWrite* documents, here's what to do:

1. Hook up the cables that connect the Scanner Cartridge, Adapter Box, ImageWriter,

and Macintosh. If you are using a Mac Plus, a Power Converter must also be connected:



2. Install the Scanner Cartridge in the ImageWriter as follows:

a.) Unplug the ImageWriter, turn off the Mac; remove the top forward cover of the ImageWriter. Make sure the <u>Bale</u> is against the <u>Platen</u>:



b.) Gently grasp the Print Head (do not grasp the cartridge) and move it to the middle of the carriage.

c.) Remove the ribbon cartridge from the ImageWriter by gently prying out the tabs on each side, and lifting the cartridge out.

d.) Take the Scanner Cartridge in both hands, and with the nose of the cartridge pointed toward the Platen and slightly down (so it doesn't bump the Bale), guide it onto the ribbon deck and click it into place. The two Tabs should snap into the notches on the sides of the Scanner Cartridge: be sure you hear two distinct clicks.

e.) Grasp the print head, and gently move it as far to the right and as far to the left as it will go, making sure that nothing interferes with its travel, and that the cable doesn't catch on anything. Leave the print head positioned to the far left.

f.) If this is an ImageWriter II, turn it on, being sure to keep your hands out of the insides. The scanner will travel to the left, then to the center, pivot down, then back up. (This insures that the scanner is properly seated.) Turn the ImageWriter II off.

Get the modified ImageWriter cover:

a.) If you are using an old ImageWriter, this will be an entirely different cover, made specifically for the Thunderscan.

b.) If you are using an ImageWriter II, you will need to remove the clear plastic portion of the cover yourself, by <u>gently</u> pressing the two clear plastic tabs on the underside of the cover inward and down with your thumbs.

c.) Put the cover in place on the ImageWriter.

4. Find the fuzzy piece of Velcro about 12 inches down the cable that comes from the scanner. Press it against the other piece of Velcro on the front center of the ImageWriter, to keep the cable in place during scanning.

Note: If there is no Velcro there, you will need to get a piece of rough (not fuzzy) Velcro with an adhesive back, and follow the directions for installation in the Thunderscan User's Guide. If you are using an old ImaneWriter, you will probably need to obtain and install the the white timing tape, which is also explained in the Thunderscan User's Guide.

5. Find the paper release lever on the outside of the ImageWriter case, and set it in the friction feed position:





23 Thunderscan

6. Insert your original to be digitized so that the left edge of the paper is approximately three eighths of an inch from the left edge of the Platen, and the Bale is about one half inch above the top edge of the picture to be copied.

7. Find a work disk with *Thunderscan* on it. Turn on the Mac, and insert the disk. Double click the disk icon to open the directory window, then double click the *Thun-derscan* application icon. (If you don't know what "open window" or "icon" etc. mean, then you need to study "MacPaint" or one of the other application chapters! If your only copy of *Thunderscan* is a master disk, and not a work disk, then you need to study the "How to Copy" chapter.) When *Thunderscan* opens, it will have a menu like this:

# 🗱 File Edit Scanner Tools

Pull down Scanner to Configuration.... You will get a dialog bog like this.

ெ	ThunderScan™ Configuration Settings		
🛄 15" Printer		🛛 Edge Sensing	
	🔲 Bi-Directional	🗌 Modem Port	
	🛛 Use Gray Map	🗌 High Contrast	
	🗌 Trim White	🗌 Faster Scan	
	🛛 ImageWriter II	🛛 Paper Adjust	
	Slower Scan Mag:	25	
	DK	R Cancel	

Set it as shown above for the ImageWriter II. For the old ImageWriter, <u>unclick ImageWriter II, unclick Paper Adjust</u>, and click **Bi-Directional**. Now click "ok".

8. Set the switch on the side of the Adapter Box to "SCAN".

9. Focus the Scanner as follows:

a.) Turn the ImageWriter off and remove the forward printer cover again. Gently move the Print Head until the Scanner's nose is pointing at the whitest area of the paper in the ImageWriter.

b.) Pull down **Scanner** to **Focus...** Turn the thumb wheel on the top of the scanner until the number at the bottom of the focus dialog box reaches its maximum value. Click "done".

c.) Put the cover back on, turn the ImageWriter power on. Make sure you have three green lights if its an ImageWriter II, or two green lights if its an old ImageWriter. If you don't have enough green lights, press the select button on the ImageWriter.

10. Pull down Scanner to Scan.... You will get a scan dialog box like this:



a.) Click and drag from upper left to lower right across the page map, to make a dotted-line rectangle around the area of the paper in your ImageWriter that you would like to scan.

b.) Unclick the Bi-Directional box if you are using an ImageWriter II.

c.) Set the Magnification by dragging the Magnification scroll box. The greater the magnification, the more machine memory you will use, the longer it will take,

and the higher will be the quality of your picture. If you use too much, the machine will let you know. I'd use 100% to start.

11. Click on the "New Scan" button. After some preliminary jerks, starts, and delays, the <u>image pane</u> will begin to fill with your picture, as the picture is scanned line by line. (If everything is plugged in, turned on, and nothing happens, try clicking the "Pause" button.)

	Untitled
Light Intensity Gauge	Light
Lipes to go: 187	Dark Contrast = 100%

While the ImageWriter scans your picture, lets look at some of the features of the main *Thunderscan* screen pictured above.

a.) The tool palette, to the left of the image screen will allow you to modify the picture when the scanning is finished: it is no coincidence that the tools look like *MacPaint* tools. To use them, you will click and drag across the area you wish to alter. The hand will allow you to slide the picture around beneath the Image Pane, so you can see all of the picture. The dotted line selection box will allow you to select particular portions of your picture for modification. The pencil and eraser work just like their real counterparts.

b.) The <u>Light Intensity Gauge</u> shows you what the scanner sees as it scans each line. This will help you adjust the <u>Contrast</u> and <u>Brightness</u> controls when you modify the picture for best results later.

Thunderscan 26

c.) The **"Pause"** button lets you pause in the middle of a scan without having to start over. Pushing it again allows you to resume. Don't click the **"Stop"** button unless you really want to quit and start over.

12. When the scan is complete, pull down **File** to **Save as Scan Image...**. Name picture something memorable, and click the "Save" button.

13. Click on the selection box. Use it to select a small portion (say 1 by 2 inches) of the picture to experiment with. Change the settings of the contrast and brightness controls. Pull down **Scanner** to **Halftone**. Watch what happens. Try to adjust the contrast and brightness so that the light intensity is scattered from top to bottom of the light intensity gauge without "topping out" or "bottoming out."

14. Repeat this process until you think you've found the best possible contrast and brightness settings; then pull down **Edit** to **Select All**. Pull down **Scanner** to **Halftone** again. This time you will modify the whole picture.

15. You can twiddle with highly detailed parts of the picture by pulling down **Edit** to **Fat Bits**; and then using the pencil to click out or click in the individual dat bits that make up the picture. A little picture in the upper left corner of the image pane shows the full size effect of your work in fat bits. Pull down **Edit** to **Fat Bits** again when you are done.

16. If you need to erase a large area, select it; then pull down Edit to Clear.

17. When your digitized picture is as good as you can make it, **Save as Scan** again; then pull down **File** to **Save as Paint Doc...**. This saves your *Thunderscan* image as a *MacPaint* document, allowing you to do anything with it that you can do with any other *MacPaint* document.

The Mac (	Ō	Idiot	Book
MacDraw			



This chapter assumes that you want to be able to draft advertisements, floor plans, or other precisely scaled graphics of the type that once were prepared at a drafting table or layout board.

1. In order to get started, you'll need a Macintosh computer, and a work disk with *MacDraw* on it. (If your only copy of *MacDraw* is a master disk, you need to study the **"How to Copy"** chapter first, and make a second work disk copy. It is dangerous to use your only copy of an application: what will you do if you damage it?)

a.) Connect the power cord and mouse to the back of the Mac. If you have an ImageWriter printer, or an external disk drive, or you have access to an AppleTalk system, connect them too. Study the little icons (pictures) above the connectors in the back of the Mac: they will help you to decide which peripheral (accessory) connects where. (If you use it, the AppleTalk connector <u>must</u> be plugged into the port below the printer icon.) Plug your Mac into a surge protector or a grounded (three prong) wall outlet.

b.) Plug the keyboard into the jack at the base of the front of the Mac. Make sure the keyboard's plugs are right side up when you insert them, or you will bend the keyboard plug contacts.

c.) Turn it on. The off-on switch is just above the power cord connection in the back. The Mac will "beep" when you turn it on.

d.) Adjust the brightness. You can feel the knurled brightness knob under the ledge just below the apple logo, on the lower left front side of the computer. Don't turn the brightness any higher than necessary to see comfortably. The lower you keep the brightness, the longer the "picture tube" will last.

2. Hold the *MacDraw* work disk the way it is in this little picture: but with your right thumb over the label. Slide it all the way into the disc slot below the screen, until it snaps in and the disc drive starts to click and hum.

The computer is gathering system information from the disk which is necessary for its operation; this process is sometimes called "<u>booting the system</u>." Any disk that "boots the system" is called a <u>startup disk</u>. A startup disk must have a system file on it. If Mac spits the disk out when you try to insert it, it's because the disk doesn't have a system file, or the disk is defective.)

After about 18 seconds, the disk drive will stop and the screen should look like the picture at the top of the next page:



The <u>menu bar</u> containing the words **G** File Edit Uiew Special is across the top of the screen. The <u>desktop</u>, which is the rest of the screen below the menu bar, should be blank except for the <u>disk icon</u> and <u>trash icon</u> on the right side. (If the desktop looks instead like the screen diagram below, no harm has been done. Someone left it that way when they last quit.)

3. There should be a <u>pointer</u>: A somewhere on the screen. The pointer moves around on the computer desktop when you roll the mouse around on a real table top. Move the mouse to position the tip of the pointer in the center of the disk icon and "<u>double-click</u>" (tickaticka) the mouse button without moving the mouse. This <u>opens</u> the disk's <u>directory window</u>; and now your screen should look something like this:



The icons in the <u>directory window</u> above represent the computer files which are recorded on the disk:

MacDraw 30

a.) The <u>application icons</u> represent files which tell the computer how to do something special; in this case, how to be a *MacDraw* graphics program.

b.) Icons with a "dog-eared" (bent-over) corner represent <u>documents</u> (drawings) which you create with applications like *MacDraw*.

c.) The system folder contains the <u>System</u> which tells Mac how to be a computer. The system also holds the <u>fonts</u> (type faces); and the <u>desk accessories</u> which are discussed in the appendix. Double-click the System Folder, and open it up:



d.) The <u>Finder</u> creates the desktop and the icons which allow you to find your way around in the Mac.

e.) The <u>Clipboard File</u> is a "clipboard" which allows you to carry words or pictures from one document to another. The clipboard will only hold one piece of information at a time.

f.) The <u>Scrapbook File</u> is a place you can store words and pictures to use over and over in different documents. The scrapbook will hold many different drawings or other pieces of information at once.

g.) The <u>LaserWriter</u> and <u>ImageWriter</u> are printer "drivers." If you want the computer to print documents on paper, you must have a driver for the printer you want to use. If you will be the first to use a LaserWriter printer after it has been turned on in the morning, you must have a <u>Laser Prep</u>. If the printer driver you want is missing, see the **"How to Copy"** chapter.

4. Close the <u>system folder</u> window by putting the tip of the pointer in the <u>close box</u>, and <u>clicking once</u>, without moving the mouse. (This is called "<u>clicking on</u>" the close box.)

31 MacDraw

Note: The box in the lower right corner of each window is called a "Size Box" If you put the tip of the pointer in it, and then hold the mouse button down while you "drag" the size box, you can change the shape of the window. Also, you can move the entire window by using this same strategy to "click and drag" the title bar around. This manipulation of windows can be quite useful when you are trying to arrange things so that you can see the contents of more than one window at once. Some windows have a "zoom" box in the their upper right corner. If you click on it, it will "toggle" the window between full size, and some other size you may have selected with the "Size Box."



5. Click and hold the mouse button, while you attempt to drag down the word View in the menu bar. A list should appear beneath it. The word View will not drag, but as you pull the pointer down, each line in the list is highlighted (blackened) in sequence. When the line **by Size** is highlighted, release the mouse button. (This process is called "<u>pulling down" View to by Size</u>.) The icons in the directory window should change into a list of the files and applications arranged in order of size, largest first. (The size is measured in "k." You may need to adjust the size box to see it.) If you wish, you can instead rearrange the list alphabetically by pulling down View to by Name, etc. Try it, then change the window back to **by Icon**.

6. The Apple menu, **(**, lists <u>desk accessories</u> on your disk, such as the **Scrapbook** and **Chooser**. Use **Chooser** before you begin, to prepare Mac for the kind of printing he will do when you are ready to print your creation: pull down **(** to **Chooser**. When the Chooser window appears....

a.) If you will be using a LaserWriter or an ImageWriter connected to the AppleTalk network, <u>click on the "active" button</u>, the printer icon, and the printer's name, if they do not "highlight" when you click on them, then something is wrong.


If the printer icon isn't there, you need to go back to step 3g If the printer's name isn't there, or if it refuses to highlight (white print on black) when you click on it, then the printer is not turned on; or the printer and(or) your Mac are not connected to the AppleTalk network.

b.) If you will be printing on an ImageWriter connected to your Mac only, click the "Inactive" button for AppleTalk; then click on the ImageWriter icon, and click on the icon of the printer port to which the printer is connected. You can tell which port by looking to see where the ImageWriter plugs into Mac's back.



c.) Click the Chooser's close box.

Note: If your Chooser doesn't look like the one in the diagram, pull down **d** to About the Finder. A little card should appear that tells you the finder is number 5.3. (If it's not, you need to replace the system, finder, and printer driver icons. "How to Copy" tells how to to this.) Put the little card away by clicking on it.

### 33 MacDraw

7. Double-click the *MacDraw* application icon. When the *MacDraw* window opens, it should look something like this:



The menu, the scroll bars, the size box, and the close box, are all standard Macintosh tools. But one thing that sets *MacDraw* apart from other applications is the tool <u>palette</u> on the the left.

The tools in the palette are used to create discrete "objects." Each of these objects can be manipulated independently. You can go back and revise any object at any time without affecting other objects you have created. (This is different because, in *MacPaint*, once a selected object is released, it is pasted there for good unless you erase it; and if you erase it, there will be a hole in your drawing where the object was.)

Preparing a graphic display with *MacDraw* is a matter of creating a collection of "objects," putting the objects together, then experimenting with the objects (changing and repositioning them) until you have achieved the effect you want. Let's prepare a simple advertisement so you can see how all this works.

8. Decide how big you want the advertisement to be. (Mine will be 2.5" wide by 2".) You will need rulers to be sure your dimensions are right: pull down **Layout** to **Show Rulers**. A set of rulers should appear along the left and top edges of the *MacDraw* window. Here's how make a box the right size:

a.) Click the **Rectangles** tool. (When a tool has been clicked, the "t Pointer turns into a "+" Pointer.)

b.) Click and drag from upper left to lower right. (You can tell the dimensions exactly because the little moving dotted lines on the rulers show exactly where the pointer is.) Your ad box should look like the picture on the next page:

MacDraw 34



c.) You can drag any of the eight tiny black boxes (called **handles**), as needed, to readjust the size and(or) shape of your rectangle. You can shift the entire rectangle without changing its size or shape by clicking and dragging anywhere inside of it.

d.) When your ad box is just right, lock it so you won't accidentally move it later: Pull down **Arrange** to **Lock**. (You can unlock it later, if you want to move it again.)

9. Now make a border inside of your ad:

a.) Click the round corner rectangle tool.

b.) Pull down **Lines** to the width of line you want for your border; and pick a pattern for it by pulling down **Pen** to the pattern you want. (The width and pattern you have selected will show up in the small **Line** box in the lower left hand corner of the drawing window.)

c.) Draw your border, paying attention to the rulers to be sure it is the same distance from all four sides of the ad box. If it is a little bit off center, remember you can jiggle it into position by clicking and dragging it on its inside. When it's just right, lock it.

35 MacDraw

10. Pull down **File** to **Save**. A <u>dialog box</u> will appear with the <u>insertion point</u> winking in the small rectangle under the words "save current document as:" Type the name of the drawing, the way you want it listed in the computer's directory (Make the name short, but memorable). The letters will flow out behind the moving insertion point. Click on the "save" button. The dialog box will go away, and the name you have selected will take the place of "untitled" on the <u>title bar</u>. You will not have to fill in the dialog box again, unless you change your drawing's name.

Warning: Save your work. If you don't, you will probably lose it. To save, pull down File to Save every ten minutes or every time you get up to get coffee or go to the bathroom. The disk drive will hum for a few seconds while the computer stores your work on the disk. It's cheap insurance!!!

Note: if you want to change the title of a document, do it when you are back on the desktop. Click and drag through the title under the document icon. The mouse pointer will turn into an I-beam. Now type the new name. Click elsewhere on the desktop to make the change permanent.

11. Pull down **File** to **Page Setup...** A dialog box titled **LaserWriter** or **ImageWriter**, depending upon which printer you selected with the **Chooser**, should appear. If you don't want to change anything, click the "ok" button, and the dialog box should go away.

Note: If there is any chance you will be using a LaserWriter. you should always use LaserWriter fonts in <u>MacDraw</u>. If you are working within <u>MacDraw</u> select LaserWriter fonts in the first place. Some of the LaserWriter fonts are HelvetIca, Times, Symbol, N.HelvetIca, Zapf Dingbats, and Zapf Chancery. ImageWriter fonts will look "stretched out" when you print on the LaserWriter; and it will make the LaserWriter take <u>a very long time</u> to print. Even if you are going to print a first draft on an ImageWriter, you should <u>still</u> use the LaserWriter fonts!!!!

12. Now make a drawing to go in your ad. (Because you will be doing freehand work, you will need to pull down **Layout** to **Turn Grid Off**, while you are working on your drawing. The grid aligns objects in *MacDraw* along imaginary grid lines, which keeps things neat, but makes it impossible to do fine freehand adjustments in some cases.)

a.) Click the circle tool. Change the **Pen** pattern back to black, and the **Lines** back to normal.

b.) Press shift to constrain the circle tool to perfect circles, while you use the mouse to draw a quarter inch circle well outside of your ad box.

c.) While the circle is still selected (You can tell it's selected because it has handles!), press **3** -D (Command-D) to duplicate it four times. Now you have a diagonal row of five overlapping circles like this:



d.) Click and drag the circles until they make an arc instead of a row. (They should look like a small bunch of lollypops.)

e.) Select each lollypop in turn, by clicking on it, and choose a different pattern from **Fill** for each:



f.) Select all five of the lollypops by using the k pointer to box them in with a dotted line rectangle: drag from above and to their left to below and to their right. Pull down **Arrange** to **Group**. Now the bunch of lollypops is a single object instead of five objects. Move (click and drag) the lollypops into your ad box.

g.) Click the diagonal lines tool. Pull down **Lines** to the proper width for a lollypop stick. Pull down **Pen** to put a pattern on the stick. Draw lollypop sticks attached to each lollypop, similar to the picture below. Hold the command key down while you draw so you won't have to keep clicking the diagonal lines tool.



h.) Select, group, and lock your picture. This time you will need to select your lollypops and each stick, one at a time, holding the shift key down and clicking on each part.

13. *MacDraw* does text in two entirely different ways. Either way is better than *Mac-Paint* ...

a.) ...because you can change font, style, or font size any time the text is selected. (However, any change you attempt affects the entire text block the same way: you cannot change only one part of a text block.)

b.) ...because any background you have behind the text will show through, between the letters, if you have pulled down Fill to "none."

The two ways MacDraw does text are called "caption" and "paragraph":

c.) You get "caption" text by clicking the text tool (the "T" in the tool palette). Then click where you want to start typing, and type. The words will flow out after the insertion point, just as you probably expect them to. The problem is, caption doesn't word wrap, so the words flow out forever, in a straight line ignoring all objects

in the drawing window, unless you press return. You can "Cut and Paste" <sup>1</sup> selected portions of "caption" text in the normal Macintosh way.

d.) You get "paragraph" text by clicking in any box that happens to be in the drawing window; and starting to type. The words will flow out after the insertion point again. However, this time they will word wrap when they get to the side of the box. You do not have to press return; you can keep typing until the box fills up. Correct your work by backspacing as you type; you won't be able to correct it later.

You can Cut text from MacWrite or Word and Paste it into MacDraw as paragraph text?<sup>2</sup>

i.) Cut or Copy the text from MacWrite or Word into the clipboard. Quit.

ii.) Open *MacDraw*. (You must be on the same startup disk or the clipboard will be lost. If you are using *Switcher*, hold option down while you change applications.)

iii.) Make a box. Click in it.

iv.) Type one letter from the keyboard; any letter will do. Backspace over the letter. An insertion point will be winking in the upper left corner of the box.

v.) Pull down Edit to Paste. The text will "flow" in, conforming to the box's sides.

"Paragraph" text respects the sides of the box until you select the box. After you select the box, that block of "paragraph" text becomes a separate object, which can be independently moved and resized just like every other object on the drawing board. When you change the shape of a block of paragraph text, by pulling on the handles, the words will "flow" to conform to that new shape. ("Caption" text won't "flow" into new shapes like this; however, "paragraph" text won't cut and paste! So each type of text has its advantages.)

14. Let's practice working the text features of MacDraw :

a.) Click the text tool (the capital "T "), then click the space to the right of your ad. Type the words, "Five Flavors." Pull down **Font** to various types and sizes, and pull down **Style** to various styles, until you get a good combination. Pull down **Fill** to **None**.

b.) Click the selection pointer tool, then click and drag "Five Flavors" onto your ad. Play with the text position until it looks right. You may have to move your

<sup>&</sup>lt;sup>1</sup>"Cut and paste" means you can click and drag over a portion of text which you would like to move, and pull down **Edit** to **Cut**. Then click where you would like the text to be, and pull down **Edit** to **Paste**.

<sup>&</sup>lt;sup>2</sup>And you can import drawings from *MacPaint* the same way. Just don't try to stretch them after they are in *MacDraw*. Things will fall apart in a hurry.

picture around. If so, select your picture and pull down **Arrange** to **Unlock**. Tweak the picture and the text some more. When everything is perfect, lock it.

c.) Now make another box to the right of your ad. (If your box is transparent, pull down **Fill** to the plain white "pattern.") Click in the box, and type these words,"A five flavor bouquet of lollypops will be given to every adult who brings a child into Thrifty foods on the day of the parade."

d.) Click in the center of your new "paragraph" text block. Try various fonts, sizes, and styles until you think the print is as small as you can make it. (Try plain Helvetica 9.)

e.) Drag your "paragraph" block into your ad. Try push and pulling on the handles until it fits.



15. You may have figured out already that, with the exception of the text blocks, our objects are opaque. To illustrate this, lets try a demonstration:

a.) Select the edge of your ad box. Unlock it. Fill it with black. Your ad should now have a suave looking two-tone border:

b.) Select the round corner rectangle border which you originally placed inside of your ad box. Unlock it. Fill it with "none." Ocops! Now you can see that each object is opaque (unless it's filled with "none.").

c.) Refill your round corner rectangle border with (opaque) white.

16. Select your whole ad with the dotted line rectangle. Pull down **Arrange** to **Flip Vertical**. Ocops! Try a **Rotate Left** etc. Fun!

17. Click on "Five Flavors." Pull down **Arrange** to **Send to Back**. When you do this, "Five Flavors" isn't gone. It has just moved to the bottom of the pile. If you don't believe it, select the rest of the pile and drag it aside as illustrated on the next page.



# 18. To erase portions of your drawing:

a.) Make a box. While it is selected, pull down **Fill** to the white pattern; pull down **Lines** to the invisible line. "- - - -". The box should "disappear", except for the selection handles.

b.) Drag the "invisible" box over part of your ad. Part of the ad should disappear as though it was erased. And unlike *MacPaint* you can "unerase" it anytime you want to!

19. Pull down Layout to Reduce to Fit. This shows the size of your ad compared to a standard 8.5 by 11 inch piece of paper. Of couse the ad isn't actual size on the drawing window anymore. You can actually drag objects around though, while in Reduce to Fit. This really speeds things up if you are working on a large drawing. Pull down Layout to Normal Size, if you want to get back to the drawing window.



20. *MacDraw* has windows. You can drag the size box (the lower right corner of the drawing window) to the left, and make the window smaller. Then pull down **File** to **New**; make another window; and adjust its size with the size box. Etc. Make as many windows as you want. Pull down **File** to **Open**, now you can open up old *MacDraw* documents if they exist. (You may have to open a folder to get at them.) It is possible to copy and paste parts of different *MacDraw* documents between windows. Neat! If you have drawings with parts you need for new drawings, that you don't want to destroy:



21. When you are ready to quit **DO NOT** turn off the computer. If you turn off the computer without going through proper shutdown procedure, you may lose hours of work, or even damage your disk.

a.) When you are ready to quit, pull down **File** to **Quit**. If you have not saved already, a dialog box will ask you if you want to save your work. Click "yes" or "no." After the disk drive hums briefly, the desktop will reappear. If you can already see the desktop, skip this step.

b.) Once you are back to the desktop, the best way to quit is to pull down **Spe**cial to **Shut Down**. This ejects all disks and <u>resets</u> the computer. If you are done, you can turn off the computer; or if you want change startup disks and do something totally different with the computer, you can reboot with a different startup disk.

c.) You can also quit by dragging the disk into the trash. After Mac spits out the disk, turn him off.

d.) If you want to keep a disk as the startup disk, and keep its directory window on the screen; perhaps while you copy a file from one disk to another, select (click on) the disk, and pull down **File** to **Eject**, or type **B** -**E**. Mac will spit out the disk that was selected.

22. When you want to go back to work on the same paper, boot the system, and open the directory window. There should be a document icon there with the name you gave your paper in step 10. Reopen your paper by double-clicking that icon. When your paper opens, use the scroll bar to get to where you want to start working.

- 23. When you are ready to print; Save; then do the following:
  - a.) Make sure the printer is turned on:

i.) If you are using a LaserWriter, the On/Off switch is on the left end, just around the backside corner from the Power Cord Socket:



The green light on the front flashes as the LaserWriter warms up; then the yellow light starts flashing to show that the LaserWriter is processing a test print. The LaserWriter should deliver its own test print within two minutes. The yellow light will go out when the LaserWriter delivers the test print. When the green light is on steady, the LaserWriter is ready to print.

ii.) <u>If you are using an **ImageWriter**</u>, turn it on by depressing the on/off button, which is on the right side of the ImageWriter's top. Three green lights adjacent to the on/off button should come on. If you are using an old ImageWriter, there will be only two green lights. (If you don't get the right number of green lights, or the ImageWriter needs paper, and you don't know what to do, read the **"ImageWriter"** chapter.) b.) Pull down **File** to **Print**. When the dialog box appears click the "ok" button. It may take a minute or two, but if all goes well, Mac ought to start printing.

c.) In case of difficulty...

i.) ...if nothing happens, you may have skipped steps 3, 6, or 11: that is, you must have printer driver icon for the printer you intend to use present in your system folder; the AppleTalk "on-off" switch must be set the right way and the appropriate printer and port must have been selected in **Chooser**; and **File** must have been pulled down to **Page Setup...** 

24. <u>To avoid excessive use of the mouse</u>: Use the keyboard command letters instead, which appear to the right of many of the options in the pull down menus. There are dozens of other keyboard commands as well, which are listed in the **"Hurry up"** chapter of this book, and the Apple literature.

25. <u>There are two ways to move your *MacDraw* drawings into other documents</u>: you can use the clipboard or the **Scrapbook**.

a.) <u>Clipboard</u>: when *MacDraw* is on the same disk with graphics or word processing applications such as *Excel, MacWrite*, or *MacPaint*:

i.) Create the graphic or text in *MacDraw* select it, then pull down **Edit** to **Copy**. Quit that application.

ii.) Open your other document; click where you want the graphic to be, then pull down **Edit** to **Paste**. Your graphic should appear.

b.) <u>Scrapbook</u>: when the other document is on the same disk with your *Mac-Draw* creation:

i.) Select the portion of the *MacDraw* graphic which you want to transfer; and **Cut**(or **Copy**) it.

ii.) Pull down **c** to **Scrapbook**, and when the scrapbook window opens, **Paste** your item. Click the close box.

If there are several different portions you would like to paste, repeat steps i. and ii. Each time you paste into the scrapbook, another page is created. This is an advantage over the clipboard, because the clipboard will only accept one portion at a time. Once you have pasted something into the scrapbook, it is safe; you can do anything else you might want to do:

use the clipboard, quit for the day, or take a vacation. What you paste in the scrapbook is safely stored on the disk, it will not disappear when the power goes off, like things which are stored in the clipboard.

iii.) When you are ready to paste the **Scrapbook**-stored graphic into the other document, pull down **t** to **Scrapbook**; and, when the scrapbook appears, page through it, by clicking on the scroll bar below its window, until you find the graphic you want.

iv.) Cut(or Copy) the item from the scrapbook. Click the close box.

v.) Click in the other document where you want your *MacDraw* graphic to be, and **Paste**.

26. <u>To save a "changed" drawing without destroying the original</u>: pull down File to **Save As...**. Type in the new name for your changed document. Click the "save" button.





Essentially, *SuperPaint* is greatly improved version of *MacPaint*, with the advantages of *MacDraw* thrown in. (The catch is it requires 430K of memory to work properly.) In working with *SuperPaint* one uses two different layers: one layer works like *MacPaint*; the other layer works like *MacDraw*. The <u>paint/draw toggle</u> feature to be discussed later, will allow you to switch between the two styles of graphics work.

Once you have created a part of your drawing in the <u>paint layer</u>, it loses its identity as a particular part and becomes nothing more than a <u>collection of bits</u> (or dots or pixels); which can be modified one little bit at a time. But different parts of the <u>draw layer</u> exist as <u>separate entities</u> in Mac's memory, like the separate components of an artist's collage. The draw layer allows you to "slide" the different parts around on the screen until you get just the right effect. The draw layer is therefore said to be "object oriented", while the paint layer is said to be "bit-mapped."

If you are already familiar with *MacPaint* and *MacDraw*, you will be able to use *SuperPaint* easily; but there are a few new things you will eventually need to know. Like the other application chapters, this chapter assumes total ignorance of computers and graphics programs, but to make the best use of *SuperPaint* even the experienced *MacPaint* or *MacDraw* user will benefit from a quick survey of this chapter. For your convenience, there is a topic index between steps 14 and 15.

1. In order to get started, you'll need a Macintosh computer, and a work disk with *SuperPaint* on it. (If your only copy of *SuperPaint* is a master disk, you need to study the **"How to Copy"** chapter first, and make a second work disk copy. It is dangerous to use your only copy of an application: what will you do if you damage it?)

a.) Connect the power cord and mouse to the back of the Mac. If you have an ImageWriter printer, or an external disk drive, or you have access to an AppleTalk system, connect them too. Study the little icons (pictures) above the connectors in the back of the Mac: they will help you to decide which peripheral (accessory) connects where. (If you use it, the AppleTalk connector <u>must</u> be plugged into the port below the printer icon.) Plug your Mac into a surge protector or a grounded (three prong) wall outlet.

b.) Plug the keyboard into the jack at the base of the front of the Mac. Make sure the keyboard's plugs are right side up when you insert them, or you will bend the keyboard plug contacts.

c.) Turn it on. The off-on switch is just above the power cord connection in the back. The Mac will "beep" when you turn it on.

d.) Adjust the brightness. You can feel the knurled brightness knob under the ledge just below the apple logo, on the lower left front side of the computer.

Don't turn the brightness any higher than necessary to see comfortably. The lower you keep the brightness, the longer the "picture tube" will last.

2. Hold the *SuperPaint* work disk the way it is in this little picture: but with your right thumb over the label. Slide it all the way into the disc slot below the screen, until it snaps in and the disc drive starts to click and hum.

The computer is gathering system information from the disk which is necessary for its operation; this process is sometimes called "booting the system." Any disk that "boots the system" is called a <u>startup disk</u>. A startup disk must have a system file on it. If Mac spits the disk out when you try to insert it, it's because the disk doesn't have a system file, or the disk is defective.)

After about 18 seconds, the disk drive will stop and the screen should look like this:



The <u>menu bar</u> containing the words **File Edit Diew Special** is across the top of the screen. The <u>desktop</u>, which is the rest of the screen below the menu bar, should be blank except for the <u>disk icon</u> and <u>trash icon</u> on the right side. (If the desktop looks instead like the screen diagram on the next page, no harm has been done. Someone left it that way when they last quit.)

3. There should be a <u>pointer</u>: ★ somewhere on the screen. The pointer moves around on the computer desktop when you roll the mouse around on a real table top. Move the mouse to position the tip of the pointer in the center of the disk icon and "<u>double-click</u>" (tickaticka) the mouse button without moving the mouse. This <u>opens</u> the disk's <u>directory window</u>; and now your screen should look something like this:





a.) The <u>application icons</u> represent files which tell the computer how to do something; in this case, how to do *SuperPaint* graphics.

b.) Icons with a "dog-eared" (bent -over) corner represent <u>documents</u> which you create with applications like *SuperPaint*.

c.) The <u>system folder</u> contains the <u>System</u> which tells Mac how to be a computer. The system also holds the <u>fonts</u> (type faces); and the <u>desk accessories</u> which are discussed in the appendix. Double-click the System Folder, and open it up:



d.) The <u>Finder</u> creates the desktop and the icons which allow you to find your way around in the Mac.

e.) The <u>Clipboard File</u> is an electronic "clipboard" which allows you to "carry" words or pictures from one document to another. The clipboard will only hold one picture at a time.

f.) The <u>Scrapbook File</u> is a place you can store words and pictures to use over and over in different documents. The scrapbook will hold many different pictures at once.

g.) The <u>LaserWriter</u> and <u>ImageWriter</u> are printer "drivers." If you want the computer to print documents on paper, you must have a driver for the printer you want to use. If you will be the first to use a LaserWriter printer after it has been turned on in the morning, you will also need a <u>Laser Prep</u>. If the printer driver you want is missing, see the **"How to Copy"** chapter.

4. Close the <u>system folder</u> window by putting the tip of the pointer in the <u>close box</u>, and clicking once, without moving the mouse. (This is called "<u>clicking on</u>" the close box.)

Note: The box in the lower right corner of each window is called a "Size Box" If you put the tip of the pointer in it, and then hold the mouse button down while you "drag" the size box, you can change the shape of the window. Also, you can move the entire window by using this same strategy to "click and drag" the title bar around. This manipulation of windows can be quite useful when you are trying to arrange things so that you can see the contents of more than one window at once. Some windows have a "zoom" box in the their upper right corner. If you click in it, it will "toggle" the window between full size, and some other size you may have selected with the "Size Box."



5. Click and hold the mouse button, while you attempt to drag down the word View in the menu bar. A list should appear beneath it. The word View will not drag, but as you pull the pointer down, each line in the list is highlighted (blackened) in sequence. When the line **by Size** is highlighted, release the mouse button. (This process is called "<u>pulling down" View to by Size</u>.) The icons in the directory window should change into a list of the files and applications arranged in order of size, largest first. (The size is measured in "k." You may have to adjust the size box to see it.) If you wish, you can instead rearrange the list alphabetically by pulling down View to by Name, etc. Try it, then change the window back to by Icon.

6. The Apple menu, **\$\$**, lists <u>desk accessories</u> on your disk, such as the **Scrapbook** and **Chooser**. Use **Chooser** before you begin, to prepare Mac for the kind of printing he will do when you are ready to print your creation: pull down **\$\$** to **Chooser**. When the Chooser window appears....

a.) If you will be using a LaserWriter or an ImageWriter connected to the AppleTalk network, <u>click on the "active" button</u>, the printer icon, and the printer's name, if they do not "highlight" when you click on them, then something is wrong.



If the printer icon isn't there, you need to go back to step 3g If the printer's name isn't there, or if it refuses to highlight (white print on black) when you click on it, then the printer is not turned on; or the printer and(or) your Mac are not connected to the AppleTalk network.

b.) If you will be printing on an ImageWriter connected to your Mac only, click the "Inactive" button for AppleTalk; then click on the ImageWriter icon, and click on the icon of the printer port to which the printer is connected. You can tell which port by looking to see where the ImageWriter plugs into Mac's back.



c.) Click the Chooser's close box.

Note: Pull down **s** to About the Finder. A little card should appear that tells you the finder is number 5.3. (If it's not, you need to replace the system, finder, and printer driver icons. "How to Copy" tells how to to this.) Put the little card away by clicking on it.

7. Double click the *SuperPaint* application icon. When *SuperPaint* opens, it should look something like the picture below. The paintbrush icon should be fully visible in

the paint/draw toggle, L. If it isn't, click on the brush, to bring it to the top.



- 8. Play with the text.
  - a.) Click on the text tool, A. Click again on the upper middle of the screen.

b.) Type "Apple." The menu bar you see across the top works the same way as the menu bar on the desk top. Pull down Font Size to 72. Pull down Style to Outline.

c.) Press the spacebar down and hold it there to get at the <u>grabber</u>. Click and drag with the grabber, anywhere on the <u>worksheet</u> to pull "Apple" as near to the center of the <u>window</u> as you can.

d.) Click on the <u>Selected Fill Pattern</u> rectangle to be sure it is active. (A little black triangle should be pointing at it. Click a <u>pattern</u> other than black from the

SuperPaint 50

Pattern Palette. The Selected Fill Pattern should change to the pattern you chose.

e.) Click on the <u>paint bucket</u>. Put the very tip of the spilling paint in the hollow space inside of the letter "i" in "Apple". Click <u>ONCE</u>. The hollow space should fill with your selected pattern. If the paint "spills," pull down **Edit** to **Undo**.

f.) Click on the <u>eraser</u>. Erase the letter "a" in "Apple"by clicking and dragging over it.

h.) Pull down Edit to Rotate Left. What happened? Pull down Edit to Flip Vertical. What happened? Pull down Edit to Flip Horizontal. What happened?

i.) Click on the <u>lasso</u>. Carefully click and drag the tiny little piece of rope that dangles off of the lasso's knot, in a circle completely around the "A" in "Appl". Now the animated dotted line should "outline" the letter "A".

j.) Do not click yet, but position the lasso inside the letter " $\mathbb{A}$ ". The lasso should turn into a mouse arrow. Click and drag the " $\mathbb{A}$ " from place to place.

k.) Press the option key, and drag the "A" some more. There should be two letter "A's" now. Click the fattest line from the Line and Border Widths box.
Press both option and (Command) while you drag the "A" around some more. A whole trail of "A's" should appear.

The width of the line checked in the <u>Line and Border Widths</u> box controls the spacing between the "A's".

I.) Pull down Edit to Cut. Pull down Edit to Paste. What happened? Drag the selected (lassoed) "A" around some more. Press backspace. The selected "A" is gone for good. Double-click the eraser. Everything is gone for good.

Everything you did with the "A" except steps a and b can be done with <u>any</u> image in the *SuperPaint* drawing window. Indeed, text is one of the <u>last</u> things you should be messing with in the "paint" layer. If you want to want to do serious work with text in *SuperPaint* you need to do it in the "draw" layer. This is discussed in step 25. Now let's look at some other tools:

9. Learn about the pencil and FatBits:

a.) Click the pencil, [n]. Write your name by clicking and dragging the pencil in the window. You will get better with a little practice.

b.) Place the tip of the pencil over a particular portion of your name which you would like to see in more detail. Press the command button and click. (**B**-click) Now you are in <u>FatBits</u>. FatBits allows you to see and modify your picture one <u>pixel</u> at a time!

Note: you can also get into FatBits by clicking on the FatBits tool. S. Then click on the portion of the screen that you would like to see magnified. You can then, in turn, click on the portion of the magnified screen that you would like to see more magnified, etc.

c.) You can use your pencil in FatBits to click pixels in and out of existence. Try it! The rectangle on the left shows you an actual-sized picture of what is going on.

Note: if you start to drag the pencil when it is on white it will make black. If you start to drag the pencil when it is on black it will make white. This is true whether or not you are in FatBits. All of the other tools will work in FatBits too.

d.) Pressing the spacebar will toggle the pencil into a grabber. Then you can use it to drag another portion of your FatBits drawing into sight.

- e.) Double-click on the pencil to get out of FatBits.
- 10. Try the paint brush and make some custom erasers:

a.) Click on a different pattern. Click on the <u>paint brush</u>,[白]. Paint (drag) a line under your name with it.

b.) Double-click the <u>paint brush</u>. Click on a different brush shape in the box that appears. Click "ok." Try painting with your new brush shape.

c.) Click on the white pattern above "none". Now your brush is a customshaped eraser. You can make an <u>eraser one pixel wide</u> if you click the one pixel brush shape.

d.) Or if you double-click the brush, and pick the biggest square brush shape, you will have a <u>transparent eraser</u> that will allow you to see what you are about to erase before you click on it.

11. Pick another pattern if you like. (You can see more patterns by clicking the up and down arrows on the <u>pattern scroll bar</u>.) Click on the <u>spray can</u>. Spray paint a rectangle around your underlined name.

Note: you can make the paint <u>transparent</u> if you press the **S** (command) button while you spray. This works for the paint bucket and brush too. Also, you can pull down **Paint** to **Opaque, Transparent**, or **Paint on Black**. As you might expect, opaque paint will cover anything; transparent paint only paints white surfaces; and **Paint on Black** only paints black surfaces.

12. Learn about enclosed shape tools:



a.) Click on the <u>Selected Line Pattern</u> rectangle; then click on the black "pattern" above "None" to select a black line pattern. Click the <u>Selected Fill Pattern</u> rectangle, then click "None" for a fill pattern:



b.) Click on the <u>rectangle enclosed shape tool</u>. Make a rectangle around your spray painted rectangle. (Click and drag, upper left to lower right.)

c.) Select (click on) a different fill pattern. Make a filled shape.

d.) Click on a wider border width, click on the selected line pattern rectangle again, click on a different pattern for the selected line pattern, and try a different enclosed shape tool.

The border width you select controls the widths of lines made by <u>any</u> line-making tool (including the enclosed shape tools) except the pencil.

If you want a patterned shape with <u>no border</u>, select "none". It represents no border at all.

The bottom three "enclosed" shape tools are not restricted to enclosed shapes. The "crushed box" (polygon) tool allows you to draw a series of connected lines: click each time you want to change direction. Double-

click when you are done. The arc tool i makes arcs, and the freehand

tool [b] is like the pencil, except that you can fill the shapes it draws, and select line widths for it.

13. In order to do things to an image in the "paint" layer, you select parts of it with the lasso,  $\Im$ , or the selection rectangle,  $\square$ . You can do the following things to an image in the "paint" layer when it is selected with either of these tools:

a.) Click and drag the image anywhere in the window.

b.) <u>Duplicate it</u>: press option as you click and drag; click again each time you want to leave another copy of the image in your trail.

c.) <u>Leave a continuous trail of images</u>: press both option and **%** (command) as you click and drag. The spacing between the images is controlled by the line width in the <u>Line and Border Widths</u> selection box.

d.) <u>Paste your drawing elsewhere</u>: you can pull down **Edit** to **Copy** or **Cut**. Then use the grabber to move the worksheet; or quit and move to *Word* or *MacWrite*. Then you can pull down **Edit** to **Paste**, and paste your drawing wherever you like.

i.) When you **Paste** within *SuperPaint*, you can make the item you have **Cut** conform to a particular shape by making a new selection rectangle to "receive" the pasted drawing.

ii.) If you have **Cut** or **Copied** text from *MacWrite* or *Word*, and you want to paste it in *SuperPaint*., you can prepare a selection rectangle to receive it. When you paste, the text will "flow" to fit the selection rectangle. You can drag the corners of the rectangle to change its shape, and the text will "reflow" to fit the new shape. You can select new fonts, sizes and styles while the selection rectangle is "active" and the text within will change accordingly!

e.) Eliminate the selected image by any of the following:

i.) Pull down **Edit** to **Cut**. This puts it in the "clipboard" and you can bring it back later by pulling down **Edit** to **Paste**. The catch is that you can only have one thing in the clipboard at a time. So if you like what's in the clipboard, and you don't want to eliminate it with a second **Cut**, do either of the next two as an alternate:

- ii.) Pull down Edit to Clear.
- iii.) Press Backspace.

Note: Clear and Backspace have a finality that Cut does not have. If you Cut, what you cut is still in the clipboard, and it can be Pasted again; but when you Clear or Backspace an item, it is gone for good.

f.) You must use the two layer selector, [2]. to Cut or Copy both layers ("paint" and "draw") at once.

g.) To transfer work from the paint layer to the draw layer, select what you want to transfer, then type **B** -E.

#### 14. But there are big differences between the lasso and the selection rectangle:

a.) When you click on the lasso  $\bigcirc$ , you can click and drag it in a circle around the target object. The lasso "tightens" to select only the target object.

Note: you do not have to make a complete circle with the lasso: it is sufficient to get it about threefourths of the way around the circle. (The tiny little piece of rope that dangles off of the lasso's knot is the "hot" point that generates the lasso "rope".)

Note: to select <u>everything</u> in the drawing with the lasso, hold down the option key while you pull down Edit to Select All.

b.) You can drag lassoed objects over the top of patterns or other objects, so they appear to be "behind" the lassoed object. <u>To superimpose letters</u> such as Q, R, O, P, over a pattern or other objects, so they will show through the interior portion of the letter, you must intentionally create a "leak" in the letter, so the pattern beneath can "leak" through to the enclosed space within the letter. Then select the letters with the lasso as you normally would and drag them over the pattern.

c.) When you click on the selection rectangle . you can click and drag from upper left to lower right to make a selection rectangle around a target object. You are stuck with the rectangular shape and it selects <u>everything</u> inside the rectangle, including the empty space. So you cannot use the selection rectangle to superimpose one object over another. The "empty" space will obliterate any pattern or other objects which are "under" the rectangle.

However you can assure that the rectangle is as small as possible by pressing the command key at the same time you are "clicking and dragging" the selection rectangle.

d.) As you have seen, objects can be rotated and flipped when they are selected with the selection rectangle. The lasso can't do any of these things. The selection rectangle also allows you to <u>freely rotate</u>, <u>stretch</u>, <u>distort</u>, <u>and slant</u> images; or put them into an artistic perspective:



To do this, select the image with the selection rectangle, then pull down **Paint** to the desired option. Tiny little black box "handles" will appear on the corners of the image. Click and drag the little boxes to achieve the desired effect.

e.) You can do precision, top quality "shrinking" or "stretching" of objects in the <u>selection rectangle</u> without distortion, by pulling down **Edit** to **Scale**, and selecting the percentage change you want. If you plan on doing this, don't fill your objects with a pattern until after the scaling operation is done.

But why should I continue to run on this way; you get the idea! Go ahead and play with *SuperPaint* on your own; that's the best way to learn about it. When you're done playing, come back and read the rest of this chapter. There are quite a few other facts that may be worth knowing. To help you in finding a particular feature, here's a short index of the "**SuperPaint**" Chapter's contents:

Topic	Step	group	32
artistic perspective	14	handles	30
autoscroll	39	icons, SuperPaint	7
bit-mapped (paint) layer	intro	ImageWriter printing	3, 6, 16, 19
borders, paint layer	12	keyboard commands	20
borders, draw layer	31	LaserWriter printing	3, 6, 19
changing layers	after 29	lasso	13, 14
chooser	6	layers	intro,aft 29,35
click and drag in draw layer	32	leak prevention, paint bucket	23
clipboard, use of	21	line "painting"	25
concentric circles	26	lines, dotted	25
constraining to horiz, vert. etc.	24. 25	lines, drawing straight	25
cut or copy in both layers	13, 39	locking drawing	30
cutting and pasting, draw laver	33	moving graphics,other docs	21
cutting and pasting, paint layer	13	naming your document	15
differences, pnt vs drw layers	intro	objects	intro,after29
disasters	23	page setup	16
discrete objects	after 29	paint brush	10
distorting	14	paint bucket	8
dotted lines	25	paint bucket leaks, disasters	23
dragging images, paint layer	13, 14	paint layer	intro
draw layer	30-36	paint, transparent, opaque	11
drawing in the draw layer	32	paint/draw toggle	after 29
duplicate, how to, draw layer	32	pattern editing	27
duplicate, how to, paint layer	13	patterns	7
editing patterns	27	pencil	9
editing text in the draw layer	33	perspective	14
enclosed shape tools	12	precise positioning	24
erasing, paint layer	8, 10, 13	precision scaling	14
erasing, draw layer	36	printing	3, 19
FatBits	9	quit, how to	17
bit editing	9	rectangle	12
magnified editing	9	reduced view	28, 29
flip and rotate	8	reshape polygon	37
free rotation	14	return to same drawing	18
freehand tool	12	revert to saved picture	23
full page, view	28	rotate and flip	8
full screen work area	39	rotation in small increments	14
getting started	1-7	rulers	30
going back to work	18	saving both revised and orig.	22
grabber	8, 9	saving space	29
grid	23, 24, 30, 32	saving your work, how to	15

scaling precisely	14	SuperPaint window and icons	7
scrapbook, use of	21	tall adjusted	16
scrolling, auto	39	text, draw layer (the only way)	33, 34
selected fill pattern	8, 12	text, paint layer (don't do it!)	8
selecting in the paint layer	13, 14	toggle, paint/draw	after 29
selecting in the draw layer	30, 32, 33	trail of duplicate images	8
selection rectangle	13, 14	transparent paint	11
send to back	35	transfer graphics betwn layers	13, 39
show page	28	transfer graphics, other docs	13,21,39
shutting down	17	two layer selector	13, 39
slanting	14	undo, use of	23
spray can	11	view full page	28
starting up	1-7	window, SuperPaint	7
stretching	14		
superimposing letters	14		

15. When you start to create something that you think you might want to save, pull down **File** to **Save**. A <u>dialog box</u> will appear with the <u>insertion point</u> winking in the small rectangle under the words "save document as:" Type the name of your work, the way you want it listed in the computer's directory (Make the name short, but memorable). The letters will flow out behind the moving insertion point. Click on the"save" button. The dialog box will go away, and the name you have selected will take the place of "untitled" on the <u>title bar</u>.

Warning: Save your work. If you don't, you will probably lose it. To save, pull down File to Save every ten minutes or so. The disk drive will hum for a few seconds while the computer stores your work on the disk. You will not have to fill in the dialog box again, unless you change your drawing's name.

16. Pull down File to Page Setup... A dialog box titled LaserWriter or ImageWriter, depending upon which printer you selected with the Chooser, should appear. If you don't want to change anything, click the "ok" button, and the dialog box should go away.

Note: If you you are using the <u>ImageWriter</u>, you should click **Tall Adjusted** in the **Page Setup...**dialog box. (This degrades the print quality slightly, but greatly improves the picture quality.)

17. When you are ready to quit <u>DO NOT</u> turn off the computer. If you turn off the computer without going through proper shutdown procedure, you may lose hours of work, or even damage your disk.

a.) When you are ready to quit, pull down **File** to **Quit**. If you have not saved already, a dialog box will ask you if you want to save your work. Click "yes" or "no." After the disk drive hums briefly, the desktop will reappear. If you can already see the desktop, skip this step.

b.) Once you are back to the desktop, the best way to quit is to pull down **Special** to **Shut Down**. This ejects all disks and <u>resets</u> the computer. If you are done, you can turn off the computer; or if you want change startup disks and do something totally different with the computer, you can reboot with a different startup disk.

c.) You can also quit by dragging the disk into the trash. After Mac spits out the disk, turn him off.

d.) If you want to keep the present disk as the startup disk, and keep its directory window on the screen; perhaps while you copy a file from one disk to another, select (click on) the disk icon, and pull down **File** to **Eject**, or type **36** -E. Mac will spit out the disk that was selected.

18. When you want to go back to work on the same drawing, boot the system, and open the directory window. There should be a document icon there with the name you gave your paper in step 15. Reopen your drawing by double-clicking that icon.

- 19. When you are ready to print; Save; then do the following:
  - a.) Make sure the printer is turned on:

i.) If you are using a LaserWriter, the On/Off switch is on the left end, just around the backside corner from the Power Cord Socket:



The green light on the front flashes as the LaserWriter warms up; then the yellow light starts flashing to show that the LaserWriter is processing a test print. The LaserWriter should deliver its own test print within two minutes. The yellow light will go out when the LaserWriter delivers the test print. When the green light is on steady, the LaserWriter is ready to print.

ii.) If you are using an ImageWriter, turn it on by depressing the on/off button, which is on the right side of the ImageWriter's top. Three green lights adjacent to the on/off button should come on. If you are using an old ImageWriter, there will be only two green lights. (If you don't get the right number of green lights, or the ImageWriter needs paper, and you don't know what to do, read the "ImageWriter" chapter.) b.) Pull down **File** to **Print**. When the dialog box appears click the "ok" button. It may take a minute or two, but if all goes well, Mac ought to start printing.

c.) In case of difficulty...

i.) ...if nothing happens, you may have skipped steps 3, 6, or 16: that is, you must have printer driver icon for the printer you intend to use present in your system folder; the AppleTalk "on-off" switch must be set the right way on the **Control Panel**; the appropriate printer and port must have been selected in **Chooser**; and **File** must have been pulled down to **Page Setup...** 

ii.) ...if something goes wrong during the ImageWriter printing process, first. turn off the printer by pressing its on/off button; then press **%** - . (command-period). (Mac will tell you to stop the printing by pressing **%** - . only, but this turns out to be much too slow.)

20. <u>To avoid excessive use of the mouse</u>: Use the keyboard command letters instead, which appear to the right of many of the options in the pull down menus.

<u>File</u>	<u>Edit</u>				Optior	IS	
New 🏽 -N	Undo		<b>%</b> -7	Z	Scrolli	ng Off/On	<b>%</b> ]-'
Open 🕱 -0	Cut		<b>※</b> -:	X	Nudge	Up	<mark>Ж</mark> -Ү
Save 🕱 - S	Сору		80	С	Nudge	Down	Ж-Ж
Quit 🕱 -Q	Paste		<b>*</b> - '	V	Nudge	Left	<b>%</b> ]-]
Print 🔀 -;	Copy to Pa	aint/Draw	<b>%</b> -:	E	Nudge	Right	<b>K</b> -K
	Duplicate		<b>*</b> -:	D			
	Select All		<b>*</b> -	A			
Windows		Draw			s	tyle	
Hide Palettes	<b>)%</b> -H	Bring to	Front	8	-= P	lain	<b>ж</b> -Р
Hide Back Layer	<b>)</b> - L	Send to	Back	<b>X</b>	B	old	🕱 -В
Reduced View	<b>W</b> – <b>W</b>	Group		×	-G It	alics	<b>%</b> ]-I
Full Screen	<b>8</b> - F	Ungroup	)	8	-U T	ext Patterr	1 🕱 -Т
		Reshape	•	*	-R		المهيدين

21. <u>There are two ways to move your *SuperPaint* graphics into other documents</u>: you can use the clipboard or the **Scrapbook**.

a.) <u>Clipboard</u>: when the other document is on the same disk with your *Super-Paint* creation:

1

i.) Select the portion of the graphic which you want to transfer; and pull down **Edit** to **Copy**. Quit *SuperPaint*.

ii.) Open your other document; click where you want the graphic to be, then pull down **Edit** to **Paste**. Your graphic should appear.

b.) <u>Scrapbook</u>: when the other document is on the same disk with your *SuperPaint* creation:

i.) Select the portion of the graphic which you want to transfer; and **Cut**(or **Copy**) it.

ii.) Pull down **(f** to **Scrapbook**, and when the scrapbook window opens, **Paste** your item. Click the close box.

If there are several different portions you would like to paste, repeat steps i. and ii. Each time you paste into the scrapbook, another page is created. This is an advantage over the clipboard, because the clipboard will only accept one portion at a time. Once you have pasted something into the scrapbook, it is safe; you can do anything else you might want to do: use the clipboard, quit for the day, or take a vacation. What you paste in the scrapbook is safely stored on the disk, it will not disappear when the power goes off, like things which are stored in the clipboard.

iii.) When you are ready to paste the Scrapbook-stored graphic into the other document, pull down **(** to Scrapbook; and, when the scrapbook appears, page through it, by clicking on the scroll bar below its window, until you find the graphic you want.

iv.) Cut (or Copy) the item from the scrapbook. Click the close box.

v.) Click in the other document where you want your *SuperPaint* graphic to be, and **Paste**.

22. <u>To save a "changed" document without destroying the original</u>: pull down **File** to **Save As...**. Type in the new name for your changed document. Click the "save" button.

## 23. Disasters, problems and solutions:

a.) If you make a mistake, you can undo your <u>last</u> action by pulling down **Edit** to **Undo.** But the catch is <u>if you make even **ONE**</u> attempt to fix your mistake before you try **Undo**, all you can "Undo" is your attempt. So when you screw up, <u>get your hands off of the mouse and the keyboard</u>. Stop, think, be cool. Then undo.

b.) If you pull down File to Save every ten minutes or so, and a disaster happens, you can pull down File to Revert, and your picture will "revert" to the way is was the last time you saved it

c.) Leaks can be a disaster: If you are attempting to fill the interior of an object from the paint bucket, and the object leaks, you will cover your entire drawing with the pattern from the bucket. If you accidentally click the mouse more than once (and this is not unlikely, because the paint bucket often suffers from "delayed action"), you will not be able to use **undo** and your drawing will be destroyed. (Unless you have saved recently!)

d.) Do not use the paint bucket while in **FatBits**. It's too easy to spill it through a leak without knowing it. If this happens, your work will be ruined. (Unless you have saved recently!)

e.) <u>After you have pasted a drawing in *Word* or *MacWrite*: be careful not to type anything while the drawing is still selected. It will disappear.</u>

f.) If your mouse seems to have become jerky and insensitive, the **Grid** probably got turned on by accident. Pull down the **Options** to **Grid and Ruler...** and see. If the **Grid Snap On** box has an "X" in it, click it off.

#### 24. For precise positioning of letters and parts of your drawing:

a.) Pull down **Options** to **Grid and Ruler...**, and click the **Grid Snap On** box. This sets up grid lines on *SuperPaint*, and the text, etc. will align only on the grid lines. You can set the grid line spacing, and whether or not they will show, in the dialog box. Even if you can see the grid lines, they will not print.

b.) If you use the shift key when you drag, you can only drag horizontally or vertically; you can only draw lines in directions that are whole number multiples of 45°, and you can only make squares and circles (as opposed to rectangles and ovals). When used this way, the shift key is said to <u>constrain</u> the tools.

This is particularly valuable when you want to erase next to a long horizontal or vertical edge: Position the eraser exactly where you want to begin; then press the shift key, while you click and drag in the general direction you want to go. The eraser will move in a <u>precisely</u> vertical or horizontal direction, and your shaky human hand won't accidentally wipe out part of the edge.

#### 25. When you draw lines in SuperPaint :

a.) You can pour paint "into" <u>any</u> line, including pencil lines, by precisely positioning the tip of the paint "drip" from the paint bucket on the line before you click. This may take some practice.

b.) Shift constrains the direction of the line and polygon (squashed box) tools to multiples of 45 degrees. Shift constrains the direction of the pencil to horizontal and vertical.

But you really don't need to constrain the line or polygon tools to draw multiples of 45 degrees: you can "eyeball" it. The only truly "straight" lines in *SuperPaint* are multiples of 45 degrees; all others have a "stair step" look to them. All you have to do is twiddle with the end point of the line until the line looks straight. When it looks straight, it is at a multiple of 45 degrees.

### c.) To draw dotted lines:

<u>Method 1</u>: Lasso a dot, and drag it with the **S**-option buttons pressed. To draw horizontal and vertical lines, drag the dot with the **S**-option-shift buttons pressed. This method takes practice to get uniform dot spacing.

<u>Method 2</u>: Select a diagonal strip pattern. Double-click the brush. Click on the single dot brush pattern. Drag the brush wherever you want dotted lines. To draw horizontal and vertical lines, drag the brush with the **shift** button pressed. This method works best for horizontal and vertical lines, and will not work at all for diagonal lines.

#### 26. To draw concentric circles (one circle centered inside of another):

a.) Click the pencil, then click a single dot. This dot will be the common center of your concentric circles.

b.) Pull down **Options** to **Paint from Center**. Little crosshairs should appear in the enclosed shape tools.

c.) Click the circle tool. The mouse pointer itself should turn into a crosshair.

d.) Position the mouse pointer crosshairs exactly on the dot. The crosshairs will be white in the center if they are exactly on the dot.

e.) Draw the first circle.

f.) Position the crosshairs exactly on the dot again.

g.) Draw the second circle.

27. You can edit a pattern by pulling down Options to Edit Patterns.

a.) When the dialog box pops up, click on the pattern in the Pattern Palette that

you would like to alter; if you don't want to alter an existing pattern, click on an empty pattern box. (You may have to use the <u>Pattern Scrollbar</u> to find one.)

b.) In the box on the left, use the pencil to edit or create a FatBit pattern you like; the actual size pattern will appear in the box on the right.

c.) When you've got it the way you want it, click the **Save** button; if you don't like your creation, click the **Revert** button.

d.) Click "ok".

28. <u>To see the entire 8" X 10" worksheet</u>, pull down **Windows** to **Reduced View**. The entire 8" X 10" worksheet is represented in the rectangle on the left. You can continue to work in the space on the right, any changes will be reflected in the reduced view on the left. To escape, press **3** -W.

29. <u>To save space on your *SuperPaint* disk</u>, you can combine many little **Super-Paint** pictures on one 8" X 10" worksheet. List the names of the little pictures under **Get Info** for the file icon of that worksheet. If you want a picture "catalog" of the whole page, do a "**Solution**" while in **Reduced View**, then modify and use the "screen 0" *MacPaint* document that is produced as your catalog.

How to Use SuperPaint's Draw "Laver":

Toggle the <u>paint/draw toggle</u>, *I*, to the draw "layer" *by* clicking on the drafting compass icon. If you type your text while you are working in the paint "layer" (when the paintbrush icon is selected) you won't be able to change it later.

The tools in the draw "layer" are used to create discrete "objects." Each of these objects can be manipulated independently. You can go back and revise any object at any time without affecting other objects you have created. (This is different because, in the paint "layer," once a selected object is released, it is pasted there for good unless you erase it; and if you erase it, there will be a hole where the object was.)

Preparing a graphic display with *SuperPaint's Draw "Layer"* is a matter of creating a collection of "objects," putting the objects together, then experimenting with the objects (changing and repositioning them) until you have achieved the effect you want. Let's prepare a simple advertisement so you can see how all this works.

30. Decide how big you want the advertisement to be. (Mine will be 2.5" wide by 2".) You will need rulers to be sure your dimensions are right: pull down **Options** to **Grid** & **Rulers...** When the dialog box pops up, click an "X" into the **Show rulers** box; then click "ok." A set of rulers should appear along the left and top edges of *Super-Paint's* Draw "Layer" window. Here's how make a box the right size:

a.) Click the Rectangles tool. Click "none" for a fill pattern.

b.) Click and drag from upper left to lower right. (You can tell the dimensions exactly because the little moving dotted lines on the rulers show exactly where the pointer is.) Your ad box should look like this:



c.) You can click on the pointer [k], and use it to drag any of the four tiny black boxes (called <u>handles</u>), as needed, to readjust the size and(or) shape of your rectangle. Similarly, you can shift the entire rectangle without changing its size or shape by clicking and dragging anywhere on its lines.

d.) When your ad box is just right, lock it so you won't accidentally move it later: Pull down **Draw** to **Lock**. (You can unlock it later, if you want to move it again.)

31. Now make a border inside of your ad:

a.) Click the round corner rectangle tool.

b.) Click on white (above the word "None") for the <u>Selected Fill Pattern</u>. The <u>Selected Fill Pattern</u> box should change to plain white:

00000000	

c.) Click the little black triangle to the <u>Selected Line Pattern</u> box, Click on the line width you want for your border; then click on the pattern you want from the <u>Pattern Palette</u>.

SuperPaint 64

d.) Draw your border, paying attention to the rulers to be sure it is the same distance from all four sides of the ad box. If it is a little bit off center, remember you can jiggle it into position by clicking and dragging it. When it's just right, lock it.

32. Now make a drawing to go in it. (Because you will be doing freehand work, you will need to make sure the grid is off while you are working on your drawing. Pull down **Options** to **Grid & Rulers...**, and check the dialog box. The grid aligns objects in *SuperPaint's* Draw "Layer" along imaginary grid lines, which keeps things neat, but makes it impossible to do fine freehand adjustments in some cases.)

a.) Click the circle tool. Change the <u>Selected Line Pattern</u> back to black, the <u>Selected Fill Pattern</u> to white, and the <u>Line Width</u> back to narrow.

b.) Use the mouse to draw a quarter inch circle well outside of your ad box.

c.) While the circle is still selected (You can tell it's selected because it has handles!), press **3** -D (Command-D) to duplicate it four times. Now you have a diagonal row of five overlapping circles like this:



d.) Click on the pointer, then click and drag the circles until they make an arc instead of a row. (They should look like a small bunch of lollypops.)

e.) Choose a different pattern for each lollypop by clicking on it, then clicking on a fill pattern.



f.) Select all five of the lollypops by using the pointer to box them in with a dotted line rectangle: drag from above and to their left to below and to their right. Pull down **Draw** to **Group**. Now the bunch of lollypops is a single object instead of five objects. Move (click and drag) the lollypops into your ad box.

g.) Click the line tool. Click the <u>Selected Line Pattern</u> box, select the proper line width for a lollypop stick; then click on the pattern you want for the stick from the <u>Pattern Palette</u>. Draw lollypop sticks attached to each lollypop, similar to the picture at the top of the next page.



j.) Pull down Edit to Select All; then lock your picture again.

# 33. To type text in SuperPaint :

a.) Click on the text tool, A. Click where you want to start typing, some place away from your ad. (the mouse pointer should have turned into an "I" beam). A "dotted line rectangle" will form where you are typing the text. Don't worry about it. You will be able to make the text conform to any shape you want.

b.) Click on the "pointer" icon in the draw tools; then select (click on) the text you want to edit. Little black "drag boxes" should appear on a box that surrounds your text:

i.) Click and drag on them to flow the text into the shape you want.

ii.) Pull down Font or Size or Style to make the text suit your preferences. Font sizes that are listed in Outline style, will probably look the best. You can pull down Style to Left Justify, Center, or Right to get the text to be centered, say for a title page; or aligned on the left margin, etc.

iii.) Cut and Paste, Copy, and backspace work here the same as in a word processor:

a.) To correct single letter errors, use the mouse to put the <u>"!" beam</u> after the letter you don't like, and click. (This moves the insertion point.) Backspace over the offending letter, and type in your correction. The backspace key is handy. It allows you to correct little spelling and punctuation errors quickly; but don't use it to wipe out whole words and sentences; instead follow the directions below.

b.) To correct more than a few letters: <u>select</u> what you don't like <u>by clicking and dragging</u> over it. Then, if you want <u>to destroy it, press backspace</u>. If you only want <u>to move it, cull down Edit to Cut</u>; then move the insertion point (move the "I" beam and click) to where you want the deleted word or line to appear; then pull down Edit to Paste.

Cut and Paste are among the most powerful of the word processor commands. They are what allow you to pick up and move what you've already typed to a new location. (If you want, copy some words you've already typed to another part of your work, and if you don't want to delete the original, follow the above directions; but pull down Edit to Copy instead of Cut.)

iv.) If you want the background to be visible "through" the letters, select "none" for a fill pattern; otherwise the letters will have the selected pattern for a background.

Note: Later, if you are back in the paint "layer," and you want to edit the text you typed, be sure to change the <u>paint/draw toggle</u> back to the draw "layer" by clicking on the drafting compass icon.

34. Let's practice working the text features of SuperPaint's Draw "Layer":

a.) Click the text tool [A], then click the space to the right of your ad. Type the words, "Five Flavors." Pull down **Font**, **Size**, and **Style**, until you get a good combination. Click "none" for a fill pattern.

b.) Click the selection pointer tool, then click and drag "Five Flavors" onto your ad. Play with the text position until it looks right. You may have to move your picture around. If so, select your picture and pull down **Draw** to **Unlock**. Tweak the picture and the text some more. When everything is perfect, lock it up again.

c.) Click the text tool, then click the space to the right of your ad again. Change the font size to 9, and the style to Plain. Type a short paragraph for the body of your ad.

d.) Click on the selection pointer again.

e.) Drag your "paragraph" block into your ad. Try push and pulling on the handles until it fits.



35. Let's play with the different draw layers a little bit:

a.) Select All of your ad. Unlock it, and Ungroup it.

b.) Select the edge of your ad box. Fill it with black. Your ad should now have a suave looking two-tone border:

c.) Select the round corner rectangle border which you originally placed inside of your ad box. Unlock it. Fill it with "none." Ocops! Now you can see that each object is opaque (unless it's filled with "none.").

d.) Refill your round corner rectangle border with (opaque) white.

e.) Click on Five Flavors. Pull down Draw to Send to Back. When you do this Five Flavors isn't gone. It has just moved to the bottom of the pile. If you don't believe it, select the rest of the pile, and drag it aside!



36. To erase portions of your drawing:

a.) Make a box. Click on white (above "None") for the <u>Selected Line Pattern</u> and the <u>Selected Fill Pattern</u>. The box should be invisible except for the "handles."

b.) Drag the "invisible" box over part of your ad. Part of the ad should disappear as though it was erased. And unlike the paint "layer" you can "unerase" it anytime you want to!

37. If you want to continuously change a shape in the draw layer:

a.) Draw a shape with the polygon tool, Click each time you change direction; double-click when you "close" the polygon at the end.
b.) Click on the pointer and select the polygon. Pull down **Draw** to **Reshape**. "Handles" should appear at each vertex (corner) of the polygon. You can "grab" these handles (click and drag) and pull the polygon into whatever shape you want.

c.) If you want more handles, hold the command **#** button down while you drag at a handle, and you will pull another handle out of it!

#### 38. When you are working between layers:

a.) You must use the two layer selector, (The copy both layers ("paint" and "draw") at once

b.) To transfer work from one layer to the other, select what you want to transfer, then type  $\mathbb{H} - E$ .

#### 39. When you want a work area larger than the window:

a.) The "autoscroll" feature will automatically slide your work area beneath the screen, if you attempt to draw lines or selection areas outside the limits of the window. To turn off the "autoscroll" feature, pull down **Options** to **Turn Scrolling off**.

b.) If you want the tools and Palette out of the way, pull down Windows to Hide Palettes.

c.) If you want the window to be as big as Mac's screen, pull down **Windows** to **Full Screen**.

40. Don't forget! There is a topic index between steps 14. and 15.





This chapter assumes that you want to learn word processing as rapidly as possible.

1. In order to get started, you'll need a Macintosh computer, and a work disk with *MacWrite* on it. (If your only copy of *MacWrite* is a master disk, you need to study the **"How to Copy"** chapter first, and make a second work disk copy. It is dangerous to use your only copy of an application: what will you do if you damage it?)

a.) Connect the power cord and mouse to the back of the Mac. If you have an ImageWriter printer, or an external disk drive, or you have access to an AppleTalk system, connect them too. Study the little icons (pictures) above the connectors in the back of the Mac: they will help you to decide which peripheral (accessory) connects where. (If you use it, the AppleTalk connector <u>must</u> be plugged into the port below the printer icon.) Plug your Mac into a surge protector or a grounded (three prong) wall outlet.

b.) Plug the keyboard into the jack at the base of the front of the Mac. Make sure the keyboard's plugs are right side up when you insert them, or you will bend the keyboard plug contacts.

c.) Turn it on. The off-on switch is just above the power cord connection in the back. The Mac will "beep" when you turn it on.

d.) Adjust the brightness. You can feel the knurled brightness knob under the ledge just below the apple logo, on the lower left front side of the computer. Don't turn the brightness any higher than necessary to see comfortably. The lower you keep the brightness, the longer the "picture tube" will last.

2. Hold the *MacWrite* work disk the way it is in this little picture: 💾 but with your right thumb over the label. Slide it all the way into the disc slot below the screen, until it snaps in and the disc drive starts to click and hum.

The computer is gathering system information from the disk which is necessary for its operation; this process is sometimes called "<u>booting the system</u>." Any disk that "boots the system" is called a <u>startup disk</u>. A startup disk must have a system file on it. If Mac spits the disk out when you try to insert it, it's because the disk doesn't have a system file, or the disk is defective.)

After about 18 seconds, the disk drive will stop and the screen should look like the picture on the next page:



The <u>menu bar</u> containing the words **file Edit Diew Special** is across the top of the screen. The <u>desktop</u>, which is the rest of the screen below the menu bar, should be blank except for the <u>disk icon</u> and <u>trash icon</u> on the right side. (If the desktop looks instead like the screen diagram below, no harm has been done. Someone left it that way when they last quit.)

3. There should be a <u>pointer</u>: A somewhere on the screen. The pointer moves around on the computer desktop when you roll the mouse around on a real table top. Move the mouse to position the tip of the pointer in the center of the disk icon and "<u>doubleclick</u>" (tickaticka) the mouse button without moving the mouse. This <u>opens</u> the disk's <u>directory window</u>; and now your screen should look something like this:



The icons in the <u>directory window</u> above represent the computer files which are recorded on the disk:

## MacWrite 72

a.) The <u>application icons</u> represent files which tell the computer how to do something special; in this case, how to be a word processor.

b.) Icons with a "dog-eared" (bent-over) corner represent <u>documents</u> which you create with applications like *MacWrite*.

c.) The system folder contains the System which tells Mac how to be a computer. The system also holds the fonts (type faces); and the desk accessories which are discussed int the appendix. Double-click the System Folder, and open it up:

¢	File	Edit	View	Special		
ĒC	]]] [[	JorkD	isk 📃			II)
			🗏 Syste	m Folde	r 📃	Ð
	9 items		303	SK in disk	97K avail	able
		]				\$ _
M	LaserW	n ∎ riter	Laser Prep		er	(주
K	וווו					

d.) The <u>Finder</u> creates the desktop and the icons which allow you to find your way around in the Mac.

e.) The <u>Clipboard File</u> is a "clipboard" which allows you to carry words or pictures from one document to another. The clipboard will only hold one piece of information at a time.

f.) The <u>Scrapbook File</u> is a place you can store words and pictures to use over and over in different documents. The scrapbook will hold many different pictures or pieces of information at once.

g.) The <u>LaserWriter</u> and <u>ImageWriter</u> are printer "drivers." If you want the computer to print documents on paper, you must have a driver for the printer you want to use. If you will be the first to use a LaserWriter printer after it has been turned on in the morning, you will also need a <u>Laser Prep</u>. If the printer driver you want is missing, see the **"How to Copy"** chapter.

73 MacWrite

4. Close the <u>system folder</u> window by putting the tip of the pointer in the <u>close box</u>, and clicking once, without moving the mouse. (This is called "<u>clicking on</u>" the close box.)

Note: The box in the lower right corner of each window is called a "Size Box" If you put the tip of the pointer in it, and then hold the mouse button down while you "drag" the size box, you can change the shape of the window. Also, you can move the entire window by using this same strategy to "click and drag" the title bar around. This manipulation of windows can be quite useful when you are trying to arrange things so that you can see the contents of more than one window at once. Some windows have a "zoom" box in the their upper right corner. If you click on it, it will "toggle" the window between full size, and some other size you may have selected with the "Size Box."



5. Click and hold the mouse button, while you attempt to drag down the word View in the menu bar. A list should appear beneath it. The word View will not drag, but as you pull the pointer down, each line in the list is highlighted (blackened) in sequence. When the line **by Size** is highlighted, release the mouse button. (This process is called "<u>pulling down" View to by Size</u>.) The icons in the directory window should change into a list of the files and applications arranged in order of size, largest first. (The size is measured in "k." You may have to adjust the size box to see it.) If you wish, you can instead rearrange the list alphabetically by pulling down View to by Name, etc. Try it, then change the window back to **by Icon**.

6. The Apple menu, **(f)**, lists <u>desk accessories</u> on your disk, such as the **Scrapbook** and **Chooser**. Use **Chooser** before you begin, to prepare Mac for the kind of printing he will do when you are ready to print your creation: pull down **(f)** to **Chooser**. When the Chooser window appears....

a.) If you will be using a LaserWriter or an ImageWriter connected to the AppleTalk network, <u>click on the "active" button. the printer icon</u>, and the printer's <u>name</u>, if they do not "highlight" when you click on them, then something is wrong.



If the printer icon isn't there, you need to go back to step 3g If the printer's name isn't there, or if it refuses to highlight (white print on black) when you click on it, then the printer is not turned on; or the printer and(or) your Mac are not connected to the AppleTalk network.

b.) If you will be printing on an ImageWriter connected to your Mac only, click the "Inactive" button for AppleTalk; then click on the ImageWriter icon, and click on the icon of the printer port to which the printer is connected. You can tell which port by looking to see where the ImageWriter plugs into Mac's back.



c.) Click the Chooser's close box.

Note: If your Chooser doesn't look like the one in the diagram, pull down **s** to About the Finder. A little card should appear that tells you the finder is number 5.3. (If it's not, you need to replace the system, finder, and printer driver icons. "How to Copy" tells how to to this.) Put the little card away by clicking on it.

7. Double-click (boot) the *MacWrite* application icon. When the *MacWrite* window opens, it should look something like this:



8. The <u>menu bar</u> you see across the top works the same way as the menu bar on the desk top. Pull down **File** to **Save**. A <u>dialog box</u> will appear with the <u>insertion point</u> winking in the small rectangle under the words "save current document as:" Type the name of the paper (document) you are going to write, the way you want it listed in the computer's directory (Make the name short, but memorable). The letters will flow out behind the moving insertion point. Click on the "save" button. The dialog box will go away, and the name you have selected will take the place of "untitled" on the <u>title bar</u>. You will not have to fill in the dialog box again, unless you change your drawing's name.

Warning: Save what you write. If you don't, you will probably lose all your work. To save, pull down File to Save every ten minutes or every time you get up to get coffee or go to the bathroom. The disk drive will hum for a few seconds while the computer stores your work on the disk. It's cheap insurance!!!

Note: if you want to change the title of a document, do it when you are back on the desktop. Click and drag through the title under the document icon. The mouse pointer will turn into an I-beam. Now type the new name. Click elsewhere on the desktop to make the change permanent.

9. Pull down **File** to **Page Setup...** A dialog box titled **LaserWriter** or **ImageWriter**, depending upon which printer you selected with the **Chooser**, should appear. If you don't want to change anything, click the "ok" button, and the dialog box should go away.

Note: If you you are using the <u>ImageWriter</u>, and you include graphics in your *MacWrite* document, you should click **Tall Adjusted** in the **Page Setup...**dialog box. (This degrades the print quality slightly, but greatly improves the picture quality.)

MacWrite 76

10. Do this to type the title as you want it to appear at the top of your paper:

a.) Click the <u>Align-center</u> box on the ruler. Now the insertion point is winking at the center of the top of the "page," and whatever you type will be centered.

b.) Pull down **Font** to **Helvetica**. Pull down **Style** to **Bold**. You have just selected the font and style for your title.

Note: The LaserWriter does better work, and prints faster if you use <u>all</u> LaserWriter fonts such as Helvetica, Times, Symbol, Zapf Chancery, Zapf Dingbats, N.Helvetica. If you are using the ImageWriter, use ImageWriter fonts such as Geneva, Chicago, Venice, London, or San Francisco.

c.) Type your title.

Note: Don't be afraid of making mistakes; you can easily change anything in the paper, anytime you want to change it:

a.) To correct single letter errors, use the mouse to put the <u>"I" beam</u> after the letter you don't like, and click. (This moves the insertion point.) Backspace over the offending letter, and type in your correction. The backspace key is handy. It allows you to correct little spelling and punctuation errors quickly; but don't use it to wipe out whole words and sentences; instead follow the directions below.

b.) To correct more than a few letters: <u>select</u> what you don't like <u>by clicking and dragging</u> over it. Then, if you want <u>to destroy it</u> <u>press backspace</u>. If you only want <u>to move it</u>, <u>pull down Edit to</u> <u>Cut</u>; then move the insertion point (move the "I" beam and click) to where you want the deleted word or line to appear; then pull down Edit to Paste. (For more selection tricks, see step 15.)

Cut and Paste are among the most powerful of the word processor commands. They are what allow you to pick up and move what you've already typed to a new location. (If you want, copy some words you've already typed to another part of your paper, and if you don't want to delete the original, follow the above directions; but pull down Edit to Copy instead of Cut.)

11. Get set to type the first paragraph of your paper. Pull **Format** down to **Insert Ruler**. Click the left alignment box on the new ruler. Now the insertion point is winking on the left, and whatever you type will have an even left hand margin. Pull **Style** down to **Plain**. You have just changed the style to what it will be from now on, until you change it again. Begin typing. If you make mistakes, correct them using cut and paste, or backspace as discussed above.

Warning: <u>Do not use return when you get to the end of a line</u>, unless you want a new paragraph. The "wordwrap" feature of the word processor takes care of this automatically. If you use return to start a new lines, it defeats the word processor, and makes a terrible mess. Use return only to change paragraphs.

Warning: Do not use the space bar to indent your paragraphs. This also messes up the word processor. If later, you want to indent your paragraphs, do it as described in step 18.

12. Use <u>scrolling</u> to move around in your paper. If you want to go back to the beginning, click and drag the little white <u>Scroll Box</u> up to the top end of the scroll bar. If you want to scroll backwards a line at a time, click on the <u>Scroll Arrow</u> that points up. If you want to scroll backwards a screen full at a time, click on the grey space of the <u>Scroll Bar</u> in between the scroll box and the scroll arrow. Of course, dragging the scroll box down, or using the downside scroll arrow or scroll bar, reverses the process. (The number inside the scroll box is the page number being displayed on the screen.)

13. When you are ready to quit **<u>DO NOT</u>** turn off the computer. If you turn off the computer without going through proper shutdown procedure, you may lose hours of work, or even damage your disk.

a.) When you are ready to quit, pull down **File** to **Quit**. If you have not saved already, a dialog box will ask you if you want to save your work. Click "yes" or "no." After the disk drive hums briefly, the desktop will reappear. If you can already see the desktop, skip this step.

b.) Once you are back to the desktop, the best way to quit is to pull down **Special** to **Shut Down**. This ejects all disks and <u>resets</u> the computer. If you are done, you can turn off the computer; or if you want change startup disks and do something totally different with the computer, you can reboot with a different startup disk.

c.) You can also quit by dragging the disk into the trash. After Mac spits out the disk, turn him off.

d.) If you want to keep the present disk as the startup disk, and keep its directory window on the screen; perhaps while you copy a file from one disk to another, select (click on) the disk icon, and pull down **File** to **Eject**, or type **B** -**E**. Mac will spit out the disk that was selected.

14. When you want to go back to work on the same paper, boot the system, and open the directory window. There should be a document icon there with the name you gave your paper in step 8. Reopen your paper by double-clicking that icon. When your paper opens, use the scroll bar to get to where you want to start typing.

15. When you are ready to print; Save; then do the following:

a.) Make sure the printer is turned on:

i.) If you are using a LaserWriter, the On/Off switch is on the left end, just around the backside corner from the Power Cord Socket:



The green light on the front flashes as the LaserWriter warms up; then the yellow light starts flashing to show that the LaserWriter is processing a test print. The LaserWriter should deliver its own test print within two minutes. The yellow light will go out when the LaserWriter delivers the test print. When the green light is on steady, the LaserWriter is ready to print.

ii.) If you are using an ImageWriter, turn it on by depressing the on/off button, which is on the right side of the ImageWriter's top. Three green lights adjacent to the on/off button should come on. If you are using an old ImageWriter, there will be only two green lights. (If you don't get the right number of green lights, or the ImageWriter needs paper, and you don't know what to do, read the "ImageWriter" chapter.)

b.) Pull down File to Print. When the dialog box appears...

i.) ...for the LaserWriter, click the "ok" button.

ii.) ...for the **ImageWriter** click the **Best** or **Faster** or **Draft** button (**Best** is slow, good-looking, and most copyable; **Draft** is fast and awful; **Faster** is in between.); then click the "ok" button.

It may take a minute or two, but if all goes well, Mac ought to start printing.

c.) In case of difficulty...

i.) ...if nothing happens, you may have skipped steps 3, 6, or 9: that is, you must have printer driver icon for the printer you intend to use present in your system folder; the AppleTalk "on-off" switch must be set the right way and the appropriate printer and port must have been selected in **Chooser**; and **File** must have been pulled down to **Page Setup...** 

ii.) ...if something goes wrong during the ImageWriter printing process, first, turn off the printer by pressing its on/off button; then press **8** - .

(command-period). (Mac will tell you to stop the printing by pressing **%** - . only, but this turns out to be much too slow.)

It would probably be possible to type an entire paper using only the above steps; but there may be some other things you would like to be able to do when you prepare your paper. Here are some possibilities:

16. To emphasize characters with underlining, Italics, etc:

- a.) Select (click and drag over) the words to be emphasized.
- b.) Pull down Style to whichever type of emphasis you want.
- c.) To turn off the emphasis, pull down Style to Plain text.

17. <u>To undo a stupid blunder</u> such as a cut or backspace which accidentally wiped out a lot of hard work, <u>FREEZE</u>, <u>do not press a single button or key</u>!!! If you press even one key after doing your stupid blunder, you will not be able to undo it. Now, after your head has cooled and the smoke has cleared, pull down **Edit** to **Undo**, and all your hard work should magically reappear.

18. <u>To set paragraph (or "first line") indent</u>: Pull down **Edit** to **Show Ruler**. Then click and drag the <u>Indent</u> symbol (which is usually embedded in the black triangle at the left end of the ruler) to the half inch point or wherever you want the paragraph indent to be. This will create a new paragraph, complete with indent, <u>whenever you press return</u>. This is the <u>only</u> way to indent paragraphs; <u>do not ever use the</u> <u>space bar to indent</u> your paragraphs. Doing so will occasionally screw up your documents.



19. <u>To set tabs</u>: Pull down **Edit** to **Show Ruler**. Then click and drag the tab triangles out of the <u>tab well</u> along the ruler to wherever you want the tabs to be. <u>Regular tabs</u> align the left ends of the tabbed words; <u>decimal tabs</u> align the decimal points of

## MacWrite 80

numbers. Once the tabs are set, they work about the same as the tabs on a typewriter. If you change your mind, just drag the tabs off of the ruler, and they will disappear.

20. To change the spacing of your lines, click on the appropriate spacing box. If you want the spacing to be the same as a typewriter, click the "6 lines/inch" box. If you want your work to be aligned along both the left and right edges, click the <u>Justify</u> box.

21. <u>To set margins</u>: Pull down **Edit** to **Show Ruler**. Then click and drag the small black triangles at either end of the ruler to where you want the margins to be.

Note: The setting of tabs, indents, line spacing, and margins will affect your paper from the specific location in the paper where you have placed a ruler, as you continue to type, forward. It will not affect material that has already been typed. If you want to change what has already been typed, you must insert and(or) change other rulers before that material.

Any time you change the fonts or font style or point size, that change will be in effect from that point, as you continue to type, forward. If you want to alter the font, style, or point size for a particular part of your text, you must first <u>select</u> that text:

22. Here are some more selection tricks.

a.) To select an entire word: Double click anywhere in the word.

b.) To select an odd portion of any length of your paper: Click where you want the selection to begin; and "shift"-click where you want it to end.

c.) <u>To rapidly select many lines</u>: Click and drag down the invisible selection bar in the left margin of your "page."

23. <u>To number the pages in your paper</u>: Pull down Format to Open Header. (or **Open Footer**) A header window should appear:



Drag the <u>Page number icon</u> wherever you like below the header ruler. It will number each of your pages in whatever font you've selected for the insertion point. If you want your page numbering to start at some number other than one, pull down **Format** to **Set Page #...** Type in the desired page number and click "ok."

81 MacWrite

Note: *MacWrite* automatically decides where your page breaks will be. Page breaks are where the printer goes on to the next page during the printing process. You can tell where *MacWrite* has put a page break, because a fine horizontal dotted line will suddenly appear across your page at that point. If you don't like *MacWrite's* choice, click where you want the page break to be, then pull down Format to **insert Page Break**. *MacWrite* will renumber the pages automatically.

If you'd like something else such as a title to appear on each page, type it below the header ruler. If you want each page stamped with the current date and time, go ahead and drag those icons down too. People will think you're weird, but if it feels good, go ahead. Click the close box on the header window.

24. <u>There are three ways to put drawings or other graphics into *MacWrite* : you can use the clipboard, **Art Grabber +**, or the **Scrapbook**.</u>

a.) <u>Clipboard</u>: when *MacWrite* is on the same disk with graphics programs such as *Excel, MacPaint* or *MacDraw* :

i.) Create the graphic in *Excel, MacPaint* or *MacDraw*, select it, then pull down **Edit** to **Copy**. Quit the graphic program.

ii.) Open your *MacWrite* document; click where you want the graphic to be, then pull down **Edit** to **Paste**. Your graphic should appear in your *MacWrite* document.

b.) <u>Art Grabber +</u>: If the graphic already exists on your disk as a *MacPaint* document, you can use **Art Grabber** to "grab" it while you are working within *MacWrite*.

i.) Pull down **d** to **Art Grabber+**. The word "**Grabber+**" will appear on the menu bar.

ii.) Pull down **Grabber+** to **Open**. A directory of your *MacPaint* documents will appear. You may need to open a folder to get at them. Double click on the title of the *MacPaint* document you want. It will appear in the **Art Grabber** window.

iii.) Click and drag the "+" mouse pointer from the upper left corner to the lower right corner of the part of the *MacPaint* document you want to use. Pull down **Edit** to **Copy**. Click the close box of the **Art Grabber** window.

iv.) Click where you want the graphic to be. Pull down Edit to Paste.

c.) <u>Scrapbook</u>: when *MacWrite* is on the same disk with graphics programs such as *Excel, MacPaint* or *MacDraw*, you can create the graphic in one of these applications, then...

i.) Select the portion of the graphic which you want to transfer; and **Cut**(or **Copy**) it.

ii.) Pull down **d** to **Scrapbook**, and when the scrapbook window opens, **Paste** your item. Click the close box.

If there are several different portions you would like to paste, repeat steps i. and ii. Each time you paste into the scrapbook, another page is created. This is an advantage over the clipboard, because the clipboard will only accept one portion at a time. Once you have pasted something into the scrapbook, it is safe; you can do anything else you might want to do: use the clipboard, quit for the day, or take a vacation. What you paste in the scrapbook is safely stored on the disk, it will not disappear when the power goes off, like things which are stored in the clipboard.

iii.) When you are ready to paste the **Scrapbook**-stored graphic into the other document, pull down **t** to **Scrapbook**; and, when the scrapbook appears, page through it, by clicking on the scroll bar below its window, until you find the graphic you want.

iv.) Cut(or Copy) the item from the scrapbook. Click the close box.v.) Click in the other document where you want your *MacWrite* graphic to be, and Paste.

After the graphic is in *MacWrite* you can drag it horizontally, by selecting it, then clicking and dragging its left or right edges. (You can also resize the picture by dragging any of the three little black boxes which appear across the bottom of the picture when it is selected. I've never been particularly pleased with the effect, however.)

25. To find out how much space your document is using: Pull down **c** to About **MacWrite**. The dialog box that appears will tell you who wrote *MacWrite*, and the version number; then it will say something like "Document occupies 23K on disk with 47K remaining." This is sometimes important to know; because, if you run out of space unexpectedly, you may very well loose your entire document.

Note: <u>Pull down File to Save As... if you do run out of space</u>. When the dialog box appears, <u>type in a new</u> <u>name</u>, then <u>click the "eject" button</u>. Wait for a count of ten until you are well clear of the aircraft, then pull your parachute "D" ring. The parachute should deploy normally. If you were not flying a high performance aircraft, <u>insert a formatted disk with lots of room</u> in the now empty drive slot. Now <u>click the "Save" button</u>. Your "As.." has been saved! (Parachutes notwithstanding, this is no laughing matter; follow these directions if you run out of space!)

Save As.. can also be useful if you open an existing document, make some "on screen" changes, and then decide that you want to save <u>both</u> the old document and the new "changed" document:

26. <u>To save a "changed" document without destroying the original</u>: pull down **File** to **Save As...**. Type in the new name for your changed document. Click the "save" button.

27. <u>To change a certain word that appears in many places in your document</u>: Pull down **Search** to **Change...**. When the Change window appears, type the "certain word" you want to change in the top **Find what** rectangle; type what you want to change it to in the **Change to** rectangle. Click the **Find Next** button if you wish to exercise discretion in your changes. Click the **Change All** button if you want to change every single occurrence of that "certain word" in the same way.

28. <u>To avoid excessive use of the mouse</u>: Use the keyboard command letters instead, which appear to the right of many of the options in the pull down menus. There are dozens of other keyboard commands as well, which are listed in the **"Hurry up"** chapter of this book, and the Apple literature.





This chapter assumes that you want to learn word processing as rapidly as possible.

1. In order to get started, you'll need a Macintosh computer, and a work disk with *Word* on it. (If your only copy of *Word* is a master disk, you need to study the **"How to Copy"** chapter first, and make a second work disk copy. It is dangerous to use your only copy of an application: what will you do if you damage it?)

a.) Connect the power cord and mouse to the back of the Mac. If you have an ImageWriter printer, or an external disk drive, or you have access to an AppleTalk system, connect them too. Study the little icons (pictures) above the connectors in the back of the Mac: they will help you to decide which peripheral (accessory) connects where. (If you use it, the AppleTalk connector <u>must</u> be plugged into the port below the printer icon.) Plug your Mac into a surge protector or a grounded (three prong) wall outlet.

b.) Plug the keyboard into the jack at the base of the front of the Mac. Make sure the keyboard's plugs are right side up when you insert them, or you will bend the keyboard plug contacts.

c.) Turn it on. The off-on switch is just above the power cord connection in the back. The Mac will "beep" when you turn it on.

d.) Adjust the brightness. You can feel the knurled brightness knob under the ledge just below the apple logo, on the lower left front side of the computer. Don't turn the brightness any higher than necessary to see comfortably. The lower you keep the brightness, the longer the "picture tube" will last.

2. Hold the *Word* work disk the way it is in this little picture: 🗂 but with your right thumb over the label. Slide it all the way into the disc slot below the screen, until it snaps in and the disc drive starts to click and hum.

The computer is gathering system information from the disk which is necessary for its operation; this process is sometimes called "<u>booting the system</u>." Any disk that "boots the system" is called a <u>startup disk</u>. A startup disk must have a system file on it. If Mac spits the disk out when you try to insert it, it's because the disk doesn't have a system file, or the disk is defective.)

After about 18 seconds, the disk drive will stop and the screen should look like the picture at the top of the next page:



The <u>menu bar</u> containing the words **file Edit Diew Special** is across the top of the screen. The <u>desktop</u>, which is the rest of the screen below the menu bar, should be blank except for the <u>disk icon</u> and <u>trash icon</u> on the right side. (If the desktop looks instead like the screen diagram below, no harm has been done. Someone left it that way when they last quit.)

3. There should be a <u>pointer</u>: \* somewhere on the screen. The pointer moves around on the computer desktop when you roll the mouse around on a real table top. Move the mouse to position the tip of the pointer in the center of the disk icon and "<u>double-click</u>" (tickaticka) the mouse button without moving the mouse. This <u>opens</u> the disk's <u>directory window</u>; and now your screen should look something like this:



The icons in the <u>directory window</u> above represent the computer files which are recorded on the disk:

Word 86

a.) The <u>application icons</u> represent files which tell the computer how to do something special; in this case, how to be a word processor.

b.) Icons with a "dog-eared" (bent -over) corner represent <u>documents</u> which you create with applications like *Word*.

c.) The system folder contains the System which tells Mac how to be a computer. The system also holds the fonts (type faces); and the desk accessories which are discussed in the appendix. Double-click the System Folder, and open it up:

Ś	File Edi	t View	Special		
	📃 Work	Disk 📃			
		📕 Syste	m Folder		בו
	9 items	303	K in disk	97K availat	ole
	System	Finder	Clipboard File	e Scrapbook File	
2	Laser Writer	▶ Laser Prep	Image Writer		<b>↓</b>
R	5			¢	Ð

d.) The <u>Finder</u> creates the desktop and the icons which allow you to find your way around in the Mac.

e.) The <u>Clipboard File</u> is an electronic "clipboard" which allows you to "carry" words or pictures from one document to another. The clipboard will only hold one picture at a time.

f.) The <u>Scrapbook File</u> is a place you can store words and pictures to use over and over in different documents. The scrapbook will hold many different pictures at once.

g.) The <u>LaserWriter</u> and <u>ImageWriter</u> are printer "drivers." If you want the computer to print documents on paper, you must have a driver for the printer you want to use. If you will be the first to use a LaserWriter printer after it has been turned on in the morning, you must have a <u>Laser Prep</u>. If the printer driver you want is missing, see the **"How to Copy"** chapter. 4. Close the <u>system folder</u> window by putting the tip of the pointer in the <u>close box</u>, and clicking once, without moving the mouse. (This is called "<u>clicking on</u>" the close box.)

Note: The box in the lower right corner of each window is called a "Size Box" If you put the tip of the pointer in it, and then hold the mouse button down while you "drag" the size box, you can change the shape of the window. Also, you can move the entire window by using this same strategy to "click and drag" the title bar around. This manipulation of windows can be quite useful when you are trying to arrange things so that you can see the contents of more than one window at once. Some windows have a "zoom box" in the their upper right corner. If you click on it, it will "toggle" the window between full size, and some other size you may have selected with the "Size Box."

title bar	Į	Startup		۲.	zoom box
click and drag to move		Name	<u>Size</u>	Kir	toggles the window from
the window	\$	Microsoft Word	332K	$\mathbf{\hat{O}}$	little to big
close box	<b>G</b>	SuperPaint	162K		/size box
makes the	D	Main Dictionary	161K		drag to get
window go	<u> </u>	Ready_Set_Go! 3	<u>151K</u>	<u>₽</u>	the right
away	K)		I57	প্র	window size

5. Click and hold the mouse button, while you attempt to drag down the word View in the menu bar. A list should appear beneath it. The word View will not drag, but as you pull the pointer down, each line in the list is highlighted (blackened) in sequence. When the line **by Size** is highlighted, release the mouse button. (This process is called "pulling down" View to by Size.) The icons in the directory window should change into a list of the files and applications arranged in order of size, largest first. (The size is measured in "k." You may need to adjust the size box to see it.) If you wish, you can instead rearrange the list alphabetically by pulling down View to by Name, etc. Try it, then change the window back to by Icon.

6. The Apple menu, **(**, lists <u>desk accessories</u> on your disk, such as the **Scrapbook** and **Chooser**. Use **Chooser** before you begin, to prepare Mac for the kind of printing he will do when you are ready to print your creation: pull down **(** to **Chooser**. When the Chooser window appears....

a.) If you will be using a LaserWriter or an ImageWriter connected to the AppleTalk network, <u>click on the "active" button</u>, the printer icon, and the printer's name, if they do not "highlight" when you click on them, then something is wrong.



If the printer icon isn't there, you need to go back to step 3g If the printer's name isn't there, or if it refuses to highlight (white print on black) when you click on it, then the printer is not turned on; or the printer and(or) your Mac are not connected to the AppleTalk network.

b.) If you will be printing on an ImageWriter connected to your Mac only, click the "Inactive" button for AppleTalk; then click on the ImageWriter icon, and click on the icon of the printer port to which the printer is connected. You can tell which port by looking to see where the ImageWriter plugs into Mac's back.



c.) Click the Chooser's close box.

Note: If your Chooser doesn't look like the one in the diagram, pull down **(** to About the Finder. A little card should appear that tells you the finder is number 5.3. (If it's not, you need to replace the system, finder, and printer driver icons. "How to Copy" tells how to to this.) Put the little card away by clicking on it.

7. Double-click (boot) the *Word* application icon, opens, it will look something like this:

When the Word window



8. The menu bar you see across the top works the same way as the menu bar on the desk top. Pull down **File** to **Save**. A <u>dialog box</u> will appear with the <u>insertion point</u> winking in the small rectangle under the words "save current document as:" Type the name of the paper (document) you are going to write, the way you want it listed in the computer's directory (Make the name short, but memorable). The letters will flow out behind the moving insertion point. Click on the "save" button. The dialog box will go away, and the name you have selected will take the place of "untitled" on the <u>title bar</u>. You will not have to fill in the dialog box again for this paper, unless you revise your document, and you want to save both the revision and the old version. To do this, see step 29 of this chapter.

Warning: Save what you write. If you don't, you will probably lose all your work. To save, pull down File to Save every ten minutes or every time you get up to get coffee or go to the bathroom. The disk drive will hum for a few seconds while the computer stores your work on the disk. It's cheap insurance!!!

Note: if you want to change the title of a document, do it when you are back on the desktop. Click and drag through the title under the document icon. The mouse pointer will turn into an I-beam. Now type the new name. Click elsewhere on the desktop to make the change permanent.

9. Pull down File to Page Setup... A dialog box should pop up:

Page Setup	Use facing
Orientation:  Tall O Wide means sideways !	pages and gutter, if
Paper Width: 8.5in Height: 11 in OK	you plan to print on both
Margins: Top: 1 in Left: 1 in 🛛 Facing Pages	your pages.
The margin Jottom: 1 in Right: 1 in Gutter: 0.5in	widows are
the edges of Footnotes at: OBottom of Pg. Widow Control	single lines separated from their
Name the next document in a series here, if you want to link documents for indexing, etc.	paragraphs by a page break.

Type the margins you want into the appropriate spaces. If you want footnotes, say where. If you want page numbering, specify what number you want to start with. Click an "X" into widow control. Click the "ok."

Note: Word has a Short Menus feature to make things less confusing for beginners. But the Short Menus are too short. Click on the Edit menu: if the words, Short Menus, are listed, you will be ok.

10. Get ready to type the title as you want it to appear at the top of your paper:

a.) Pull down Format to Show Ruler. A ruler should pop up.

<u> 1 2 3</u>		
Justify text	Double	
Align text right	One and a half space	l Paragraph double space
Align text left	gle space p	aragraph ingle space

Click on the <u>Center text</u> icon. The insertion point is winking in the center of the "page," and when you are ready to type your title, it will be centered.

b.) Pull down Font to Helvetica. Pull down Font to 12. Pull down Format to Outline. You have just selected the font, font size, and style for your title. Click the "ok" button.

Note: The LaserWriter does better work, and prints faster if you use <u>all</u> LaserWriter fonts such as Helvetica, Times, Symbol, Zapf Chancery, Zapf Dingbats, N.Helvetica. If you are using the ImageWriter, use ImageWriter fonts such as Geneva, Chicago, Venice, London, or San Francisco. If

Helvetica, or some other font you may want is not in the **Font** menu, use whatever is there for now. (To change the fonts in your disk's <u>system</u> see the **Font Appendix**. To change the fonts in the menu, see step 39.)

c.) Type your paper's title.

Note: Don't be afraid of making mistakes; you can easily change anything in the paper, anytime you want to change it:

i.) To correct single letter errors, put the <u>"I" beam/mouse pointer</u> after the letter you don't like, and click the mouse. (This moves the insertion point.) Backspace over the offending letter, and type in your correction. The backspace key is handy. It allows you to correct little spelling and punctuation errors quickly; but don't use it to wipe out whole words and sentences; instead follow the directions in the next box.

ii.) To correct more than a few letters: <u>select</u> what you don't like <u>by clicking and dragging</u> over it. The portion you have selected should be "highlighted" (have a black background). Then, if you want to <u>destroy it, press backspace</u>. If you only want to <u>move it, pull down Edit to Cut</u>; move the insertion point (move the "I" beam and click) to where you want the deleted word or line to appear; then pull down Edit to Paste. For more selection tricks, see step 20.

Cut and Paste are among the most powerful of the word processor commands. They are what allow you to pick up and move what you've already typed to a new location. (If you want, copy some words you've already typed to another part of your paper, and if you don't want to delete the original, follow the above directions; but pull down Edit to Copy instead of Cut.)

11. Get set to type the first paragraph of your paper. Press return twice (Return is used only to change "paragraphs.") Click the <u>Align text left</u> icon on your ruler.



Now the insertion point is winking on the left, and whatever you type will have an even left hand margin. If you want both margins to be even, click the <u>Justify text</u> icon instead. If you want single spacing between the lines of the paragraph, click the <u>Single</u> space icon.

If you want each paragraph to be indented, click and drag the little first line indent triangle a half inch to the right, or however much you want to indent. A new paragraph, complete with indent, will now be created, <u>whenever you press return</u>. If you want automatic double spacing between paragraphs, click the <u>Paragraph double space</u> icon.

Word 92

Pull **Format** down to Outline again ( this <u>switches</u> the Outline style back <u>off</u> again). You have just changed the style to what it will be from now on, until you change it again. Begin typing. If you make mistakes, correct them using cut and paste, or backspace as discussed in step 10.

Warning: <u>Do not use return when you get to the end of a line</u>, unless you want a new paragraph. The "wordwrap" feature of the word processor takes care of new lines automatically. If you use return to start a new line, it defeats the word processor, and makes a terrible mess. Use return only to change paragraphs.<sup>2</sup>

Warning: Do not ever use the space bar to indent your paragraphs. This also messes up the word processor. If you want to indent your paragraphs, do it only as described above.

#### 12. To set tabs:

a.) Click on the tab style you want: Left end tab means the left ends of the tabbed words will line up; Tab on decimal means the decimal points will line up, etc.

b.) Click on the ruler wherever you want the tabs to be. Little tab icons should appear on the ruler wherever you have clicked. You can readjust them by dragging them left or right, or if you don't want them at all, just drag the them off of the ruler, and they will disappear. Once the they are set, they work about the same as the tabs on a typewriter. But do **not ever** use the space bar in place of the tab feature.<sup>3</sup>



13. To temporarily indent a portion of your paper like this, click and drag the small black left and right

<sup>&</sup>lt;sup>1</sup>Because the computer <u>remembers</u> the spaces from the spacebar even when you don't want them there any more!

<sup>&</sup>lt;sup>2</sup>Because the computer <u>remembers</u> the "returns" and it will start a new paragraph at the end of that line, even when you later decide to add something on to the line!

<sup>&</sup>lt;sup>3</sup>Because what you see is not quite what you get. Columns that you lined up "perfectly" on the screen, with the spacebar, will no longer be lined-up when you print your document.

# indent triangles at either end of the ruler in toward the center however much you like.

Note: The setting of tabs and indents; the selection of text alignment; and line and paragraph spacing; the emphasizing of characters with italics, underlining, etc.; and the selection of fonts and font sizes will affect your paper from the specific location in the paper where you are typing, as you continue to type, forward, until you change it. It will not affect material that has already been typed. If you want to change what has already been typed, you must <u>select</u> (click and drag over) that material <u>before</u> you make the change. Some more selection tricks are described in step 20.

14. Use the <u>scroll bar</u> to move around in your paper. If you want to go back to the beginning, click and drag the little white box up to the top end of the scroll bar. If you want to scroll backwards a line at a time, click on the scroll bar arrow that points up. If you want to scroll backwards a screen full at a time, click on the grey space in between the little white box and the arrow that points up. Of course, dragging the little white box down, or using the downside arrow or grey space, reverses the process.



15. When you are ready to quit **<u>DO NOT</u>** turn off the computer. If you turn off the computer without going through proper shutdown procedure, you may lose hours of work, or even damage your disk.

a.) When you are ready to quit, pull down **File** to **Quit**. If you have not saved already, a dialog box will ask you if you want to save your work. Click "yes" or "no." After the disk drive hums briefly, the desktop will reappear. (If you can already see the desktop, skip this step.)

b.) Once you are back to the desktop, the best way to quit is to pull down **Special** to **Shut Down**. This ejects all disks and <u>resets</u> the computer. If you are done, you can turn off the computer; or if you want change startup disks and do something totally different with the computer, you can reboot with a different startup disk.

c.) You can also quit by dragging the disk into the trash. After Mac spits out the disk, turn him off.

d.) If you want to keep the present disk as the startup disk, and keep its directory window on the screen; perhaps while you copy a file from one disk to another, select (click on) the disk icon, and pull down File to Eject, or type **%** -E. Mac will spit out the disk that was selected.

16. When you want to go back to work on the same *Word* document, boot the system, and open the directory window. The *Word* document icon should be there with the name you gave your paper in step 8. Reopen your paper by double-clicking that icon. When your paper opens, use the scroll bar to get to where you want to start typing. To open your "old" *Word 1.0*, *MacWrite* documents, see step 40.

17. When you are ready to print; Save (see step 8); then do the following:

a.) Pull down File to Page Preview... What you see in Page Preview is what you will get, when you print your document:

Click on the Magnifier icon, and the mouse pointer turns into a magnifier. Use it to click on parts of the page that you need to see better.

Click on the Page number icon, and the mouse pointer turns into a page number. Click it on the part of the page where you want the page numbers to appear.

When you click on the Margins icon, the margins, page breaks, page numbers, headers, and footers, can be rearranged.

If you click on the single page, a single page will be displayed. Click on two pages, and two pages will be displayed.



You can turn the preview pages with the scroll bars. When you are done previewing, click the close box. Save again if you changed anything.

b.) Make sure the printer is turned on:

i.) If you are using a **LaserWriter**, the <u>On/Off switch</u> is on the left end, just around the backside corner from the <u>Power Cord Socket</u>.

95 Word



The green light on the front flashes as the LaserWriter warms up; then the yellow light starts flashing to show that the LaserWriter is processing a test print. The LaserWriter should deliver its own test print within two minutes. The yellow light will go out when the LaserWriter delivers the test print. When the green light is on steady, the LaserWriter is ready to print.

ii.) If you are using an ImageWriter, turn it on by depressing the on/off button, which is on the right side of the ImageWriter's top. Three green lights adjacent to the on/off button should come on. If you are using an old ImageWriter, there will be only two green lights. (If you don't get the right number of green lights, or the ImageWriter needs paper, and you don't know what to do, read the "ImageWriter" chapter.)

c.) Pull down File to Print. When the dialog box appears...

i.) ...for the **LaserWriter**, click the "X" out of the **Font Substitution** box; then click the "ok" button.

ii.) ...for the **ImageWriter** click the **Best** or **Faster** or **Draft** button (**Best** is slow, good-locking, and most copyable; **Draft** is fast and awful; **Faster** is in between.); then click the "ok" button. If there are graphics in your *Word* document, you should click **Tall Adjusted**. (This degrades the print quality slightly, but greatly improves the picture quality.)

It may take a minute or two, but if all goes well, Mac ought to start printing.

d.) In case of difficulty...

i.) ...if nothing happens, you may have skipped steps 3, 6, or 9: that is, you must have printer driver icon for the printer you intend to use present in your system folder; the AppleTalk "on-off" switch must be set the right way and the appropriate printer and port must have been selected in **Chooser**; and **File** must have been pulled down to **Page Setup...** 

Word 96

It would probably be possible to type an entire paper using only the preceding instructions; but there will be other things you eventually want to do. Here's a short index of some possibilities, and where to find them:

Topic	<u>Step</u>	going back to work, same document	16
accidental deletions	19	graphics, adjustment of, in Word	27
adding up numbers in Word	34	graphics transfer into Word	27
adjusting for graphics distortion	17	gutter, printing on both sides	9
align text	11, 12	header, running	32
alphabetizing a column in Word	34	highlighting (selecting)	6, 10, 20
AppleTalk switch	6	hyphenation	33
Art Grabber	27	I-beam/mouse pointer	7, 10
backspace key	10	icons	3
black text background (selecting)	10.20	ImageWriter printer	17
calculating in Word	34	indent, how to	11, 13
center text	10	indexing, how to	38
changing certain word throughout	30	insertion point	7, 8, 10
character emphasis	10, 11, 13, 18	justify text	11
checking spelling	33	k of space being used for document	5, 28
chooser	6	LaserWriter printer	17
click and drag	4, 5, 10	line numbering	37
clipboard	27	line spacing	11
close box	4	MacPaint, MacDraw, into Word	27
columns, making more than one	35	magnifier icon	17
contents, table of, automatic typing	37	margin setting	9, 17
copying text	10	menu additions and deletions	39
corrections, making	10	menu bar	2,6
custom menus, making	39	merging documents, form letters	31
cut and paste, how to	10	moving around in your paper, scroll	14
deleting text	10	moving graphics into Word	27
desktop	2	multiple columns, how to	35
disasters, what to do	19, 28	multiple windows, how to	21, 22
disk full, what to do	28	numbering lines and paragraphs	37
duplicating text	10	opening multiple windows, how to	22
editing, how to	10	page breaks	24
emphasizing text	10, 11, 13, 18	page numbering, how to	9, 17
erasing text	10	page preview	17
error correction	10	page setup	9, 17
facing pages, printing on both sides	9, 16	paragraph numbering, how to	37
font, font size, and style selection	10, 11, 13, 18	paragraph spacing	11
footer, running	32	paragraph formatting	11
footnotes, how to	23	pasting text, how to	10
form letters, how to do them	31	print, how to	17
formatting text	10, 11, 13, 18	printer drivers	3
full page display	17	printer selection, chooser	6
getting started	1-7	pulling down, how to	5
global change of certain word	30	quitting, how to	15
glossary, how to use	25	removing text	10
		-	

97

renaming document, how to	8	spelling checker	33
reopening your paper	16	splitting windows	21
repaginate	24	starting up Word	1-7
repeatedly typing same thing	25	stopping for the day	15
return key (change paragraphs only)	11	style sheets	36
return to work on same document	16	SuperPaint into Word	27
ruler, how to use	10.11.12	tab setting, how to	12
running header and footer	32	tall adjusted, use of	17
same phrase typing, over and over	25	title, formatting	10
Save As how to, and why	28.29	totaling numbers in a column	34
saving new without wiping old	29	transferring graphics into Word	27
scraphock use of	27	transferring text within Word	10
scroll bars use of	14	turning pages, scrolling	14
selecting "highlighting"	10 20	two part viewing, multiple windows	21
show whole page preview	17	undo (reversing stupid acts)	19
shutting down how to	15	viewing several parts (2 windows)	21 22
simultaneous viewing of two parts	21 22	widow control ("oroban" lines)	9
size box use of	4	window	ä
size k of document	5 28	window adjustment how to	Ă
sorting words in a column	34	window split har use of	21
space bar (only between words)	11 12	Word window illustration of	7
space in use "k" finding how much	5 28	zoom box use of	Å
space in use, R , intuing new much	11	20011 004, 000 01	-
show whole page, preview shutting down, how to simultaneous viewing of two parts size box, use of size, k, of document sorting words in a column space bar (only between words!) space in use, "k", finding how much spacing, line and paragraph	17 15 21, 22 4 5, 28 34 11, 12 5, 28 11	undo (reversing stupid acts) viewing several parts (2 windows) widow control ("orphan" lines) window window adjustment, how to window split bar, use of Word window, illustration of zoom box, use of	19 21, 22 9 3 4 21 7 4

18. To emphasize characters with underlining, Italics, etc:

a.) Select (click and drag over) the words to be emphasized.

b.) Pull down Format to whichever type of emphasis you want.

c.) To toggle the emphasis off again, pull down **Format** to that same type of emphasis once again.

19. <u>To undo a stupid blunder</u> such as an inadvertent cut or backspace which wipes out a lot of hard work, <u>FREEZE</u>, <u>do not press a single button or key</u>!!! If you press even one key after doing your stupid blunder, you will not be able to undo it. Now, after your head has cooled and the smoke has cleared, pull down **Edit** to **Undo**, and all your hard work should magically reappear.

20. Here are some more selection tricks:

a.) To select an entire paper:

First move the "I" beam/mouse pointer to the <u>invisible selection bar</u>. (See the diagram at the beginning of this chapter.) You can tell when you've arrived at the invisible selection bar because the "I" beam turns into a pointer which points up and to the right,  $\mathbf{A}$ .

Now press the "command" (four leaf clover) button and the mouse button at the same time. This is written, **%\_-click**.

b.) <u>To select an odd portion of any length of your paper</u>: Click where you want the selection to begin; and "shift"-click where you want it to end.

c.) <u>To select a paragraph</u>: Double-click in the invisible selection bar next to the paragraph.

d.) To rapidly select many lines: Click and drag down the invisible selection bar.

e.) To rapidly select a sentence: **3** -click on any word in the sentence.

f.) <u>To select a single column</u> from a body of tabulated material: hold down the **Option** button while you drag from the upper left to the lower right corners of the column.

21. To view two different parts of your paper simultaneously:



a.) Click and drag the small black rectangle, the <u>window split bar</u> from the top end of the vertical scroll bar down to the scroll bar's middle. Now you have two different screens, each with its own little scroll bar.

b.) Scroll the screens to any two locations in your paper. You can easily move from one to the other by pointing and clicking on wherever you want to be. Yes, you can cut and paste from one screen to the other.

c.) When you are done with the split screens, drag the window split bar back up to the top of the scroll bar.

22. <u>To view two different papers simultaneously</u>: Pull down **File** to **Open**; and when the dialog box pops up, double-click on the name of the document you want. (Click the "drive" button if the document is on a disk in another drive. You may have to double-click on folder names to get at the file you want. To close a folder, so you can get at another folder, click on the disk's name.) When the new document you wanted opens, drag the document windows and adjust the size and(or) zoom boxes until you can see both documents to your satisfaction. Yes, you can cut and paste from one screen to the other. To put a document away, **save** and click its close box.

## 23. To insert footnotes:

a.) Make sure the insertion point is adjacent to the word where you want the footnote number to appear.

b.) Pull down **Document** to **Footnote...** You will get a dialog box. Click an "X" into the little box next to "auto numbered reference." Click "ok."

99 Word

c.) Automatically: the screen will split, a footnote number will appear where the insertion point was, and the insertion point will appear in the newly created screen next to the footnote number to be at the bottom of the page. Type your footnote.

Note: Make sure the font and font size match the main body of your text; otherwise your paper will look disorganized. This problem frequently occurs when an author decides to change fonts after a paper is finished, and forgets to change the footnotes, because they are not normally visible.

d.) Move the insertion point back to the original window and continue typing. If you want to get rid of the split screens, drag the window split bar back up to the top of the scroll bar.

24. <u>To see where the page breaks will be</u>: Pull down **Document** to **Repaginate**, and wait. The dotted lines ...... that run across the page show where the page breaks will be. To insert your own page breaks, click where you want the page break to be, then press **shift-enter**.

25. To avoid typing the same long idiot phrase repeatedly:

a.) Type it once, then select it, and pull down Edit to Copy the idiot phrase.

b.) Pull down Edit to Glossary .....

c.) In the dialog box which appears, type a short easily remembered code letter to stand for the idiot phrase

d.) Click the "define" button.

e.) Click on the close box of the dialog box.

f.) Now hereafter, whenever your paper requires that long idiot phrase, press **36** -backspace, type the code letters, then press **Return**; and, lo! The idiot phrase will magically appear!

g.) If you press **B** -backspace; type the letters: time, then press Return, the time (say 6:47 PM) will appear! It also works for date (say 3/9/87).

26. <u>To avoid excessive use of the mouse</u>: Use the keyboard command letters instead, which appear to the right of many of the options in the pull down menus. There are dozens of other keyboard commands as well, which are listed in the **"Hurry up"** chapter of this book, and the Microsoft literature.

27. <u>There are three ways to put drawings or other graphics into *Word*: you can use the clipboard, **Art Grabber +**, or the **Scrapbook**.</u>

a.) <u>Clipboard</u>: when *Word* is on the same disk with graphics programs such as *Excel, MacPaint, SuperPaint*, or *MacDraw* :

i.) Create the graphic while you are in the graphics program, select it, then pull down **Edit** to **Copy**. Quit the graphic program.

ii.) Open your *Word* document; click where you want the graphic to be, then pull down **Edit** to **Paste**. Your graphic should appear in your *Word* document.

b.) <u>Art Grabber +</u>: If the graphic already exists on your disk as a *MacPaint* document, you can use **Art Grabber** to "grab" it while you are working within *Word*.

i.) Pull down **d** to **Art Grabber+**. The word "**Grabber+**" will appear on the menu bar.

ii.) Pull down **Grabber**+ to **Open**. A directory of your *MacPaint* documents will appear. You may need to open a folder to get at them. Double click on the title of the *MacPaint* document you want. It will appear in the **Art Grabber** window.

iii.) Click and drag the "+" mouse pointer from the upper left corner to the lower right corner of the part of the *MacPaint* document you want to use. Pull down **Edit** to **Copy**. Click the close box of the **Art Grabber** window.

iv.) Click where you want the graphic to be. Pull down Edit to Paste.

c.) <u>Scrapbook</u>: when *Word* is on the same disk with graphics programs such as *Excel, MacPaint, SuperPaint,* or *MacDraw*, you can create the graphic in one of these applications, then...

i.) Select the portion of the graphic which you want to transfer; and **Cut**(or **Copy**) it.

ii.) Pull down **d** to **Scrapbook**, and when the scrapbook window opens, **Paste** your item. Click the close box.

If there are several different portions you would like to paste, repeat steps i. and ii. Each time you paste into the scrapbook, another page is created. This is an advantage over the clipboard, because the clipboard will only accept one portion at a time. Once you have pasted something into the scrapbook, it is safe; you can do anything else you might want to do: use the clipboard, quit for the day, or take a vacation. What you paste in the scrapbook is safely stored on the 101 Word disk, it will not disappear when the power goes off, like things which are stored in the clipboard.

iii.) When you are ready to paste the **Scrapbook**-stored graphic into *Word*, pull down **t** to **Scrapbook**; and, when the scrapbook appears, page through it, by clicking on the scroll bar below its window, until you find your graphic.

iv.) Cut(or Copy) the item from the scrapbook. Click the close box.

v.) Click in Word where you want it pasted, and Paste.

After the graphic is in *Word* you can position it horizontally by clicking on it, dragging the little black indent triangle on the ruler, then clicking and dragging at the graphic's tiny little black box "handles". You can center it vertically by dragging at the bottom center "handle". You can resize the picture by pressing **Shift**, then dragging any of the same three little black boxes. When you want to restore it to its original size, drag at a handle <u>without</u> pressing **Shift**.

28. <u>To find out how much space your document is using</u>: Look in the lower left corner of the document window after you have saved. This is sometimes important to know; because, if you run out of space unexpectedly, you may very well loose your entire document.

Note: If you do run out of space, pull down File to Save As.... When the dialog box appears, type in a new name, then click the "eject" button. After the disk ejects, insert a formatted disk with lots of room in the now empty drive slot. Now click the "Save" button. Your document has been saved!

Save As.. can also be useful if you open an existing document, make some "on screen" changes, and then decide that you want to save <u>both</u> the old document and the new "changed" document:

29. <u>To save a "changed" document without destroying the original</u>: pull down **File** to **Save As...**. Type in the new name for your changed document. Click the "save" button.

30. To change a certain word that appears in many places in your document: Pull down Search to Change.... When the Change window appears, type the "certain word" you want to change in the top Find what rectangle; type what you want to change it to in the Change to rectangle. Click the Find Next button if you wish to exercise disgression in your changes. Click the Change All button if you want to change every single occurrence of that "certain word" in the same way. But be careful! If you inadvertently change a common word occurring throughout your paper, into a blank space, there is no way to undo your mistake.

Word 102

# Merging a Document

One of *Word's* most powerful features is its ability to "merge" documents. One uses merge when, for example, they need essentially the same letter mailed to many different people, with only the names and address being different from one letter to the next.

#### 31. To merge documents:

a.) Prepare a merge document, first naming each category of item which will vary from letter to letter; then the list of those items. It must be typed and punctuated in <u>exactly</u> the following manner:

fullname, title, school, name Robert Penny, Principal, Sedro Woolley High School, Bob Lawrence W. Brown, Vice Principal, S.W.H.S., Larry Peder Mathews, Principal, Cascade Middle School, Peder Louie Spane, Principal, Evergreen Elementary, Lou

When you save your merge document and quit, take careful note of its name. I will call the above example "mergedoc".

b.) Type your letter, but <u>use the names for the categories of items</u>, instead of the items themselves. And enclose each item in special brackets «like this». You can type this bracket "«" by pressing **option-**\. This one "»" is produced by typing **option-shift-**\. And one more very important thing: <u>you must tell *Word* at the beginning of your letter the name of the merge document</u>. Like this: «DATA mergedoc»

Here's my letter:

Aug 27, 1987 Kauii

«DATA mergedoc» «fullname» «title» «school»

Dear «name»,

How have things been at good old «school» this summer? They've not been so bad here on Kauii. In fact, they've been so good that I don't think I'll be back this fall. How long have you been «title» there in Sedro Woolley anyway? I sure don't envy you! Have a ball this fall «name».

In consolation,

c.) Pull down File to Print Merge...

# Headers and Footers

You may have noticed the "running footer," at the bottom of the odd pages of this chapter. You can designate any running footer you want, at the top or the bottom, left or right, odd or even or both pages, first page or not first page.

32. <u>To print a running header (or footer)</u>, pull down **Document** to **Header** (or **Footer**). When the **Header** (or **Footer**) window opens:



d.) Click the close box. Click "yes" when Mac asks if you want to save?

e.) If you are using facing pages (printing on both sides), you will need odd and even headers. If this is the case, use the order a thru c above for the odd header s (or footers) and reverse the order for even headers: a page number, tab b. date (time) tab c. header title

33. To use the spelling checker, pull down Document to Spelling ....

a.) When the dialog box pops up, click the Start Check button.

b.) When the checker finds a word it doesn't recognize, it will stop. The unknown word will be selected in the document, and displayed after **Unknown Word:** You have several options:

i.) If the word is "right" click the "+" button to add it to your dictionary; click the **Continue Ck** button and continue.

ii.) If the word is wrong, and you want to edit it, click on it, after **Unknown Word:**. The word will appear in the **Change To:** box. Edit it in the normal way. Click **Change** and continue.

iii.) If the word is wrong, and you want a suggestion, click **Suggest**. If you like the suggestion, click **Change** and continue.

c.) When you are done, click the close box.

Word 104

d.) <u>To hyphenate</u>, select the portion of text you would like to hyphenate. Then pull down **Document** to **Hyphenate...**, and click the **Hyphenate Selection** button. When you are done, click the close box.

#### 34. To total or sort a tabulated column of numbers: or alphabetize a tabbed list:

a.) Select the column or list by pressing the **Option** key as you click and drag from the upper left corner to the lower right corner of the list.

b.) If you want to total the column, pull down **Document** to **Calculate**. The total will appear in the lower left corner of the window, where the page number sometimes is. Click where you want to paste the total; pull down **Edit** to **Paste**.

Note: if any numbers in the list are negative, they will be subtracted from the sum of the positive numbers. You can also multiply and divide; but you must use the symbol \* (asterisk) to stand for multiply, and / (slash): 45\*14 (forty-five times fourteen); 45/14 (forty-five divided by fourteen).

c.) If you want to sort the column of numbers, or alphabetize the list, pull down **Document** to **Sort**.

35. To print your document in multiple columns (like a newspaper):

a.) Pull down Format to Section.... Type the number of columns you want after Number: in the Column box. Click the No Break button.in the Section Start box.

Note: If you want to see what it will look like, before you print, pull down File to Page Preview...(see step 17).

b.) If you want only part of your document to be in multiple columns, you will have to make that part into a separate section: insert a section divider at the beginning of the part by clicking there, and typing **B** -Enter. Insert another section divider at the end of the part, click within the section and proceed as in step a above. Click within the section after the part, and click the **No Break** button.in the **Section Start** box again.

36. <u>To "record" the formatting of a paragraph</u> (fonts, font size, style, indent, tabs, etc.), so you wont have to keep doing the same formatting over and over:

a.) Select the first line of the paragraph for which you would like to record the formatting.

b.) Pull down Format to Define Styles....
c.) When the dialog box pops up, type an appropriate name for your formatting recording (style sheet) in the box after **Style:** 

d.) Click the Define button. Click "ok."

To use your recorded formatting (it's called a style sheet).

a.) Select the paragraph you would like to reformat.

b.) Pull down Format to Styles....

c.) When the dialog box pops up, click on the name of the formatting you want to use. Click "ok."

## 37. To number lines or paragraphs: or make a table of contents:

a.) <u>Lines</u>: pull down Format to Section. When the dialog box pops up, click an "X" into the Line Numbering box. If you want to limit the line numbering to a particular section, see step 35.

b.) <u>Paragraphs</u>: pull down **Document** to **Renumber...** When the dialog box pops up, click the "all" or "only if already numbered" buttons, depending on how you want the paragraphs numbered. (Be careful! If you number every paragraph in your document unintentionally, it can be very hard to undo.) Fill in the **Start at:** box. Click "ok."

## c.) Table of Contents

i.) Identify the headings within your paper which are to be used for the <u>Table of Contents</u> by typing **.C.** as hidden text, in front of the heading, and ; as hidden text, after the heading. See step 38 for some hints on how to type hidden text symbols quickly.

ii.) pull down Edit to Preferences.... Click the "X" out of the Show Hidden Text box; click "ok." Pull down Document to Table of Contents...; click the .C. Paragraphs button; click the Start button. The headings will be collected with their page numbers as a table of contents at the front of your document. When, in the course of editing, the page numbers change, your table of contents can be updated, just by doing step ii above again.

38. To make an index:

a.) Type the symbol .i.. Select it. Pull down Format to Character.... When the dialog box pops up, click an "X" into the Hidden box under Character Formats. Click "ok."

Word 106

b.) Pull down Edit to Glossary. When the dialog box pops up, type in. Click the Define button. Click the close box.

c.) Repeat steps a and b for the symbol ;. Type **en** in the glossary dialog box. Pull down **File** to **Save As...** When the dialog box pops up, click the **Save** button. Click "Yes" to replace the <u>Standard Glossary</u>.

d.) Use the **Glossary** and the above codes, **in** and **en** (see step 25) to paste the hidden text symbol **.i.** before and the hidden text symbol ; after each word you want to have appear in the index.

e.) Pull down Edit to Preferences. Click the "X" out of the Show Hidden Text box. Click "ok."

f.) Pull down **Document** to **Index...**. Click the **Start** button. The index will be listed at the end of your paper.

39. <u>To change the fonts listed when you pull down Font</u>, or otherwise build custom pull down menus:

a.) If you want to remove listed fonts, press **3** -Option- - (command-optionminus). The mouse pointer will turn into a "-" sign. Use it to pull down Font to the font you would like to remove.

b.) <u>If you want to add fonts</u>, press **# -Option-** + (command-option-plus). The mouse pointer will turn into a "+" sign. Use it to pull down **Format** to **Character**. Click on the font you want to add to the pull down font list.

40. If you want to edit your old *Word 1.0* or *MacWrite* documents in new *Word 3.0* you must first boot the *Word* application icon, then pull down **File** to **Open**. There will be a pause of 20 seconds or so, while *Word* converts the old document. When you **Save** it will save as a new document, which you will have to name. If you want to wipe out the old document, give the new one the same name.

The Mac	Ō	<b>Idiot Book</b>
ReadySet	Go	)



If you're reading this chapter, you may be wanting to lay out and print a multi-column newsletter which contains both writing and graphics. Here's how to do it.

1. In order to get started, you'll need a Macintosh computer, and a work disk with *ReadySetGo 3.0 (RSG)* on it. (If your only copy of *RSG* is a master disk, you need to study the **"How to Copy"** chapter first, and make a second work disk copy. It is dangerous to use your only copy of an application: what will you do if you damage it?) To properly follow these instructions, your *RSG* work disk must also contain at least one graphic from *MacPaint, MacDraw,* or *Excel*; and at least one, 2 or 3 page written document from *MacWrite* or *Word*. The process of adding these documents to your disk is explained in **"How to Copy."** 

a.) Connect the power cord and mouse to the back of the Mac. If you have an ImageWriter printer, or an external disk drive, or you have access to an AppleTalk system, connect them too. Study the little icons (pictures) above the connectors in the back of the Mac: they will help you to decide which peripheral (accessory) connects where. (If you use it, the AppleTalk connector <u>must</u> be plugged into the port below the printer icon.) Plug your Mac into a surge protector or a grounded (three prong) wall outlet.

b.) Plug the keyboard into the jack at the base of the front of the Mac. Make sure the keyboard's plugs are right side up when you insert them, or you will bend the keyboard plug contacts.

c.) Turn it on. The off-on switch is just above the power cord connection in the back. The Mac will "beep" when you turn it on.

d.) Adjust the brightness. You can feel the knurled brightness knob under the ledge just below the apple logo, on the lower left front side of the computer. Don't turn the brightness any higher than necessary to see comfortably. The lower you keep the brightness, the longer the "picture tube" will last.

2. Hold the *RSG* work disk the way it is in this little picture: 🗂 but with your right thumb over the label. Slide it all the way into the disc slot below the screen, until it snaps in and the disc drive starts to click and hum.

The computer is gathering system information from the disk which is necessary for its operation; this process is sometimes called "<u>booting the system</u>." Any disk that "boots the system" is called a <u>startup disk</u>. A startup disk must have a system file on it. If Mac spits the disk out when you try to insert it, it's because the disk doesn't have a system file, or the disk is defective.)

After about 18 seconds, the disk drive will stop and the screen should look like the picture at the top of the next page:



The <u>menu bar</u> containing the words **G** File Edit Uiew Special is across the top of the screen. The <u>desktop</u>, which is the rest of the screen below the menu bar, should be blank except for the <u>disk icon</u> and <u>trash icon</u> on the right side. (If the desktop looks instead like the screen diagram below, no harm has been done. Someone left it that way when they last quit.)

3. There should be a <u>pointer</u>: A somewhere on the screen. The pointer moves around on the computer desktop when you roll the mouse around on a real table top. Move the mouse to position the tip of the pointer in the center of the disk icon and "<u>double-click</u>" (tickaticka) the mouse button without moving the mouse. This <u>opens</u> the disk's <u>directory window</u>; and now your screen should look something like this:



The icons in the <u>directory window</u> represent the computer files which are recorded on the disk:

# ReadySetGo 110

a.) The <u>application icons</u> represent files which tell the computer how to do something special; in this case, how to be a page processor.

b.) Icons with a "dog-eared" (bent -over) corner represent <u>documents</u> which you create with applications like *RSG*.

c.) The <u>System Folder</u> contains the <u>System</u> which tells Mac how to be a computer. The System also holds the <u>fonts</u> (type faces); and the <u>desk accessories</u> which are discussed in the appendix. Double-click the System Folder, and open it up:

Ś	File Ed	it View	Special		
	📄 🔤 Work	Disk 📃			
		Syste	m Folder		コ重
Π	9 items	303	SK in disk	97K availat	ole
	System	Finder	Clipboard File	E Scrapbook File	<b>公</b>
K	Laser Writer	Laser Prep	Image Writer		<b></b> <b></b>
R	5			¢	日

d.) The <u>Finder</u> creates the desktop and the icons which allow you to find your way around in the Mac.

e.) The <u>Clipboard File</u> is an electronic "clipboard" which allows you to "carry" words or pictures from one document to another. The clipboard will only hold one picture at a time.

f.) The <u>Scrapbook File</u> is a place you can store words and pictures to use over and over in different documents. The scrapbook will hold many different items at once.

g.) The <u>LaserWriter</u> and <u>ImageWriter</u> are printer "drivers." If you want the computer to print documents on paper, you must have a driver for the printer you want to use. If you will be the first to use a LaserWriter printer after it has been turned on in the morning, you will also need a <u>Laser Prep</u>. If the printer driver you want is missing, you need to study "How to Copy."

111 ReadySetGo

4. Close the <u>system folder</u> window by putting the tip of the pointer in the <u>close box</u>, and clicking once, without moving the mouse. (This is called "<u>clicking on</u>" the close box.)

Note: The box in the lower right corner of each window is called a "Size Box" If you put the tip of the pointer in it, and then hold the mouse button down while you "drag" the size box, you can change the shape of the window. Also, you can move the entire window by using this same strategy to "click and drag" the tille bar around. This manipulation of windows can be quite useful when you are trying to arrange things so that you can see the contents of more than one window at once. Some windows have a "zoom" box in the their upper right corner. If you click on it, it will "toggle" the window between full size, and some other size you may have selected with the "Size Box."



5. Click and hold the mouse button, while you attempt to drag down the word View in the menu bar. A list should appear beneath it. The word View will not drag, but as you pull the pointer down, each line in the list is highlighted (blackened) in sequence. When the line **by Size** is highlighted, release the mouse button. (This process is called "<u>pulling down" View to by Size</u>.) The icons in the directory window should change into a list of the files and applications arranged in order of size, largest first. (The size is measured in "k." You may need to adjust the size box to see it.) If you wish, you can instead rearrange the list alphabetically by pulling down View to by Name, etc. Try it, then change the window back to **by Icon**.

6. The Apple menu, **(f)**, lists <u>desk accessories</u> on your disk, such as the **Scrapbook** and **Chooser**. Use **Chooser** before you begin, to prepare Mac for the kind of printing he will do when you are ready to print your creation: pull down **(f)** to **Chooser**. When the Chooser window appears....

a.) If you will be using a LaserWriter or an ImageWriter connected to the AppleTalk network, <u>click on the "active" button</u>, the printer icon, and the printer's name, if they do not "highlight" when you click on them, then something is wrong.



If the printer icon isn't there, you need to go back to step 3g If the printer's name isn't there, or if it refuses to highlight (white print on black) when you click on it, then the printer is not turned on; or the printer and(or) your Mac are not connected to the AppleTalk network.

b.) If you will be printing on an ImageWriter connected to your Mac only, click the "Inactive" button for AppleTalk; then click on the ImageWriter icon, and click on the icon of the printer port to which the printer is connected. You can tell which port by looking to see where the ImageWriter plugs into Mac's back.



c.) Click the Chooser's close box.

Note: If your Chooser doesn't look like the one in the diagram, pull down **d** to About the Finder. A little card should appear that tells you the finder is number 5.3. (If it's not, you need to replace the system, finder, and printer driver icons. "How to Copy" tells how to to this.) Put the little card away by clicking on it.

7. Double-click (boot) the RSG application icon. When the RSG window opens, it should look something like this:



The <u>Page scroll boxes</u> allow you to flip from one page to the next in your newsletter; when you are working on several pages at once, you can click on the page number you want. The <u>Line Patterns</u> allow you to choose the line pattern for your divider lines (called "rules" in the newspaper business). Only the upper-left corner of your future newsletter is visible right now; you will use the <u>Scroll bars</u> to move around on it, while you work on different portions of the page. The <u>Toolboxes</u> are used for a number of different purposes, to be discussed as we go along:



8. The <u>Command menu</u> you see across the top works the same way as the menu bar on the desk top. Pull down **File** to **Save**. A <u>dialog box</u> will appear with the <u>insertion</u> <u>point</u> winking in the small rectangle under the words "save current document as:" Type the name of the document you are going to "page-process," the way you want it listed in the computer's directory (Make the name short, but memorable). The letters will flow out behind the moving insertion point. Click on the "save" button. The dialog box will go away, and the name you have selected will take the place of "untitled" on the <u>title bar</u>. You will not have to fill in the dialog box again, unless you change your drawing's name.

ReadySetGo 114

Warning: Save what you write. If you don't, you will probably lose all your work. To save, pull down File to Save every ten minutes or every time you get up to get coffee or go to the bathroom. The disk drive will hum for a few seconds while the computer stores your work on the disk. It's cheap insurance!!!

Note: if you want to change the title of a document, do it when you are back on the desktop. Click and drag through the title under the document icon. The mouse pointer will turn into an I-beam. Now type the new name. Click elsewhere on the desktop to make the change permanent.

9. Pull down File to Page Setup.... A dialog box titled LaserWriter or ImageWriter, depending upon which printer you selected with the Chooser, should appear. If you don't want to change anything, click the "ok" button, and the dialog box should go away.

Note: If you you are using the <u>ImageWriter</u>, and you include graphics in your *RSG* document, you should click **Tall Adjusted** in the **Page Setup...**dialog box. (This degrades the print quality slightly, but greatly improves the picture quality.)

10. Pull down Special to Size to Fit. Now you should be able to see the whole page. (You can lay out a whole page in Size to Fit; and enter text in Actual Size.) Pull down Special to Design Grids. A dialog box labeled Design Grids will pop up. Click on the 8 x 8 button. Click the "ok" button. A grid should appear like the one in the window on the next page:



Note: The "grid" is the collection of small dotted line rectangles, surrounded by a larger dotted line rectangle. This larger dotted line rectangle indicates the "live area" of the printer you selected in **Chooser**. Objects place outside of this "live area" dotted line boundary <u>will not print</u> even though they may be visible on the screen.

11. Pictures and text you place on the page should automatically snap to the nearest grid lines. Position the picture block first:

a.) Click on the <u>Picture Block</u> tool: Use it to create a picture block by clicking and dragging from the upper-left to the lower-right corners of where you want the picture placed on the page. The picture block should look like the one in the grid on the left below. If it is the wrong shape, press the Backspace key and the block will disappear. Then try again.



b.) Now click on the <u>Cropper</u>: Use it to click on the picture block. This prepares your picture block to receive an imported graphic. A picture block prepared to receive a graphic looks like the one in the grid on the above right.

12. Pull down File to Get Picture.

a.) When the dialog box pops up, double click on the name of the graphic document which contains your picture. The document should be listed in the dialog box's list window. (You may have to open a folder in the dialog box list window to get at the document. To do this, double click on the name of the folder which contains the graphic. If you have an external drive, and the graphic is on a disk in the other drive, click the "drive" button. If the graphic document isn't there, you will have to put one on your disk, as I said in step 1.)

b.) The graphic should appear in the picture block. Use the cropper to slide the graphic around in the picture block until it is positioned the way you want it:



Note: If possible use graphics created with *MacDraw*. They look much better when printed on the LaserWriter. If **Get Picture** does not work for *MacDraw*, see step 19 for other strategies.

13. Click on the <u>Text Block</u> tool, <u>I</u> and draw four columns (text blocks) by dragging the tool upper left to lower right, as you did with the Picture Block tool. The page on the lower left, has three of the four columns drawn. Click on the <u>Linker</u> tool, <u>and</u> link all four text columns by clicking once inside of each column. Click on the last col-

+

umn a second time to complete the text chain.



14. Click on the <u>I-beam</u> tool, then use it to click on the first text block. Pull down **File** to **Get Text**.

a.) When the dialog box pops up, double click on the name of the document (*Word* or *MacWrite*) which contains your text. The document should be listed in the dialog box's list window. (You may have to open a folder in the dialog box list window to get at the document. To do this, double click on the name of the folder which contains the text. If you have an external drive, and the text is on a disk in the other drive, click the "drive" button. If there is no text document, you will have to put one on your disk, as I said in step 1.)

b.) The text should flow into the text blocks in the order in which they were linked. Your newsletter should look like the page above right.

Note: you can also "word-process" text on the spot in *RSG* using normal word-processing procedures discussed in the *MacWrite* and *Word* chapters: you can **Cut** and **Paste**; select fonts, font sizes, and styles; move sentences and paragraphs around; etc. the same as in *MacWrite* or *Word* 

Note: <u>you should always use LaserWriter fonts in RSG</u>. If you are word processing within RSG select LaserWriter fonts in the first place. If you import your text, select it all, and change it to LaserWriter fonts before you print. Some of the LaserWriter fonts are **Helvetica**, **Times**, **Symbol**, **N.Helvetica**, **Zapf Dingbats**, and **Zapf Chancery**. ImageWriter fonts will look

"stretched out" when you print it in the LaserWriter; and it will make the LaserWriter take <u>a very long</u> time to print. Even if you are going to print the first draft of your newsletter on an ImageWriter, you should <u>still</u> use the LaserWriter fonts!!!!

c.) <u>Select all of the text</u> by clicking in a text block with the <u>I-beam</u> then pull down **Edit** to **Select All**. While the text is selected, you can pull down the **Font, Style,** and **Format** menus to alter the text in any manner you see fit. Of course you can click and drag over a smaller portion of the text, and bring about these same changes in only a small selected area.

d.) See step 19 for other text importing methods.

15. When you are ready to quit <u>DO NOT</u> turn off the computer. <u>If you turn off the</u> computer without going through proper shutdown procedure, you may lose hours of work, or even damage your disk.

a.) When you are ready to quit, pull down **File** to **Quit**. If you have not saved already, a dialog box will ask you if you want to save your work. Click "yes" or "no." After the disk drive hums briefly, the desktop will reappear. (If you can already see the desktop, skip this step.)

b.) Once you are back to the desktop, the best way to quit is to pull down **Special** to **Shut Down**. This ejects all disks and <u>resets</u> the computer. If you are done, you can turn off the computer; or if you want change startup disks and do something totally different with the computer, you can reboot with a different startup disk.

c.) You can also quit by dragging the disk into the trash. After Mac spits out the disk, turn him off.

d.) If you want to keep the present disk as the startup disk, and keep its directory window on the screen; perhaps while you copy a file from one disk to another, select (click on) the disk icon, and pull down **File** to **Eject**, or type **B** -E. Mac will spit out the disk that was selected.

16. When you want to go back to work on the same *RSG* document, boot the system, and open the directory window. The *RSG* document icon should be there there with the name you gave your paper in step 8. Reopen it by double-clicking on its icon.

17. When you are ready to print; Save; then do the following:

a.) Make sure the printer is turned on:

i.) <u>If you are using a LaserWriter</u>, the <u>On/Off switch</u> is on the left end, just around the backside corner from the <u>Power Cord Socket</u>:

# ReadySetGo 118



The green light on the front flashes as the LaserWriter warms up; then the yellow light starts flashing to show that the LaserWriter is processing a test print. The LaserWriter should deliver its own test print within two minutes. The yellow light will go out when the LaserWriter delivers the test print. When the green light is on steady, the LaserWriter is ready to print.

ii.) If you are using an **ImageWriter**, turn it on by depressing the on/off button, which is on the right side of the ImageWriter's top. Three green lights adjacent to the on/off button should come on. If you are using an old ImageWriter, there will be only two green lights. (If you don't get the right number of green lights, or the ImageWriter needs paper, and you don't know what to do, read the "**ImageWriter**" chapter.)

b.) Pull down File to Print. When the dialog box appears...

i.) ...for the LaserWriter, click the "ok" button.

ii.) ...for the **ImageWriter** click the **Best** or **Faster** or **Draft** button (**Best** is slow, good-looking, and most copyable; **Draft** is fast and awful; **Faster** is in between.); then click the "ok" button.

It may take a minute or two, but if all goes well, Mac ought to start printing.

c.) In case of difficulty...

i.) ...if nothing happens, you may have skipped steps 3, 6, or 9: that is, you must have printer driver icon for the printer you intend to use present in your system folder; the AppleTalk "on-off" switch must be set the right way and the appropriate printer and port must have been selected in **Chooser**; and **File** must have been pulled down to **Page Setup...** 

ii.) ...if something goes wrong during the ImageWriter printing process, first, turn off the printer by pressing its on/off button; then press **38** - .

(command-period). (Mac will tell you to stop the printing by pressing **36** - . only, but this turns out to be much too slow.)

18. <u>To avoid excessive use of the mouse</u>: Use the keyboard command letters instead, which appear to the right of many of the options in the pull down menus. There are dozens of other keyboard commands as well, which are listed in the **"Hurry up"** chapter of this book, and the *RSG* literature.

19. <u>There are three other ways to move text or graphics into *RSG* : you can use the clipboard, **Art Grabber +**, or the **Scrapbook**.</u>

a.) <u>Clipboard</u>: when *RSG* is on the same disk with graphics or word processing applications such as *Excel, MacWrite*, or *MacDraw* :

i.) Create the graphic or text in that application select it, then pull down **Edit** to **Copy**. Quit that application.

ii.) If you are moving text, open your *RSG* document; click with the <u>l-beam</u> in the text block where you want the text to be, then pull down **Edit** to **Paste**. The text should appear.

iii.) If you are moving graphics, open your RSG document; click with the

<u>Cropper</u> in the picture block where you wan the picture to be, then pull down **Edit** to **Paste**. The graphic should appear.

b.) <u>Art Grabber +</u>: If the graphic already exists on your disk as a *MacPaint* document, you can use **Art Grabber** to "grab" it while you are working within *RSG*.

i.) Pull down **d** to Art Grabber+. The word "Grabber+" will appear on the menu bar.

ii.) Pull down **Grabber+** to **Open**. A directory of your *MacPaint* documents will appear. You may need to open a folder to get at them. Double click on the title of the *MacPaint* document you want. It will appear in the **Art Grabber** window.

iii.) Click and drag the "+" mouse pointer from the upper left corner to the lower right corner of the part of the *MacPaint* document you want to use. Pull down **Edit** to **Copy**. Click the close box of the **Art Grabber** window.

iv.) Click with the <u>Cropper</u> in the picture block where you want the picture to be, then pull down **Edit** to **Paste**. The graphic should appear.

ReadySetGo 120

c.) <u>Scrapbook</u>: when *RSG* is on the same disk with applications such as *Excel, MacWrite* or *MacDraw*, you can create the graphics or text in one of these applications, then...

i.) Select the portion of the graphic or text which you want to transfer; and **Cut**(or **Copy**) it.

ii.) Pull down **(f)** to **Scrapbook**, and when the scrapbook window opens, **Paste** your item. Click the close box.

If there are several different portions you would like to paste, repeat steps i. and ii. Each time you paste into the scrapbook, another page is created. This is an advantage over the clipboard, because the clipboard will only accept one portion at a time. Once you have pasted something into the scrapbook, it is safe; you can do anything else you might want to do: use the clipboard, quit for the day, or take a vacation. What you paste in the scrapbook is safely stored on the disk, it will not disappear when the power goes off, like things which are stored in the clipboard.

iii.) When you are working within *RSG*, and you are ready to paste the **Scrapbook**-stored item into *RSG*, pull down **t** to **Scrapbook**; and, when the scrapbook appears, page through it, by clicking on the scroll bar below its window, until you find your item.

iv.) Cut (or Copy) the item from the scrapbook. Click its close box.

v.) If you are moving text; click with the <u>I-beam</u>  $\square$  in the text block where you want the text to be, then pull down **Edit** to **Paste**. The text should appear.

vi.) If you are moving graphics; click with the <u>Cropper</u> in the picture block where you want the picture to be, then pull down **Edit** to **Paste**. The graphic should appear.

20. <u>To save a "changed" document without destroying the original</u>: pull down **File** to **Save As...**. Type in the new name for your changed document. Click the "save" button.

21. To create additional pages ...

a.) Pull down **Special** to **Insert Page(s)**. Type the number of pages you want. Click the "ok" button.

b.) Add **Design Grids** and at least one <u>Text block</u> to your new page(s) as you did on page one.

## 22. To link the new Text block with the others...

a.) Click page icon number one in the page scroll box, to go back to page one.

b.) Click the last <u>Text block</u> on page one with the <u>Linker</u> tool is scroll to one of your new pages; click one of the new text blocks twice with the <u>Linker</u>, and any excess text which may not have been displayed on page one will flow into the new text block. (If there is still undisplayed text, there will be an <u>overflow</u> indicator: "J" in the lower right hand corner of the text block.)

Note: If you want to <u>unlink</u> a text block, hold down the Option key while you click the block with the <u>Linker</u>. If you want to <u>eliminate</u> a text block, but preserve the text, select the block with the <u>Pointer</u>, and press the Backspace key. If you want to wipe out <u>both the text block and its text</u>, select it with the <u>Pointer</u>, and pull down **Edit** to **Cut**.

## 23. To change the shape of a text or picture block ...

a.) Click on the <u>Pointer</u> tool, and use it to click on a text or picture block. "Handles" (tiny black squares) will appear that let you resize the block in any direction.

b.) Pull down **Special** to **Turn Snap to Off.** Click and drag the handles in whatever direction you want, to reshape the block in any direction.

If it is a text block, the text will reflow to fit the new shape.

If it is a picture block, and you cover up an adjacent column, the text will reflow around the picture block automatically. Click and drag the whole picture to another location. Again, the text will reflow to fit the new contours. You can do this with other objects (like another <u>Text block</u> !!) by pulling down **Special** to **Specifications**, and selecting **Run Around** from the dialog box which pops up.

Note: **Run Around** is important. If you don't use it, and the the overlapping object is not a picture block, it will over print the underlying text.

Note: Reshaping a picture block does not stretch or compress the picture inside the block. If you want to do this, pull down Special to Specifications, and change the percent values of Scale Across and Scale Down in the dialog box that pops up.

24. <u>To turn the hyphenation off</u> for a selected word. Selected the word by clicking and dragging over it; and pull down **Text** to **Hyphenation Off**.

25. You can open more than one *RSG* document by pulling down **File** to **New** (or **Open** if another *RSG* document already exists.) You will need to resize the windows so that you can see both documents by clicking and dragging on the size boxes and title bars. This is useful if you want to **Cut** and **Paste** between *RSG* documents.

26. To create white type on a black background ...

a.) Create a text block of large outline style type.

b.) Click on the <u>Rectangle</u> tool : and use it to drag (upper left to lower right) a rectangle somewhat larger than the text block.

c.) Click on the <u>Pointer</u> and select the new rectangle. Pull down Fill to black or some other dark pattern. The rectangle should fill with the pattern you selected.

d.) Select the text block with the pointer, and drag it over the filled rectangle.

e.) Select the filled rectangle again; then pull down Special to Send Behind.

27. To draw lines (rules)...

a.) Click on the Line tool

b.) Click on the <u>Line pattern</u> you want. If you want it to be some other "color" than black, pull down **Fill** to the "color" you want to substitute.

c.) Click and drag from where you want the beginning to where you want the end. If you don't like the <u>Line pattern</u> or the "color. Select the line with the <u>Pointer</u>; then click on a different pattern; or pull down **Fill** to a different "color."

Note: the "Thin" Line Pattern produces a hairline only on the LaserWriter.

Note: be conservative in your use of lines; they can make your newsletter look "junky" and they slow down the LaserWriter.





With *Excel* you can do <u>spreadsheet work</u> with many different mathematically related numbers, simultaneously, rapidly, and accurately; as you might, in doing accounting or budgeting or a grade book; and(or)

You can make good-looking graphs or charts from sets of data; and(or)

You can create a <u>database</u> (computerized card file) which will allow you to quickly pull single selected facts out of a big pile of information, or allow you to quickly rearrange and present that information in a more convenient format

1. In order to get started, you'll need a Macintosh computer, and a work disk with *Excel* on it. (If your only copy of *Excel* is a master disk, you need to study the **"How to Copy"** chapter first, and make a second work disk copy. It is dangerous to use your only copy of an application: what will you do if you damage it?)

a.) Connect the power cord and mouse to the back of the Mac. If you have an ImageWriter printer, or an external disk drive, or you have access to an AppleTalk system, connect them too. Study the little icons (pictures) above the connectors in the back of the Mac: they will help you to decide which peripheral (accessory) connects where. (If you use it, the AppleTalk connector <u>must</u> be plugged into the port below the printer icon.) Plug your Mac into a surge protector or a grounded (three prong) wall outlet.

b.) Plug the keyboard into the jack at the base of the front of the Mac. Make sure the keyboard's plugs are right side up when you insert them, or you will bend the keyboard plug contacts.

c.) Turn it on. The off-on switch is just above the power cord connection in the back. The Mac will "beep" when you turn it on.

d.) Adjust the brightness. You can feel the knurled brightness knob under the ledge just below the apple logo, on the lower left front side of the computer. Don't turn the brightness any higher than necessary to see comfortably. The lower you keep the brightness, the longer the "picture tube" will last.

2. Find a work disk with *Excel* on it. Hold the disk the way it is in this little picture: but with your right thumb over the label. Slide it all the way into the disc slot below the screen, until it snaps in and the disc drive starts to click and hum.

125 Excel

The computer is gathering system information from the disk which is necessary for its operation; this process is sometimes called "<u>booting the system</u>." A disk that "boots the system" is called the <u>startup disk</u>. A startup disk must have a system file on it. If Mac spits the disk out when you try to insert it, it's because the disk doesn't have a system file, or the disk is defective.)

After about 18 seconds, the disk drive will stop and the screen will look like this:



The <u>menu bar</u> containing the words **file Edit Uiew Special** is across the top of the screen. The <u>desktop</u>, which is the rest of the screen below the menu bar, should be blank except for the <u>disk icon</u> and <u>trash icon</u> on the right side. (If the desktop looks instead like the screen diagram below, no harm has been done. Someone left it that way when they last quit.)

3. There should be a <u>pointer</u>: somewhere on the screen, which moves around on the computer desktop when you roll the mouse around on a real table top. Move the mouse to position the tip of the pointer in the center of the disk icon and "<u>double-click</u>" (tickaticka) the mouse button without moving the mouse. This <u>opens</u> the disk's <u>directory window</u>; and now your screen should look something like the picture below:



The icons in the <u>directory window</u> above represent the computer files which are recorded on the disk:

a.) The <u>application icons</u> represent files which tell the computer how to do something special; in this case, how to be a spreadsheet/database.

b.) Icons with a "dog-eared" (bent -over) corner represent <u>documents</u> which you create with applications like *Excel* :

- i. The worksheet icon can be either a saved spreadsheet or saved database.
- ii. The chart icon is a saved graph or chart. It must be accompanied by the icon for the worksheet which was used to create it.
- iii. The macro icon is a stored "macro." Macros will be explained in step 26. This particular icon, COMMANDS, comes with Excel; don't trash it.

c.) The system folder contains the <u>System</u> which tells Mac how to be a computer. The system also holds the <u>fonts</u> (type faces); and the <u>desk accessories</u> which are discussed int the appendix. Double-click the System Folder, and open it up:

	File Edi	t View	Special		
	🗌 🔤 Work	Disk 📃			
		Syste Syste	m Folder		1
	9 items	303	K in disk	97K availat	ole
	System	Finder	Clipboard File	Scrapbook File	
K	LaserWriter	Laser Prep	Image Writer		Ţ
	\$I 🗌			¢	먼

d.) The <u>Finder</u> creates the desktop and the icons which allow you to find your way around in the Mac.

e.) The <u>Clipboard File</u> is a "clipboard" which allows you to carry graphs or data from one document to another. The clipboard will only hold one piece of information at a time.

f.) The <u>Scrapbook File</u> is a place you can store graphs and data to use over and over in different documents. The scrapbook will hold many different items at once.

g.) The <u>LaserWriter</u> and <u>ImageWriter</u> are printer "drivers." If you want the computer to print documents on paper, you must have a driver for the printer you

127 Excel

want to use. If you will be the first to use a LaserWriter printer after it has been turned on in the morning, you will also need a Laser Prep. If the printer driver you want is missing, you need to study "How to Copy."

 Close the <u>system folder</u> window by putting the tip of the pointer in the <u>close box</u>, and clicking once, without moving the mouse. (This is called "<u>clicking on</u>" the close box.)

Note: The box in the lower right corner of each window is called a "Size Box" If you put the tip of the pointer in it, and then hold the mouse button down while you "drag" the size box, you can change the shape of the window. Also, you can move the entire window by using this same strategy to "click and drag" the title bar around. This manipulation of windows can be quite useful when you are trying to arrange things so that you can see the contents of more than one window at once. Some windows have a "zoom" box in the their upper right corner. If you click on it, it will "toggle" the window between full size, and some other size you may have selected with the "Size Box."

title bar	Startup	Et a	-zoom box
click and drag to move /	Name	<u>Size</u> Kir	toggles the window from
the window	A Microsoft Word	332К 🟠	little to big
alaca hay	🗟 SuperPaint	162K	size box
makes the	🗋 Main Dictionary	161K	click and drag to get
window go	Ready ,Set ,Go! 3	151K	the right
away	K2	되면	window size

5. Click and hold the mouse button, while you attempt to drag down the word View in the menu bar. A list should appear beneath it. The word View will not drag, but as you pull the pointer down, each line in the list is highlighted (blackened) in sequence. When the line **by Size** is highlighted, release the mouse button. (This process is called "<u>pulling down" View to by Size</u>.) The icons in the directory window should change into a list of the files and applications arranged in order of size, largest first. (The sizes are measured in "k." You may have to adjust the size box to see the sizes.) If you wish, you can instead rearrange the list alphabetically by pulling down View to **by Name**, etc. Try it, then change the window back to **by Icon**.

6. The Apple menu, **(f)**, lists <u>desk accessories</u> on your disk, such as the **Scrapbook** and **Chooser**. Use **Chooser** before you begin, to prepare Mac for the kind of printing he will do when you are ready to print your creation: pull down **(f)** to **Chooser**. When the Chooser window appears....

a.) If you will be using a LaserWriter or an ImageWriter connected to the AppleTalk network, <u>click on the "active" button</u>, the printer icon, and the printer's <u>name</u>, if they do not "highlight" when you click on them, then something is wrong.



If the printer icon isn't there, you need to go back to step 3g If the printer's name isn't there, or if it refuses to highlight (white print on black) when you click on it, then the printer is not turned on; or the printer and(or) your Mac are not connected to the AppleTalk network.

b.) If you will be printing on an ImageWriter connected to your Mac only, click the "Inactive" button for AppleTalk; then click on the ImageWriter icon, and click on the icon of the printer port to which the printer is connected. You can tell which port by looking to see where the ImageWriter plugs into Mac's back.



c.) Click the Chooser's close box.

Note: If your Chooser doesn't look like the one in the diagram, pull down **s** to About the Finder. A little card should appear that tells you the finder is number 5.3. (If it's not, you need to replace the system, finder, and printer driver icons. "How to Copy" tells how to to this.) Put the little card away by clicking on it.

7. Double-click (boot) the *Excel* application icon. When the *Excel* window opens, it should look something like this:



8. The <u>menu bar</u> you see across the top works the same way as the menu bar on the desk top: Pull down **File** to **Save**. A <u>dialog box</u> will appear with the highlighted words **Worksheet1** in the black rectangle under the words **Save Worksheet As**: Type the name you want this worksheet to have. The letters will flow out behind the moving insertion point. Click on the **Save** button. The dialog box will go away, and the name you have selected will take the place of "Worksheet 1" on the <u>title bar</u>. You will not have to fill in the dialog box again, unless you change your worksheet's name.

Warning: Save your work. If you don't, you will probably lose all of it. To save, pull down File to Save every ten minutes or every time you get up to get coffee or go to the bathroom. The disk drive will hum for a few seconds while the computer stores your work on the disk. It's cheap insurance!!!

Note: if you want to change the title of a document, do it when you are back on the desktop. Click and drag through the title under the document icon. The mouse pointer will turn into an I-beam. Now type the new name. Click elsewhere on the desktop to make the change permanent.

9. Pull down File to Page Setup.... A dialog box titled LaserWriter or ImageWriter, depending upon which printer you selected with the Chooser, should appear. You can get rid of the row and column headings, and grid lines when you print by clicking the little boxed "X's" away. You can type in a header for your worksheet at the same time if you want. If you don't want to change anything, click the "ok" button, and the dialog box should go away.

Note: If you will be using a LaserWriter, you should use LaserWriter fonts in *Excel*. Some of the LaserWriter fonts are **Helvetica**, **Times**, **Symbol**, and **N.Helvetica**. ImageWriter fonts such as Geneva are fine for the ImageWriter but they will make the LaserWriter take <u>a very long time</u> to print. To change fonts, pull down **Options** to **Font**... If you can't get **Font** to highlight, press the **Enter** button and try again. When the dialog box appears, select a different font and font size. If the right choices aren't there, it tells how to put more fonts in the system in the "Font Appendix."

Excel 130

10. The worksheet is divided into little boxes called <u>cells</u>. A horizontal line of cells is called a <u>row</u>; a vertical line of cells is called a <u>column</u>. The <u>column labels</u> are across the top of the worksheet, and the <u>row numbers</u> are along the left hand margin. In order to type numbers or text into a cell, it must be <u>selected</u> (by pointing with the mouse and clicking, or by some other method to be discussed later). When a cell is selected, it has a heavy black border, and it is called the <u>active cell</u>; the column label and row number of the active cell are specified in the <u>reference box</u>. Click and drag the <u>size</u> box until your spreadsheet is a little over 8 rows high, and 5 columns wide, as pictured between steps 7 and 8.

## Here's how to use Excel for spreadsheeting:

11. The best way to learn spreadsheeting is to make a spreadsheet. You can use the *Excel* worksheet to do this. Let's set up a simple spreadsheet for calculating the yearly income of a hypothetical family:

## First we'll name the columns:

a.) If cell A1 hasn't been selected already, click on it; then type *family member*. (If column A isn't wide enough for the words, you can make it wider by clicking and dragging just next to the little line between the column labels.)

b.) Move to the second cell by pressing Tab; type dad.

c.) Move to the third cell and type *mom.* d.) Continue by typing *teenager* in the next cell, and *kid* in the fifth. (If you want to backtrack to the left, press **Shift** and **Tab** at the same time: **Shift-Tab**. If part of your work slips out of sight, pull it back with the scroll bars.)

## Now we'll name the rows:

a.) Click on A2, and type working income/month.

b.) Move one cell down, by pressing Return, and type months paid/year.

c.) Move to the next cell down, which is A4, the fourth from the top, by pressing **Return** again; this time type *total working income*.

d.) Use **Return** as needed, and continue by typing *other income sources* in the fifth cell from the top; *amount/year* in the sixth; *total income/member* in the seventh; and *total family income* in the eighth. (If you want to backtrack up, press **Shift-Return**. Adjust the width of column **A** and the window size again as needed.)

e.) Select cell B2, and type dad's working income of 850. (Don't try to put the \$'s in yet!) Using **Tab** as needed, type in the other monthly incomes: mom 1000; teenager 450; kid 110. Similarly, enter the number of months each family member is paid per year in row 3: dad 12, mom 9, teenager 2, and kid 12.

12. Don't be afraid of making mistakes; you can easily change anything in the spreadsheet, anytime you want to change it:

a.) If you make a mistake, and you are still typing in the same cell, just press the **Backspace** key to backspace over your error, then retype.

b.) If you discover an error after you are in another cell, select (click in) the cell where the mistake is and type the corrected entry; the old number will disappear with the first keystroke. If you want to correct a single letter or number within the cell, click a second time in the <u>formula bar</u> after the offending letter or number, backspace over it, and type your correction. Press the **Enter** key.

Note: Sometimes Excel "hangs," that is, everything quits working. Often this is a result of typing an entry in a cell without pressing Enter. If Excel refuses to "work," press Enter.

c.) If you want to delete an entire row or column, click on the offending row number, or column label, then pull down **Edit** to **Delete**. To insert a new blank row or column, click on the row number or column label that will be the next row below, or the next column to the right of, where you want to make the insertion, and pull down **Edit** to **Insert**.

13. Next we begin to exploit the true power of *Excel* by writing formulas to do simple mathematical operations on our numbers. We want to make it so the product of the *income/month* times *months paid/year* for each family member appears in row four.

a.) Select (click) B4, and type an = symbol. The beginning of the formula for cell B4 will appear in the <u>formula bar</u>.

b.) Click B3. (You're telling Mac which cell you want him to operate on.) The coordinates for B3 will appear in the formula bar next to the = sign.

c.) Since you want a product, press \* (asterisk), which is the computer symbol for times (multiply).

d.) Click B2, the other number you want Mac to operate on. This cell's coordinates will appear in the formula also.

e.) Now press Enter. Bingo! The product of B3 and B2 will magically appear in B4. (If it doesn't, pull down **Options** to **Calculation...**. When the dialog box appears, click the **Automatic** button.) You have written a formula for finding the product of any monthly payment and any number of months which may ever appear in cells B2 and B3. You will never have to write this formula again, and it will continue to work, no matter what numbers you type into B2 and B3!

14. Instead of doing the whole formula over again for each family member, you can "copy dad's formula across" like this:

a.) Select (and black out) all four "total working income" cells at once, by clicking and dragging from B4 to E4.

b.) Pull down Edit to Fill Right. The *total working income* products for each family member should appear in each of their respective cells.

15. Using the methods already discussed in step 11, label, in row 5, the other income sources for each family member: dad, *loan repmnt*; mom, *bank intrst*; teenager, *babysitg*; and kid, *gifts.* 

16. Enter, in row 6, the amount per year from each of these sources: dad,9600; mom, 360; teenager, 120; kid, 60.

17. Write a formula for cell B7 which calculates dad's total income; then copy the formula across, to get the total income for each of the other three family members. Try to figure out how to do it yourself, before you look at the directions:

a.) Click B7. Type =. Click B6 (one of the numbers to be summed). Type + (you do want to <u>add</u> this time, don't you?). Click on (CAREFUL!) B4 (the other number to be summed). Your new formula should be in B7, and in the formula bar. Now press enter, and dad's total income should appear.

b.) Now copy the formula across using the procedure in step 6. (Obviously, different cells are involved this time.)

18. Finally, write yet another formula, which calculates *total family income*, for cell B8. This formula will have four "addends," for the total incomes of each of the four family members: you'll have to type + three times. On the other hand, you won't have to copy across this time. Can you figure it out? The final results should look something like the spreadsheet at the top of the next page:

	A	B	С	D	E
1	family member	dad	mom	teenager	kid
2	working income/month	850	1000	450	110
3	months paid/year	12	9	2	12
4	total working income	10200	9000	900	1320
5	other income sources	loan repmnt	bank intrst	babystg	gifts
6	amount/year	9600	360	120	60
7	total income/member	19800	9360	1020	1380
8	total family income	31560			
5					Ċ

19. Spreadsheets can give one amazing powers in playing the game of "what if?" Experiment with your newly prepared family worksheet to see what effects various changes might have on the total family income:

a.) What if dad gets a new job at twice the pay per month? Select B2; type *1700*; press "enter." What is the *total family income* now?

b.) What if mom falls off of her horse, uses up her savings to pay the medical bills (now there's no bank interest), and misses 4 months of work? Now what? Make the changes and see what happens.

20. If the absence of <u>\$ symbols</u> bothers you, select rows 2, 4, 6, 7, and 8, by holding down the **#** key, while you click on each of those row numbers. Then pull down **Format** to **Number**. When the dialog box appears, click on the first "\$" in the list box; then click "ok."

#### How to guit, and start back up again

21. When you are ready to quit **<u>DO NOT</u>** turn off the computer. If you turn off the computer without going through proper shutdown procedure, you may lose hours of work, or even damage your disk.

a.) When you are ready to quit, pull down **File** to **Quit**. If you have not saved already, a dialog box will ask you if you want to save your work. Click "yes" because you will need this "family budget" spreadsheet to practice making graphs and charts later. After the disk drive hums briefly, the desktop will reappear. If you can already see the desktop, skip this step.

b.) Once you are back to the desktop, the best way to quit is to pull down **Special** to **Shut Down**. This ejects all disks and <u>resets</u> the computer. If you are done, you can turn off the computer; or if you want change startup disks and do

Excel 134

something totally different with the computer, you can reboot with a different startup disk.

c.) You can also quit by dragging the disk into the trash. After Mac spits out the disk, turn him off.

d.) If you want to keep the present disk as the startup disk, and keep its directory window on the screen; perhaps while you copy a file from one disk to another, select (click on) the disk icon, and pull down **File** to **Eject**, or type **B** -E. Mac will spit out the disk that was selected.

22. When you want to go back to work on the same *Excel* document, boot the system, and open the directory window. The *Excel* worksheet document icon should be there with the name you gave your paper in step 8. (You may have to adjust the window size to see it.) Reopen your paper by double-clicking on that worksheet icon.

Depending on your goals for *Excel*, you may want to skip ahead at this point:

to make graphs and charts, continue to step 23

to make a database and(or) create a macro skip to step 26

for grade book directions skip to step 32

to print something skip to step 44

to move work into documents created with other applications see step 46

Here's how to use the graph and chart-making features of Excel :

23. Make a column chart (histogram) of comparative family incomes:

a.) Select the first two rows by dragging over row number labels 1 and 2.

b.) Pull down **File** to **New**. When the dialog box appears, click the **Chart** button. Click "ok." Watch. Isn't that a gas?!?!?

24. Change your column chart to a pie chart:

a.) Pull down Chart to Main Chart Type .....

b.) When the dialog box appears, click the Pie button. Click "ok." Whoopee!!!

c.) Pull down Chart to Add Legend. A legend box will appear; but we can make it look much better.

135 Excel

d.) Click on the edge on any one pie slice. Little black boxes, called "handles," will appear around the slice's edges.

e.) Pull down **Format** to **Patterns**. When the dialog box appears, click on an area pattern you might like to fill a pie slice with. Click "ok." The selected pie slice should fill with your chosen pattern.

f.) Click on the edge of the next pie slice; fill it with a different pattern, etc.

g.) Click on the title of the pie chart. Pull down **Format** to **Text...**. Click in the **Bold** style box; click on font size "12." Click "ok." Does it look like this?

# working income/month



h.) Close the pie chart and close the income worksheet by clicking in the close boxes. Save if you want.

### 25. Try making a line graph:

- a.) Pull down File to New ... Click "ok" in the dialog box.
- b.) Type the following time and temperature table into your worksheet:

	A	B	C
1	Time (min)	Water Temp (C)	Paraffin Temp (C)
2	1.0	99	99
3	2.0	94	95
4	3.0	89	91
5	4.0	85	87
6	5.0	81	86
7	6.0	78	86
8	7.0	75	86
9	8.0	73	86
10	9.0	70	87
11	10.0	68	82
12	11.0	66	77
13	12.0	65	72
14	13.0	64	67

c.) Select columns B and C, rows 1 through 14. (Click and drag from B1 to C14.)

d.) Pull down **File** to **New**. When the dialog box appears, click the **Chart** button. Click "ok."

e.) When the chart appears, pull down **Chart** to **Main Chart Type**. Click the **Line** button. Click "ok." A line graph will appear, but we can make <u>it</u> look better too.

f.) <u>To put the "X" axis (category) values beneath the tic marks</u> (so there is no ambiguity), click on the horizontal "X" (<u>category</u>) axis. Round white "handles" will appear at each end of it. Pull down **Format** to **Axis...** When the dialog box appears, click the "X" out of the box for **Value Axis Crosses Between Categories**. Click "ok."

g.) <u>To make the graphed changes more dramatic</u>, click on the vertical "Y" (<u>value</u>) axis. Pull down **Format** to **Axis...**. When the dialog box appears, type "50" in the **Minimum:** box, and "50" in the **Category Axis Crosses At:** box. (Can you figure out why?) Click "ok."

h.) <u>To label your axes</u>: Pull down **Chart** to **Attach Text**. Click either axis button. Click "ok." Type the axis title. Press **Enter**. Repeat the steps here in step h to label the other axis.

i.) My line graph is at the top of the next page; how did yours come out?



## Here's how to use Excel as a database:

26. Begin with a new worksheet: if necessary, **Close** your previous work, and pull down **File** to **New**.

Here is some sample data which we will use in step 27:

Smith, Sam	1414 15th Ave NW, Seattle	44	Μ	Hockey
Ames, Alfreida	12 Westchester, London	18	F	Soccer
Wilson, Wilpert	5432 Rawson, Vancouver	9	М	Tennis
Beatty, Bill	243 Raupuchna, Bangok	67	м	Hockey
Norris, Noreen	4 Camden, London	62	F	Tennis
Ozment, Ozzie	941 Bennet, Seattle	45	м	Hockey

A single row of data, in this case the information about one person, is called a <u>record</u>. One record looks like this:

Smith, Sam 1414 15th Ave NW, Seattle 44 M Hockey

A datum of a particular type, for example a name, is called a <u>field</u>. On a worksheet, fields are found in columns; and records are found in rows.

#### 27. Type the field names as follows:

a.) Click cell A9. (Note: we'll leave the first 8 rows blank for now !) Typename

b.) Press Tab. Cell B9 should become active. Type address

- c.) Press Tab. Type age in C9.
- d.) Using Tab as needed, type sex in D9, and sport in E9.

## Excel 138

28. Enter step 26's sample data in the rows below your field names: one record per row. Be sure all the names are in the "name" column; the addresses in the "address" column, etc.:

a.) Click in cell A10. Type *Smith, Sam*; be sure there are no extra spaces at the beginning or the end of the text in any field. Such spaces will screw up the "search" features of the database later. Be sure you always type LAST NAME FIRST !!!!! Press Tab.

b.)Type 1414 15th Ave NW, Seattle ; you'll need to adjust the column width as described in step 11. Press **Tab**. Continue to type the rest of the record, pressing **Tab** as needed.

c.) When you finish the first record you will have to click in cell A11 to begin the next record.

d.) However you can speed the process up greatly by selecting all the cells at once. Click and drag from A10 on the upper left to E15 on the lower right. Now all you have to do is press **Enter** whenever you want to move to the next cell; when you get to the end of one record, **Enter** automatically takes you to the first cell in the next record, etc. If you want to back up, press **Shift-Enter**.

e.) When you're done, pull down File to Save. Type a name in the dialog box. Click Save.

29. To alphabetize your records according to the first field:

a.) Select (blacken) all the records you want sorted: Click and drag from A10 on the upper left to E15 on the lower right, if it isn't still selected.

Warning: if you do not select all the fields, they will be "left behind" when the sorting happens, and your database will become hopelessly mixed-up.

b.) Pull down **Data** to **Sort**. When the dialog box appears, make sure the **Rows** button is clicked. Click "ok."

30. To extract records that meet a particular criteria:

a.) Select all field names and records by clicking and dragging from A9 on the upper left to E15 on the lower right. (If you have a big database: click on the upper left cell; scroll to the lower right cell; **Shift-click** on the lower right cell.)

b.) Pull down **Data** to **Set Database**. This defines the database range over which you will search.

c.) Specify the criteria and the extraction area

>Select the field names in row 9. Pull down Edit to Copy.

>Select cell A1. Pull down Edit to Paste. You will specify the search criteria below row 1.

>Select cell A4. Pull down Edit to Paste. The extracted records will appear below row 4.

>Enter the criteria in the the cell below the name of the file you want searched: For example if you want to list all tennis players, type *tennis* in cell E2 below *sport*.

When you enter this criteria, *Excel* will find everything that begins with what you type. If you put an asterisk (\*) before and after a series of letters, *Excel* will find everything containing that series of letters. If you aren't sure of the spelling, substitute a "?" for the uncertain letter. For example, if you type Peters?n, *Excel* will find both Peterson and Peterson. When \* and ? are used in this way, they are called "wild cards." If you want to find all numbers greater than 10, type ">10" etc.

>Define criteria range: Click and drag from A1 to E2; pull down Data to Set Criteria.

>Define the extraction area: Click and drag from A4 to E7.

d.) Pull down **Data** to **Extract**. When the dialog box appears, click "ok." A list of all tennis players should appear in the extraction area.

e.) Try to extract the records of all players below age 27:

>Select and Clear cells A5 to E7. When the Clear dialog box appears, click the All button. Click "ok." Select the "Tennis" criteria cell; backspace "Tennis" out of existence.

>Select the criteria cell below age. Type <27.

>Define the extraction area: Click and drag from A4 to E7.

>Pull down Data to Extract...etc. A list of all those below age 27 should appear in the extraction area.

f.) Try to extract the names of all Seattle players. (Clue: \*Seattle. See the fine print in 30c above.)

#### Here's the information I promised about macros:

If you find that you are doing the same certain sequence of steps over and over again, when you are working in *Excel*, you may need to create a <u>macro</u> for those steps. A

Excel 140

macro is a computer recorded series of steps: you show the computer how to do a certain task, and you assign the task a name. After that, all you need to do is ask the computer to perform the named task, and the computer will do it!

#### 31. To create and run a simple Macro:

a.) Clear entire criteria and extraction area, A1 to E7.

b.) Pull down **File** to **New**. When the dialog box appears, click **Macro Sheet** button. Click "ok."

c.) Select cells A2 to A19 on the macro sheet. Pull down Macro to Set Recorder.

d.) Adjust the windows so you can see both of them. Click on the worksheet, so it is active. Think ahead! You will be recording a macro after this step.

e.) Pull down Macro to Start Recorder.

f.) Carefully, repeat all of step 30c. (This is where you show Mac how to do it.)

g.) Pull down Macro to Stop Recorder.

h.) Select cell A1 on the macro sheet. Type *Mactest*. Press Enter. Pull down Formula to Define Name. Click the Command button. Click "ok."

i.) Now test your macro:

>Clear entire criteria and extraction area, A1 to E7, again.

>Pull down **Macro** to **Run**. When the dialog box appears, double-click the name, *MacTest*.

>All the steps of 30c should happen automatically with lightning speed before your very eyes !!! Think of the possibilities !!

#### How to Make a Simple Grade book

32. Start with a new worksheet. (If necessary, pull down File to New.)

a.) Type the following names <u>LAST NAME FIRST</u> (One last then first name per cell) down column **A** in this order: *Sam Jones, Mike Smith, Mary Brown, Bill Taylor, Jane White, Leslie Adams.* (Press **Return** to move down to the next cell. Press **Shift** and **Return** to back up.)

b.) If column A isn't wide enough for the words, you can make it wider by clicking and dragging just next to the little line between the column labels.

c.) Don't be afraid of making mistakes; you can easily change anything in the spreadsheet, anytime you want to change it. Go back and review step 12, if you've forgotten how.

33. <u>Here's how to sort your new list</u>: Click the **A** at the top of the column; this selects the entire column. Then pull down **Data** to **Sort**.... When the dialog box pops up, click "ok." The names should sort themselves alphabetically !!!! Incredible !!!

34. Click on cell A1 to select it. Pull down **Edit** to **Insert**. When the dialog box pops up, click "ok." The names should all move down one row, and Row 1 should now be empty. You've just learned to <u>insert rows</u>. Do it again, so that the top two rows are empty.

- 35. a.) Type these column headings (one heading per cell) across row 1: Names, GPA, Percent, Total, 1st Assnt, 1st Test, 2nd Assnt, 2nd Test. Press Tab to move one cell to the right. (Press Shift and Tab to back up. You may need to adjust the column widths (see step 11).. If part of the worksheet slides out of sight, get it back by clicking and dragging on the little white boxes in the scroll bars.)
  - b.) Type the word, *Possible* under the *Names* column heading.

c.) Click and drag diagonally from cell **E2** to cell H8. An area four columns wide and seven rows high should be blacked out. (<u>The first four columns</u> should **NOT** be blacked out.) This is one way to select large areas.

Note: To select an even larger area, click in the upper left corner. Scroll to the lower right corner. Then press the Shift key, and click at the same time.

36. Enter these scores by typing the number and pressing **enter** after each score, beginning with the upper, left hand cell in the blacked-out selected area:

Name	<u>1st Assnt</u>	<u>1st Test</u>	2nd Assnt	2nd Test
Possible	10	20	10	20
Adams, Leslie	2	4	10	19
Brown, Mary	9	20	10	19
Jones, Sam	10	20	10	20
Smith, Mike	8	17	8	15
Taylor, Bill	8	11	8	10
White, Jane	0	20	0	20

If you make a mistake, back up by pressing **shift-Enter**. If you accidentally <u>deselect</u> the area, just reselect it in the same way, and press **Enter** until you are back to the right entry point. Now you know <u>how to enter data over a large area</u>.

**Excel** 142

37. Write the equation in cell D2 for finding the total of cells E2 through L2 as follows:

a.) Select (click) D2, and type an = symbol. The beginning of the formula for cell D2 will appear in the <u>formula bar</u>.

b.) Click E2. (You're telling Mac which cell you want him to operate on.) The coordinates for E2 will appear in the formula bar next to the = sign.

c.) Since you want a total, press + (plus), which is the computer symbol for sum (add).

d.) Click F2, the next number you want Mac to operate on. This cell's coordinates will appear in the formula also. Press + (plus) again.

e.) Continue on in this manner from G2 through cell K2; then press L2 but do not press + after you click L2. Press **Enter** instead. Bingo! The sum of E2 through L2 will magically appear in D2.

If it doesn't, pull down Options to Calculation.... When the dialog box appears, click the Automatic button.

The reason for going all the way over to column L is to provide for additional grades to be added later.

You have written a formula for finding the sum cells E2 through L2. You will never have to write this formula again, and it will continue to work, no matter what numbers you type into these cells!

38. Instead of doing the whole formula over again for each student, you can "copy the formula down" like this:

a.) Select (and black out) cells D2 to D12, by clicking and dragging from D2 to D12. (You copy the equation down to row 12 to allow for additional students.)

b.) Pull down Edit to Fill Down. The *total* points for each student should appear in each of their respective cells.

39. You will need to define a name, in order to write the percent equation which comes next: Select D2. Pull down **Formula** to **Define Name..**; type in *possible*, and click "ok." Now you know <u>how to define a name</u>.

40. Type the percent equation in cell C2:

a.) Type = then click cell D2. Press \* (asterisk, which is the computer symbol for times or multiply) then type 100. Press / (backslash, which is the computer symbol for divide) then type *possible*. The formula in the formula bar should look like this:
#### =D2\*100/possible

The equation means we take a kid's total, multiply it times 100, and divide by the possible points. The cell we defined as "possible" must be part of every single percent equation. If you want an equation to always refer to the same cell, you must first define a name for that cell. Otherwise cell references will be relative to the cell where the answer is being calculated; and an equation such as the above percent equation won't work. <u>Now you know how to do absolute cell references in an equation</u>.

b.) Press Enter. "100" should appear in cell C2. Copy it down (Fill Down) the column to row 12. You should have a percent score now for each student.

41. This GPA equation requires a student to have 65% in order to get a C- (1.5 GPA), and 92% to get an A- (3.5 GPA):

## =0.074\*C2-3.315

This is an equation for a straight line graph of the form: y=mx+b. That is, for every percent score x, there is a GPA score y. 0.074 and -3.315 are merely the constant values for the m and b that we needed for our particular percent/GPA conversion graph.

Type the GPA equation into B2, and copy it down. Does your "grade book" look like this?

22			S	imple					
	A	B	C	D	E	F	G	H	
1	Names	GPA	Percent	Total	:1stAss	1stTes	2ndAss	2ndTes	P
2	Possible Pts	: 4.09	: 100	60	: 10	20	: 10	20	1
3	Adams, Lesli	e 1.00	: 58	35	2	4	10	19	
4	Brown, Mary	: 3.84	: 97	58	: 9	20	: 10	19	
5	Jones, Sam	: 4.09	: 100	60	: 10	20	: 10	20	
6	Smith, Mike	: 2.61	: 80	48	: 8		8	15	
7	Taylor, Bill	: 1.25	62	37	: 8		: 8	10	
8	White, Jane	: 1.62	: 67	40	: 0	20	: 0	20	忆
কা								L C	모

To make the Percent and GPA columns more neat, I selected the percent column, and pulled **Format** down to **Number**. When the dialog box popped up, I clicked on the "0" and "ok."

42. Type some more scores in columns I and J, and see how the grades change.

As soon as new test and assignment scores are entered in an electronic grade book, a teacher can have the cumulative GPA for each student in a given class.

43. Rearrange your grades so they are listed by student number:

a.) Insert another column between the *Names* and *GPA* columns: select column **B**; pull down **Edit** to **Insert**.

Excel 144

b.) Label the new column *Number*. Assign a randomly selected student number to each student; make sure the numbers are in no particular order.

c.) Select rows 3 through 8, by clicking and dragging through those row numbers.

## d.) Pull down Data to Sort

e.) When the dialog box pops up; type B3 in the highlighted rectangle of its 1st **Key** box. (In effect, you are asking *Excel* to sort the things in the column headed by B3.) Click "ok'" The grade book should rearrange itself to be in order of student number.

f.) "Grab" the line that separates column labels **A** and **B**, and drag it to the left so the student names are hidden.

Note: You can post a "printout" of the grade book, listed by student number. Unless students have themselves volunteered their student numbers to others, their grade information will remain confidential, and yet it will be available for easy inspection. After you print the grades by student number, you can...

g.) Return to the alphabetical listing by "dragging" column **B** back to the right, and revealing the student names again. **Sort** again, but this time type A3 under **1st Key**. The alphabetical listing should return.

h.) Can you figure out how to list your students by period? By grade point?

## Here's how to print:

44. When you are ready to print; Save; then do the following:

a.) Select the cells to be printed. (Click and drag, Upper left to lower right.) Pull down **Options** to **Set Print Area**.

b.) Pull down **File** to **Print**. (You are not really going to print, just yet though!) When the dialog box appears, click the **Preview** box, then click "ok." A full page view of your future printed page should appear. If its not quite what you want, click "ok" and go back and change it. If it is what you want, click "ok" and press on!

c.) Make sure the printer is turned on:

i.) If you are using a LaserWriter, the On/Off switch is on the left end, just around the backside corner from the Power Cord Socket:



The green light on the front flashes as the LaserWriter warms up; then the yellow light starts flashing to show that the LaserWriter is processing a test print. The LaserWriter should deliver its own test print within two minutes. The yellow light will go out when the LaserWriter delivers the test print. When the green light is on steady, the LaserWriter is ready to print.

ii.) If you are using an ImageWriter, turn it on by depressing the on/off button, which is on the right side of the ImageWriter's top. Three green lights adjacent to the on/off button should come on. If you are using an old ImageWriter, there will be only two green lights. (If you don't get the right number of green lights, or the ImageWriter needs paper, and you don't know what to do, read the "ImageWriter" chapter.)

d.) Pull down File to Print. When the dialog box appears, "unclick" the Preview box, then...

i.) ...for the LaserWriter, click the "ok" button.

ii.) ...for the **ImageWriter** click the **Best** or **Faster** or **Draft** button (**Best** is slow, good-looking, and most copyable; **Draft** is fast and awful; **Faster** is in between.); then click the "ok" button.

It may take a minute or two, but if all goes well, Mac ought to start printing.

e.) In case of difficulty...

i.) ...if nothing happens, you may have skipped steps 3, 6, or 9: that is, you must have printer driver icon for the printer you intend to use present in your system folder; the AppleTalk "on-off" switch must be set the right way and the appropriate printer and port must have been selected in **Chooser**; and **File** must have been pulled down to **Page Setup...** 

ii.) ...if something goes wrong during the ImageWriter printing process, first, turn off the printer by pressing its on/off button; then press **%** -.

Excel 146

(command-period). (Mac will tell you to stop the printing by pressing **86** - . only, but this turns out to be much too slow.)

45. <u>To avoid excessive use of the mouse</u>: Use the keyboard command letters instead, which appear to the right of many of the options in the pull down menus. There are dozens of other keyboard commands as well, which are listed in the **"Hurry up Mac"** Chapter of this book, and the Microsoft literature.

46. <u>There are three ways to move your *Excel* spreadsheets. charts. or graphs into documents of other applications: you can use the clipboard, the **Scrapbook**, or open the the *Excel* document from within the other application.</u>

a.) <u>Clipboard</u>: when *Excel* is on the same disk with graphics or word processing applications such as *Word*, *RSG*, or *MacDraw* :

i.) Create the chart or graph in *Excel*, then pull down **Edit** to **Copy Chart**. Quit that application; **OR** select the portion of the spreadsheet which you want to transfer; and **Cut**(or **Copy**) it.

ii.) Open your other document; click where you want the graphic to be, then pull down **Edit** to **Paste**. Your graphic should appear.

b. <u>Scrapbook</u>: when *Excel* is on the same disk with applications such as *Word*, *RSG*, or *MacDraw*, you can create the graphics or spreadsheet in *Excel*, then...

i.) Select the portion of the spreadsheet which you want to transfer; and **Cut**(or **Copy**) it; **OR** create the chart or graph in *Excel*, then pull down **Edit** to **Copy Chart**. Quit that application.

ii.) Pull down **d** to **Scrapbook**, and when the scrapbook window opens, **Paste** your item. Click the close box.

If there are several different portions you would like to paste, repeat steps i. and ii. Each time you paste into the scrapbook, another page is created. This is an advantage over the clipboard, because the clipboard will only accept one portion at a time. Once you have pasted something into the scrapbook, it is safe; you can do anything else you might want to do: use the clipboard, quit for the day, or take a vacation. What you paste in the scrapbook is safely stored on the disk, it will not disappear when the power goes off, like things which are stored in the clipboard.

iii.) When you are ready to paste the **Scrapbook**-stored spreadsheet or graphic into the other document, pull down **s** to **Scrapbook**; and, when the scrapbook appears, page through it, by clicking on the scroll bar below its window, until you find the item you want.

iv.) Cut(or Copy) the item from the scrapbook. Click the close box.

v.) Click in the other document where you want your *Excel* spreadsheet or graphic to be, and **Paste**.

c.) You can save an *Excel* worksheet <u>as text</u>, then open it from <u>within</u> *Word*, *MacWrite*, or *RSG* :

i.) While you are working within *Excel*, pull down **File** to **Save As....** When the dialog box pops up, click the "text" button. Click "save."

ii.) Quit from *Excel*, and open the *Word*, *MacWrite*, or *RSG* destination document.

Once you are in *Word* or *MacWrite*, pull down **File** to **Open**. When the dialog box pops up, scroll to the name of your "text" *Excel* document, and double click on it. The "text" document should appear in your window as a *Word* or *MacWrite*, document. At this point, you will be able to cut and paste it the same as any other *Word* or *MacWrite* document.

OR

Once you are in RSG, you can click with the <u>I-beam</u> tool in a text block to select it; then pull down File to Get Text. When the dialog box pops up, scroil to the name of your "text" *Excel* document, and double click on it. The "text" document should flow into the selected text blocks.





This chapter assumes that you want to be able to create a database management (record keeping) system which will allow you to quickly pull single selected facts from within a massive pile of information, or allow you to quickly rearrange and present that information in a more convenient format.

1. In order to get started, you'll need a Macintosh computer, and a work disk with *File* on it. (If your only copy of *File* is a master disk, you need to study the **"How to Copy"** chapter first, and make a second work disk copy. It is dangerous to use your only copy of an application: what will you do if you damage it?)

a.) Connect the power cord and mouse to the back of the Mac. If you have an ImageWriter printer, or an external disk drive, or you have access to an AppleTalk system, connect them too. Study the little icons (pictures) above the connectors in the back of the Mac: they will help you to decide which peripheral (accessory) connects where. (If you use it, the AppleTalk connector <u>must</u> be plugged into the port below the printer icon.) Plug your Mac into a surge protector or a grounded (three prong) wall outlet.

b.) Plug the keyboard into the jack at the base of the front of the Mac. Make sure the keyboard's plugs are right side up when you insert them, or you will bend the keyboard plug contacts.

c.) Turn it on. The off-on switch is just above the power cord connection in the back. The Mac will "beep" when you turn it on.

d.) Adjust the brightness. You can feel the knurled brightness knob under the ledge just below the apple logo, on the lower left front side of the computer. Don't turn the brightness any higher than necessary to see comfortably. The lower you keep the brightness, the longer the "picture tube" will last.

2. Hold the *File* work disk the way it is in this little picture: 💾 but with your right thumb over the label. Slide it all the way into the disc slot below the screen, until it snaps in and the disc drive starts to click and hum.

The computer is gathering system information from the disk which is necessary for its operation; this process is sometimes called "booting the system." A disk that "boots the system" is called the <u>startup disk</u>. A startup disk must have a system file on it. If Mac spits the disk out when you try to insert it, it's because the disk doesn't have a system file, or the disk is defective.) After about 18 seconds, the disk drive will stop and the screen should look like this:



The menu bar containing the words **file Edit Diew Special** is across the top of the screen. The <u>desktop</u>, which is the rest of the screen below the menu bar, should be blank except for the <u>disk icon</u> and <u>trash icon</u> on the right side. (If the desktop looks instead like the screen diagram below, no harm has been done. Someone left it that way when they last quit.)

3. There should be a <u>pointer</u>: \* somewhere on the screen. The pointer moves around on the computer desktop when you roll the mouse around on a real table top. Move the mouse to position the tip of the pointer in the center of the disk icon and "<u>double-click</u>" (tickaticka) the mouse button without moving the mouse. This <u>opens</u> the disk's <u>directory window</u>; and now your screen should look something like this:



The icons on the desktop above represent the computer files which are recorded on the disk:

File 150

a.) The <u>application icons</u> represent files which tell the computer how to do something special; in this case, how to be a database.

b.) Icons with a "dog-eared" (bent -over) corner represent <u>documents</u> which you create with applications like *File*.

c.) The <u>system folder</u> contains the <u>System</u> which tells Mac how to be a computer. The system also holds the <u>fonts</u> (type faces); and the <u>desk accessories</u> which are discussed in the appendix. Double-click the System Folder, and open it up:



d.) The <u>Finder</u> creates the desktop and the icons which allow you to find your way around in the Mac.

e.) The <u>Clipboard File</u> is a "clipboard" which allows you to carry words or pictures from one document to another. The clipboard will only hold one piece of information at a time.

f.) The <u>Scrapbook File</u> is a place you can store words and pictures to use over and over in different documents. The scrapbook will hold many different items at once.

g.) The <u>LaserWriter</u> and <u>ImageWriter</u> are printer "drivers." If you want the computer to print documents on paper, you must have a driver for the printer you want to use. If you will be the first to use a LaserWriter printer after it has been turned on in the morning, you will also need a <u>Laser Prep</u>. If the printer driver you want is missing, you need to study "How to Copy." 4. Close the <u>system folder</u> window by putting the tip of the pointer in the <u>close box</u>, and clicking once, without moving the mouse. (This is called "<u>clicking on</u>" the close box.)

Note: The box in the lower right corner of each window is called a "Size Box" If you put the tip of the pointer in it, and then hold the mouse button down while you "drag" the size box, you can change the shape of the window. Also, you can move the entire window by using this same strategy to "click and drag" the title bar around. This manipulation of windows can be quite useful when you are trying to arrange things so that you can see the contents of more than one window at once. Some windows have a "zoom" box in the their upper right corner. If you click on it, it will "toggle" the window between full size, and some other size you may have selected with the "Size Box."



5. Click and hold the mouse button, while you attempt to drag down the word View in the menu bar. A list should appear beneath it. The word View will not drag, but as you pull the pointer down, each line in the list is highlighted (blackened) in sequence. When the line **by Size** is highlighted, release the mouse button. (This process is called "<u>pulling down" View to by Size</u>.) The icons in the directory window should change into a list of the files and applications arranged in order of size, largest first. (The sizes are measured in "k." You may have to adjust the size box to see them.) If you wish, you can instead rearrange the list alphabetically by pulling down View to by Name, etc. Try it, then change the window back to **by Icon**.

6. The Apple menu, **\$\$**, lists <u>desk accessories</u> on your disk, such as the **Scrapbook** and **Chooser**. Use **Chooser** before you begin, to prepare Mac for the kind of printing he will do when you are ready to print your creation: pull down **\$\$** to **Chooser**. When the Chooser window appears....

a.) If you will be using a LaserWriter or an ImageWriter connected to the AppleTalk network, <u>click on the "active" button</u>, the printer icon, and the printer's name. if they do not "highlight" when you click on them, then something is wrong.



If the printer icon isn't there, you need to go back to step 3g If the printer's name isn't there, or if it refuses to highlight (white print on black) when you click on it, then the printer is not turned on; or the printer and(or) your Mac are not connected to the AppleTalk network.

b.) If you will be printing on an ImageWriter connected to your Mac only, click the "Inactive" button for AppleTalk; then click on the ImageWriter icon, and click on the icon of the printer port to which the printer is connected. You can tell which port by looking to see where the ImageWriter plugs into Mac's back.



c.) Click the Chooser's close box.

Note: If your Chooser doesn't look like the one in the diagram, pull down **the Finder**. A little card should appear that tells you the finder is number 5.3. (If it's not, you need to replace the system, finder, and printer driver icons. "How to Copy" tells how to to this.) Put the little card away by clicking on it.

7. Double-click (boot) the *File* application icon. When the <u>dialog box</u> opens, type the name of the <u>datafile</u> you intend to create. (say, "Athletes") Click "new." Two windows will appear, a <u>form window</u> and a <u>datafile window</u>, like these:



8. Pull down **File** to **Page Setup...** A dialog box titled **LaserWriter** or **ImageWriter**, depending upon which printer you selected with the **Chooser**, should appear. If you don't want to change anything, click the "ok" button, and the dialog box should go away.

Note: If you will be using a LaserWriter, you should use LaserWriter fonts in *File*. Some of the LaserWriter fonts are **Helvetica**, **Times**, **Symbol**, and **N.Helvetica**. ImageWriter fonts such as Geneva are fine for the ImageWriter but they will make the LaserWriter take <u>a very long time</u> to print. To change fonts, pull down **Form** to **Set Font**.... When the dialog box appears, select the font and font size you want. If the right choices aren't there, it tells how to put more fonts in the system in the "**Font Appendix**."

9. The <u>insertion point</u> should be blinking at the left hand end of the <u>field name box</u>, in the form window. Type the label for the first column (<u>field</u>) of your datafile. (say, "Name")

10. Press return. If this first field is to be text, and not numbers or dates, press return a second time. If it will be numbers or a date, click the appropriate button on the dialog box which has popped up, then click "ok."

11. The insertion point will jump to the left hand end of the next field name box. Type the label for the second field (column) in your datafile. (say, "Address") Again, press return. Again, indicate if this column will be numbers or dates; otherwise press return again. (An address is "text.")

File 154

12. The insertion point will jump to the third field name box. Type this heading. (say, "Age"; if you do type age, you may want to click on the number button, then "ok.")

13. Continuing in the same manner, label as many additional fields as you want. (say, "Sex" and "Sport")

Now at this point, there may not be room enough for all of your fields (columns) to be on the screen at the same time. Also, the columns (fields) may not be wide enough for names and addresses; and they may be too wide for sex and sport. So adjust the future columns to a better width, using the mouse pointer to "grab" the right hand ends of the field name boxes, and stretch and push them until you are satisfied.

14. When you are ready to start entering data, click just to the right of **New** up in the datafile window, under the first field name (which has miraculously appeared in the other window) for the first field (column). The form window will disappear, and the insertion point will now be winking in the upper left hand corner of the datafile window, at the start of your database.

15. Type your first entry in the first column of your first row. (say, "Smith, Sam"; if it is a name, type the last name first.)

16. Press return to go to the second column (field), and type that data in. (say, 1414 15th Ave NW, Seattle)

17. Proceed in this manner, pressing return each time after you type your data into a box. One full line entry (say, name, address, age, sex, and sport) is called a <u>record</u>. When you get to the end of one record, just press return again, and the insertion point will jump to the beginning of the next record.

Here is some suggested data to play with:

1414 15th Ave NW, Seattle	44	М	Hockey
12 Westchester, London	18	F	Soccer
5432 Rawson, Vancouver	9	м	Tennis
243 Raupuchna, Bangok	67	M	Hockey
4 Camden, London	62	F	Tennis
941 Bennet, Seattle	45	М	Hockey
	1414 15th Ave NW, Seattle 12 Westchester, London 5432 Rawson, Vancouver 243 Raupuchna, Bangok 4 Camden, London 941 Bennet, Seattle	1414 15th Ave NW, Seattle4412 Westchester, London185432 Rawson, Vancouver9243 Raupuchna, Bangok674 Camden, London62941 Bennet, Seattle45	1414 15th Ave NW, Seattle44M12 Westchester, London18F5432 Rawson, Vancouver9M243 Raupuchna, Bangok67M4 Camden, London62F941 Bennet, Seattle45M

18. If you discover a mistake in the same box where you are still typing, just backspace over it, and retype. If the mistake isn't discovered until you are in another box; click in the box where the mistake is, after the word you want to correct, and proceed as you would with any other correction.

To back up in order to make a correction, press shift-return.

To jump to the first field in the next record, press Enter.

To duplicate whatever is in the field above, press **88** - . (Command-period).

To instantly enter the present date, press 🕱 - - (Command-hyphen).

19. When you are finished with entering data in your datafile, alphabetize it according to the first field (column), by pulling down **Organize** to **Sort**. When the dialog box appears, click under the name for the first field. An "A-Z" will appear. Click "sort."

If you want to sort it in reverse, click on "A-Z," and it will change to "Z-A." Obviously, the number fields will sort by number instead.

You can arrange your records in order according to any other field, by proceeding in the same manner. But "clear" the dialog box first by clicking the "clear" button; then click under the name of the field you wish to sort by.

20. Pull down **Organize** to **Find**. "Clear" the dialog box which appears; then type **Tennis** in the fifth (last) field box. Click "find." The computer will list all the tennis players in seconds. Of course this isn't very impressive when there are only six records in your datafile; but when the records number in the hundreds or thousands, the feature is spectacular. Bring back the whole datafile by pulling down **Organize** to **Show All Records**.

21. Pull down **Organize** to **Find**, and once again "Clear" the dialog box. This time type >40, in the age field box, click "find"; and the computer will list the records for all athletes over forty! When Mac does this for hundreds of records, instead of just a handful, it can take several minutes unless the fields have been indexed.

22. <u>Index a field</u> so the process of searching hundreds of records for a certain field property will take seconds instead of minutes. Pull down **Form** to **Format**, click the **Index** box; click "ok." You will have to wait several minutes for the indexing to occur. The catch is that this index takes up a lot of space, so don't use it frivolously.

To change the form (to add a new field, for example), pull down Form to Show Form, click where you want to make the change, and proceed normally.

To start a new datafile pull down File to New Datafile.

To go to another existing datafile pull down File to Open Datafile, then select the datafile you want in the dialog box; and click "ok."

23. When you are ready to quit **<u>DO NOT</u>** turn off the computer. If you turn off the computer without going through proper shutdown procedure, you may lose hours of work, or even damage your disk.

a.) When you are ready to quit, pull down **File** to **Quit**. If you have not saved already, a dialog box will ask you if you want to save your work. Click "yes" or "no." After the disk drive hums briefly, the desktop will reappear. (If you can already see the desktop, skip this step.)

b.) Once you are back to the desktop, the best way to quit is to pull down Special to Shut Down. This ejects all disks and <u>resets</u> the computer. If you are done, you can turn off the computer; or if you want change startup disks and do something totally different with the computer, you can reboot with a different startup disk.

c.) You can also quit by dragging the disk into the trash. After Mac spits out the disk, turn him off.

d.) If you want to keep the present disk as the startup disk, and keep its directory window on the screen; perhaps while you copy a file from one disk to another, select (click on) the disk icon, and pull down File to Eject, or type **X** -E. Mac will spit out the disk that was selected.

24. When you want to go back to work on the same *File* document, boot the system, and open the directory window. The *File* document icon should be there with the name you gave your paper in step 7. Reopen your paper by double-clicking that icon. When your paper opens, use the scroll bar to get to where you want to start typing.

25. When you are ready to print; Save; then do the following:

a.) Make sure the printer is turned on:

i.) If you are using a LaserWriter, the On/Off switch is on the left end, just around the backside corner from the Power Cord Socket:



The green light on the front flashes as the LaserWriter warms up; then the yellow light starts flashing to show that the LaserWriter is processing a test print. The LaserWriter should deliver its own test print within two minutes. The yellow light will go out when the LaserWriter delivers the test print. When the green light is on steady, the LaserWriter is ready to print.

ii.) <u>If you are using an **ImageWriter**</u>, turn it on by depressing the on/off button, which is on the right side of the ImageWriter's top. Three green lights adjacent to the on/off button should come on. If you are using an old ImageWriter, there will be only two green lights. (If you don't get the right number of green lights, or the ImageWriter needs paper, and you don't know what to do, read the **"ImageWriter"** chapter.)

b.) Pull down File to Print Records. When the dialog box appears...

i.) ...for the LaserWriter, click the "ok" button.

ii.) ...for the **ImageWriter** click the **Best** or **Faster** or **Draft** button (**Best** is slow, good-looking, and most copyable; **Draft** is fast and awful; **Faster** is in between.); then click the "ok" button.

It may take a minute or two, but if all goes well, Mac ought to start printing.

c.) In case of difficulty...

i.) ...if nothing happens, you may have skipped steps 3, 6, or 9: that is, you must have printer driver icon for the printer you intend to use present in your system folder; the AppleTalk "on-off" switch must be set the right way and the appropriate printer and port must have been selected in **Chooser**; and **File** must have been pulled down to **Page Setup...** 

ii.) ...if something goes wrong during the ImageWriter printing process, first, turn off the printer by pressing its on/off button; then press [%] -.

(command-period). (Mac will tell you to stop the printing by pressing **36** - . only, but this turns out to be much too slow.)

26. <u>To avoid excessive use of the mouse</u>: Use the keyboard command letters instead, which appear to the right of many of the options in the pull down menus. There are dozens of other keyboard commands as well, which are listed in the **"Hurry up"** chapter of this book, and the Microsoft literature.

27. <u>There are three ways to move graphics into *File*: you can use the clipboard, **Art Grabber** +, or the **Scrapbook**.</u>

a.) <u>Clipboard</u>: when *File* is on the same disk with graphics applications such as *MacPaint* or *MacDraw* :

i.) Create the graphic in that application select it, then pull down **Edit** to **Copy**. Quit that application.

ii.) Open your *File* document; click where you want the graphic to be, then pull down **Edit** to **Paste**. Your graphic should appear.

b.) <u>Art Grabber +</u>: If the graphic already exists on your disk as a *MacPaint* document, you can use **Art Grabber** to "grab" it while you are working in *File*.

i.) Pull down **to Art Grabber+**. The word "Grabber+" will appear on the menu bar.

ii.) Pull down **Grabber+** to **Open**. A directory of your *MacPaint* documents will appear. You may need to open a folder to get at them. Double click on the title of the *MacPaint* document you want. It will appear in the **Art Grabber** window.

iii.) Click and drag the "+" mouse pointer from the upper left corner to the lower right corner of the part of the *MacPaint* document you want to use. Pull down **Edit** to **Copy**. Click the close box of the **Art Grabber** window.

iv.) Click where you want the graphic to be. Pull down Edit to Paste.

c.) <u>Scrapbook</u>: when *File* is on the same disk with applications such as *MacPaint* or *MacDraw*, you can create the graphics or text in one of these applications, then...

i.) Select the portion of the graphic or text which you want to transfer; and **Cut**(or **Copy**) it.

ii.) Pull down **d** to **Scrapbook**, and when the scrapbook window opens, **Paste** your item. Click the close box.

159 File

If there are several different portions you would like to paste, repeat steps i. and ii. Each time you paste into the scrapbook, another page is created. This is an advantage over the clipboard, because the clipboard will only accept one portion at a time. Once you have pasted something into the scrapbook, it is safe; you can do anything else you might want to do: use the clipboard, quit for the day, or take a vacation. What you paste in the scrapbook is safely stored on the disk, it will not disappear when the power goes off, like things which are stored in the clipboard.

iii.) When you are ready to paste the **Scrapbook**-stored graphic into *File*, pull down **()** to **Scrapbook**; and, when the scrapbook appears, page through it, by clicking on the scroll bar below its window, until you find the graphic you want.

iv.) Cut(or Copy) the item from the scrapbook. Click the close box.

v.) Click in the *File* document where you want your graphic to be, and **Paste**.

28. <u>To save a "changed" document without destroying the original</u>: pull down **File** to **Save As...**. Type in the new name for your changed document. Click the "save" button.

File can do many other marvelous things unmentioned so far in this chapter. For example, a datafile similar to the one suggested here, can be used in conjunction with the merge feature of Word, to send out "personalized" form letters to hundreds of victims! Given a large enough storage, File can help to keep track of as many as 65,535 records, each of which contains as many as 1023 fields! You can even develop attractive records with more than one line, different fonts, and pictures. But you can investigate these capabilities yourself later, in the Microsoft File documentation, when you have become more adept with File's basics.





In writing this chapter I assumed that you might want to learn a little about what programming is like, and how *Microsoft BASIC 2.0* works on the Macintosh. However, this chapter does not presume to teach basic programming; to really learn programming, you need to take a separate course, or work with a separate book, of some length.

1. In order to get started, you'll need a Macintosh computer, and a work disk with *Microsoft Basic 2.0* on it. (If your only copy of *Basic* is a master disk, you need to study the **"How to Copy"** chapter first, and make a second work disk copy. It is dangerous to use your only copy of an application: what will you do if you damage it?)

a.) Connect the power cord and mouse to the back of the Mac. If you have an ImageWriter printer, or an external disk drive, or if you have access to an AppleTalk system, connect them too. Study the little icons (pictures) above the connectors in the back of the Mac: they will help you to decide which peripheral (accessory) connects where. (If you use it, the AppleTalk connector <u>must</u> be plugged into the port below the printer icon.) Plug your Mac into a surge protector or a grounded (three prong) wall outlet.

b.) Plug the keyboard into the jack at the base of the front of the Mac. Make sure the keyboard's plugs are right side up when you insert them, or you will bend the keyboard plug contacts.

c.) Turn it on. The off-on switch is just above the power cord connection in the back. The Mac will "beep" when you turn it on.

d.) Adjust the brightness. You can feel the knurled brightness knob under the ledge just below the apple logo, on the lower left front side of the computer. Don't turn the brightness any higher than necessary to see comfortably. The lower you keep the brightness, the longer the "picture tube" will last.

2. Find a work disk with *Basic* on it. Hold the disk the way it is in this little picture: but with your right thumb over the label. Slide it all the way into the disc slot below the screen, until it snaps in and the disc drive starts to click and hum.

The computer is gathering system information from the disk which is necessary for its operation; this process is sometimes called "<u>booting the system</u>." A disk that "boots the system" is called the <u>startup disk</u>. A startup disk must have a system file on it. If Mac spits the disk out when you try to insert it, it's because the disk doesn't have a system file, or the disk is defective.)

161 BASIC



After about 18 seconds, the disk drive will stop and the screen should look like this:

The <u>menu bar</u> containing the words **G** File Edit View Special is across the top of the screen. The <u>desktop</u>, which is the rest of the screen below the menu bar, should be blank except for the <u>disk icon</u> and <u>trash icon</u> on the right side. (If the desktop looks instead like the screen diagram below, no harm has been done. Someone left it that way when they last quit.)

3. There should be a <u>pointer</u>: A somewhere on the screen. The pointer moves around on the computer desktop when you roll the mouse around on a real table top. Move the mouse to position the tip of the pointer in the center of the disk icon and "<u>double-click</u>" (tickaticka) the mouse button without moving the mouse. This <u>opens</u> the disk's <u>directory window</u>; and now your screen should look something like this:



The icons in the <u>directory window</u> on the previous page represent the computer files which are recorded on the disk:

a.) The <u>application icons</u> represent files which tell the computer how to do something special; in this case, how to do *Basic* programming.

Note: There are two versions of *MS Basic 2.0.* We will be using version (d) for decimal, which is distinguished by the dollar sign, \$ on the icon. (The other version (b) for binary, rounds off numbers, and is therefore faster. However it drives accountants crazy because the "rounding off" feature sometimes causes calculated amounts to be off by one cent!)

b.) The <u>program icon</u> represents a computer program like the ones you may write using *Basic*.

c.) The <u>system folder</u> contains the <u>System</u> which tells Mac how to be a computer. The system also holds the <u>fonts</u> (type faces); and the <u>desk accessories</u> which are discussed in the appendix. Double-click the System Folder, and open it up:



d.) The <u>Finder</u> creates the desktop and the icons which allow you to find your way around in the Mac.

e.) The <u>Clipboard File</u> is a "clipboard" which allows you to carry words or pictures from one document to another. The clipboard will only hold one picture or set of information at a time.

f.) The <u>Scrapbook File</u> is a place you can store words and pictures to use over and over in different documents. The scrapbook will hold many different items at once.

g.) The LaserWriter and ImageWriter are printer "drivers." If you want the computer to print your programs on paper, you must have a driver for the printer you

163 BASIC

want to use. If you will be the first to use a LaserWriter printer after it has been turned on in the morning, you will also need a <u>Laser Prep</u>. If the printer driver you want is missing, you need to study **"How to Copy."** 

4. Close the <u>system folder</u> window by putting the tip of the pointer in the <u>close box</u> (the little white box to the left of the words **System Folder**), and clicking once, without moving the mouse. (This is called "<u>clicking on</u>" the close box.)

Note: The box in the lower right corner of each window is called a "Size Box" If you put the tip of the pointer in it, and then hold the mouse button down while you "drag" the size box, you can change the shape of the window. Also, you can move the entire window by using this same strategy to "click and drag" the title bar around. This manipulation of windows can be quite useful when you are trying to arrange things so that you can see the contents of more than one window at once. Some windows have a "zoom" box in the their upper right corner. If you click on it, it will "toggle" the window between full size, and some other size you may have selected with the "Size Box."



5. Click and hold the mouse button, while you attempt to drag down the word View in the menu bar. A list should appear beneath it. The word View will not drag, but as you pull the pointer down, each line in the list is highlighted (blackened) in sequence. When the line **by Size** is highlighted, release the mouse button. (This process is called "<u>pulling down" View to by Size</u>.) The icons in the directory window should change into a list of the files and applications arranged in order of size, largest first. (The sizes are measured in "k." You may have to adjust the size box to see the sizes.) If you wish, you can instead rearrange the list alphabetically by pulling down View to **by Name**, etc. Try it, then change the window back to **by Icon**.

6. Begin by double clicking on the *Microsoft BASIC* application icon. When the application opens, the screen should look like this:



7. Type a simple program in the list window. Type these two lines <u>exactly</u> as they are typed here:



**PRINT** The product of six and eight is" 6\*8

Don't worry about how to type the word **PRINT** in boldface; this is done automatically, as soon as you press **Return** at the end of each line.

8. Run your program by typing *B*-R, <u>or</u> by typing the letters **RUN** in the Command window <u>or</u> by pulling down **Run** to **Start**. If all goes well, the output window should look like this:

Untitled

This is my first BASIC program The product of six and eight is 48

We learn a number of things from this first simple program:

a.) **PRINT** is a <u>statement</u>, one of about 150 very special words which have very particular meanings in the BASIC language. This particular <u>statement</u> tells the computer to display whatever you have put in quotes in the output window. <u>Statements</u> are automatically converted to **boldface** when you press **Return**.

165 BASIC

b.) The computer can be used as a calculator. The **PRINT** statement also tells the computer to display the result of any calculation you type on the line after **PRINT**. \* (asterisk) means times (multiply); / means divide; and of course + means plus, and - means minus.

Pull down **Run** to **Stop**, <u>or</u> type **3** -. (command- period), to stop the program.

9. Pull down **File** to **Save**. When the dialog box pops up, type a name (any name will do, but make it short and memorable) for your program, and click on the "Save" button. Now type **NEW** in the command window, and press return; <u>or</u> pull down **File** to **New.** Your first program should disappear, and your windows should once again be clean.

10. When you are ready to quit **<u>DO NOT</u>** turn off the computer. <u>If you turn off the</u> computer without going through proper shutdown procedure, you may lose hours of work, or even damage your disk.

a.) When you are ready to quit, pull down **File** to **Quit**. If you have not saved already, a dialog box will ask you if you want to save your work. Click "yes" or "no." After the disk drive hums briefly, the desktop will reappear. If you can already see the desktop, skip this step.

b.) Once you are back to the desktop, the best way to quit is to pull down **Special** to **Shut Down**. This ejects all disks and <u>resets</u> the computer. If you are done, you can turn off the computer; or if you want change startup disks and do something totally different with the computer, you can reboot with a different startup disk.

c.) You can also quit by dragging the disk into the trash. After Mac spits out the disk, turn him off.

d.) If you want to keep a disk as the startup disk, and keep its directory window on the screen; perhaps while you copy a file from one disk to another, select (click on) the disk icon, and pull down **File** to **Eject**, or type **S** -E. Mac will spit out the disk that was selected.

11. When you want to go back to work, boot the system (see step 2), and open the directory window. A *Basic* program icon should be there with the name you gave your program in step 9. Reopen it by double-clicking on the program icon.

12. Try using Mac's "cut and paste" feature to edit your program:

a.) Click and drag across the second line to select it. It should become "highlighted" (white letters on black).

BASIC 166

b.) Pull down File to Cut.

c.) Click in front of the first line, to reposition the cursor.

d.) Pull down **File** to **Paste**. The old second line now precedes the first line. Hit **Return** to kick the old first line down to the second line.

13. **RUN** your "new" program. The lines that appear in the output window should be reversed in order from the first time. Pull down **Run** to **Stop**, <u>or</u> type **B** -. Type **NEW**, then hit return to get a clean slate. Tell Mac not to save it this time.

Type another simple program:



15. **RUN** it and see what happens. We learn some more things from this program:

a.) The **INPUT** statement stops the program, and makes it wait while the program user types in some requested information.

b.) This requested information is labeled according to the word following the **INPUT** statement.

c.) The labels (called variables) can be used to write a formula after LET which tells Mac how to operate on the "inputted" information.

16. Here's yet another simple program:



a.) Imagine you are Mac, reading the above program:

"count = 1" tells you where to start.
"counting:" means nothing on the first pass.
"IF count > 7..." doesn't apply because first line already told you that
"count = 1."
"PRINT count" tells you to print "1" on the output screen.
"count = count + 1" redefines count (now the count = 2).
"GOTO counting" keeps sending you back to the "counting:" signpost over and over until finally....
"IF count > 7... applies because count is now defined as 8.
"THEN endcount" sends us to the "endcount:" signpost, and finally you...

b.) Type it into the Mac and try it !

17. To make your own window, type the following program in the list window:

WINDOW 2, "My Window",(10,40)-(120,80),1

When you RUN it, you should get a window like the small one on the left:



If you select (click in) your new window, you will be able to move it and resize it, just like any other window. There are three other types of windows, but they don't have titles; so you just leave an empty space between the commas, where the title would go, if you want one of them. Window type 2 has a double line border; type three has a plain border, and type four has a shadowed border.

18. Revise your program as follows:

WINDOW 2, "My Window",(10,40)-(200,80),1 INPUT "What is your name"; X\$ PRINT "Hi there "X\$"!"

RUN it and see what happens. Can you explain the reasons for all the revisions?

19. You can add your own menus to the Macintosh menu bar using BASIC:

	0	1	2	3	4	5	6 etc. to 10
r	¢	File	Edit	Search	Format	Font	Document
-						Londo	n ľ 1
li ba	ne lar ar are	ger Dolo	nu numbe	ers. You are	allowed a	Cairo	2
m	axim	um of 10	) menus.	<u></u>		Zapf	Chancery 3
-						Times	4
וו ני	ne sm Sulled	lailer più I down" I	ain numo Font men	ers to the rig u , are the ite	em numbers.	l√Helve	tica 5
						Mobil	e 6
lt e>	kambi Kambi	imber O le, Font,	is the na which a	me of the me ppears in the	enu, in this menu bar.	Manh	attan 7

A menu is created with a statement of the following form:

MENU, menu number, item number, state, label\$

<u>Menu number</u> and <u>item number</u> are explained in the above drawing. The <u>state</u> is a 0, 1, or 2. An item with a state of "1" is a normal, potentially usable item; a disabled item has a state of "0". State "2" items are usually items that have been selected; they have a check mark next to them, like **Helvetica** in the above example. Create your own menu by typing the following program verbatim in the **List** window:

MENU 6,0,1, "Winter Sports" MENU 6,1,1, "Wrestling" MENU 6,2,1, "JV Wrestling" MENU 6,3,1, "Freshman Wrestling" MENU 6,4,0, "Boys Basketball" MENU 6,5,1, "Girls Basketball" MENU 6,6,2, "Debate" ON MENU GOSUB ProcessMenu MENU ON FOR COUNT = 1 TO 9.9E+62: NEXT COUNT END ProcessMenu: IF MENU(0) = 6 THEN GOSUB Selection: MENU RETURN Selection: ON MENU(1) GOSUB A1, A2, A3, A4, A5, A6 **PRINT** COUNT, SPORT\$ RETURN A1: SPORT\$ = "Wrestling": RETURN A2: SPORT\$ = "JV Wrestling": RETURN A3: SPORT\$ = "Freshman Wrestling": RETURN A4: SPORT\$ = "Bous Basketball": RETURN A5: SPORT\$ = "Girls Basketball": RETURN A6: SPORT\$ = "Debate": RETURN

20. In the first paragraph of this chapter, I told you that the purpose of this chapter was to show how BASIC works on the Macintosh. I was not presuming to teach you programming. If you want to learn BASIC programming, try *Basic Microsoft BASIC for the Macintosh* by Coan & Coan, Hayden Book Company 1985. After you have learned to do basic programming, if you want to know <u>all</u> the BASIC tricks the Mac can do, a good reference is the book that comes with the software, *Microsoft BASIC Interpreter* by the Microsoft Corporation 1984.

The	Mac	Ō	Idiot	Book
The	Desk	top	)	

System	Finder

The
Des
ktop

This chapter is written for people who want to start by learning a little bit about the Macintosh computer in general, rather than starting with some specific application.

1. In order to get started, you'll need a Macintosh computer, and a work disk with both *MacPaint* and *MacWrite* on it. (If your only copy is a master disk, you need to study the **"How to Copy"** chapter first, and make a second work disk copy. It is dangerous to use your only copy of any application: what will you do if you damage it?)

a.) Connect the power cord and mouse to the back of the Mac. If you have an ImageWriter printer, or an external disk drive, or you have access to an AppleTalk system, connect them too. Study the little icons (pictures) above the ports (connectors) in the back of the Mac: they will help you to decide which peripheral (accessory) connects where. (If you use it, the AppleTalk connector <u>must</u> be plugged into the port below the printer icon.) Plug your Mac into a surge protector or a grounded (three prong) wall outlet.

b.) Plug the keyboard into the jack at the base of the front of the Mac. Make sure the keyboard's plugs are right side up when you insert them, or you will bend the keyboard plug contacts.

c.) Turn it on. The off-on switch is just above the power cord connection in the back. The Mac will "beep" when you turn it on.

d.) Adjust the brightness. You can feel the knurled brightness knob under the ledge just below the apple logo, on the lower left front side of the computer. Don't turn the brightness any higher than necessary to see comfortably. The lower you keep the brightness, the longer the "picture tube" will last.

2. Find a work disk with MacPaint and MacWrite on it. Hold the disk the way it is in

this little picture: 🗂 but with your right thumb over the label. Slide it all the way into the disc slot below the screen, until it snaps in and the disc drive starts to click and hum.

The computer is gathering system information from the disk which is necessary for its operation; this process is sometimes called "<u>booting the system</u>." A disk that "boots the system" is called the <u>startup disk</u>. A startup disk must have a system file on it. If Mac spits the disk out when you try to insert it, it's because the disk doesn't have a system file, or the disk is defective.)

After about 18 seconds, the disk drive will stop and the screen should look like the picture at the top of the next page:



The <u>menu bar</u> containing the words **file Edit Diew Special** is across the top of the screen. The <u>desktop</u>, which is the rest of the screen below the menu bar, should be blank except for the <u>disk icon</u> and <u>trash icon</u> on the right side. (If the desktop looks instead like the screen diagram below, no harm has been done. Someone left it that way when they last quit.)

3. There should be a <u>pointer</u>: somewhere on the screen. The pointer moves around on the computer desktop when you roll the mouse around on a real table top. Move the mouse to position the tip of the pointer in the center of the disk icon and "<u>double-click</u>" (tickaticka) the mouse button without moving the mouse. This <u>opens</u> the disk's <u>directory window</u>; and now your screen should look something like this:



The icons in the <u>directory window</u> above represent the computer files which are recorded on the disk. Each type is discussed on the next page:

# The Desktop 172

a.) The <u>applications</u> tell the computer how to do something special; in this case, how to do graphics and be a word processor. You can read about other applications under **Read First**: on on page ii, and elsewhere in this book. Here are the icons for some of them:



b.) Icons with a "dog-eared" (bent -over) corner represent <u>documents</u>: original work which you create with applications like *MacWrite* or *MacPaint*.

c.) The <u>system folder</u> contains the <u>System</u> which tells Mac how to be a computer. The system also holds the <u>fonts</u> (type faces); and the <u>desk accessories</u> which are discussed int the appendix. Double-click the System Folder, and open it up:

	🕯 File Edi	t View	Special	
	D Work	Disk 📃		
		Syste Syste	m Folder	P
	9 items	303	iK in disk	97K available
	System	Finder	Clipboard File	e Scrapbook File
K	LaserWriter	Laser Prep	Image Writer	<b>☆</b>
	<b>公</b>			<b>心</b> 口

d.) The <u>Finder</u> creates the desktop and the icons which allow you to find your way around in the Mac.

e.) The <u>Clipboard File</u> is an electronic "clipboard" which allows you to "carry" words or pictures from one document to another. The clipboard will only hold one picture at a time.

f.) The <u>Scrapbook File</u> is a place you can store words and pictures to use over and over in different documents. The scrapbook will hold many different items at once.

g.) The <u>LaserWriter</u> and <u>ImageWriter</u> are printer "drivers." If you want the computer to print documents on paper, you must have a driver for the printer you want to use. If you will be the first to use a LaserWriter printer after it has been turned on in the morning, you will also need a <u>Laser Prep</u>. If the printer driver you want is missing, you need to study "How to Copy."

4. Close the <u>system folder</u> window by putting the tip of the pointer in the <u>close box</u>, and clicking once, without moving the mouse. (This is called "<u>clicking on</u>" the close box.)

Note: The box in the lower right corner of each window is called a "Size Box" If you put the tip of the pointer in it, and then hold the mouse button down while you "drag" the size box, you can change the shape of the window. Also, you can move the entire window by using this same strategy to "click and drag" the title bar around. This manipulation of windows can be quite useful when you are trying to arrange things so that you can see the contents of more than one window at once. Some windows have a "zoom" boxin the their upper right corner. If you click on it, it will "toggle" the window between full size, and some other size you may have selected with the "Size Box."



5. Click and hold the mouse button, while you attempt to drag down the word View in the menu bar. A list should appear beneath it. The word View will not drag, but as you pull the pointer down, each line in the list is highlighted (blackened) in sequence. When the line **by Size** is highlighted, release the mouse button. (This process is called "<u>pulling down" View to by Size</u>.) The icons in the directory window should change into a list of the files and applications arranged in order of size, largest first. (The sizes are measured in "k." You may have to adjust the size box to see the sizes.) If you wish, you can instead rearrange the list alphabetically by pulling down View to **by Name**, etc. Try it, then change the window back to **by Icon**.

6. The Apple menu, **\$\$**, lists <u>desk accessories</u> on your disk, such as the **Scrapbook** and **Chooser**. Use **Chooser** before you begin, to prepare Mac for the kind of printing he will do when you are ready to print your creation: pull down **\$\$** to **Chooser**. When the Chooser window appears....

a.) If you will be using a LaserWriter or an ImageWriter connected to the AppleTalk network, <u>click on the "active" button</u>, the printer icon, and the printer's name. if they do not "highlight" when you click on them. then something is wrong.



If the printer icon isn't there, you need to go back to step 3g If the printer's name isn't there, or if it refuses to highlight (white print on black) when you click on it, then the printer is not turned on; or the printer and(or) your Mac are not connected to the AppleTalk network.

b.) If you will be printing on an ImageWriter connected to your Mac only, click the "Inactive" button for AppleTalk; then click on the ImageWriter icon, and click on the icon of the printer port to which the printer is connected. You can tell which port by looking to see where the ImageWriter plugs into Mac's back.



c.) Click the Chooser's close box.

Note: If your Chooser doesn't look like the one in the diagram, pull down **(f)** to About the Finder. A little card should appear that tells you the finder is number 5.3. (If it's not, you need to replace the system, finder, and printer driver icons. "How to Copy" tells how to to this.) Put the little card away by clicking on it.

7. Double click the *MacPaint* application icon. When the *MacPaint* window opens, it should look like this:



- 8. Draw a picture:
  - a.) Click on the pencil Tool.
  - b.) Click and drag the pencil around on the screen.

Draw anything you want. Don't worry about quality. We are <u>not</u> trying to learn about *MacPaint* here; we are only trying to learn about the Mac in general. Later, when you decide you want to make good pictures, and learn about *MacPaint* in particular, go to the "**MacPaInt**" Chapter.

c.) If you become totally disgusted with the mess you have created, double click on the <u>eraser</u> tool, and start over. Try some other tools if you like.

d.) After you have experimented for a minute or two, click on the <u>text</u> tool, then click in the lower left corner of your creation, and type, "My first PaintDoc." If you make a mistake, backspace and retype.

e.) When you save your creation by pulling down **File** to **Save**, a dialog box will pop up like the one on the next page:

The Desktop 176

Startup A MacPaint	ф 	Startup
Save document as:		Save
FirstPaintDod		Cancel

f.) Type a short memorable name in the rectangle under the words **Save doc-ument as:** such as, FirstPaintDoc. Click on the **Save** button.

9. Click in the <u>close box</u> of the *MacPaint* window. Your creation should disappear. Don't worry, you can get it back!

10. Pull down File to New, and a new MacPaint window should appear.

a.) Draw another picture. This time you might like to use the spray can, and maybe some shape tools.

b.) Click on the text tool, and type a new name for your new picture in the lower left corner. Call this one "PaintDoc II."

c.) Save this picture, just as you saved the first. Again, type a name for it in the dialog box, say, "DocII."

d.) Again, click the close box, and make your second creation go away.

11. This time, pull down **File** to **Open**. A different type of dialog box should pop up this time (see the next page):



The dialog box should list the names of your saved creations, if it doesn't, you may need to click on the name of your disk; in the example above, the name is **Startup**. Or if you are using more than one drive, you may need to click the **Drive** button. Double click on the name of a saved creation that you would like to see again. (Do it even if you wouldn't like to see it again !!) Your old creation should reappear.

12. The **Scrapbook** is a desk accessory that stores graphics (pictures) or text where they can be used conveniently in synthesizing new documents. Let's put your *Mac-Paint* creations in the **Scrapbook**:

a.) <u>Select</u> a portion of your old resurrected creation by clicking on the <u>selection</u> <u>rectangle</u> tool; and then clicking and dragging from the upper left to the lower right of a particularly good part of your picture. When you release the mouse button, there should be an animated "marquee' of dotted lines around your selection.

b.) Pull down File to Copy.

Note: Whenever you Cut or Copy something, you put it into a part of Mac's memory called the <u>Clipboard</u>. It will stay there in his Clipboard memory until you turn the machine off, or Cut or Copy something else. (The Clipboard memory is short-lived, and it can only remember one thing at a time!) The Scrapbook, on the other hand, remembers more than one thing, and it will remember what you put there, even if you turn the machine off.

c.) Pull down d to Scrapbook. The Scrapbook window should appear.

d.) Pull down **File** to **Paste**. The selected portion of your creation should appear in the scrapbook. Click the close box in the **Scrapbook** window.

e.) Repeat steps a through d for some other portion of your creation, or better yet, **Close** the *MacPaint* window, re**Open** your other creation, and repeat steps a though d for that creation.

13. Pull down **File** to **Quit**. The desktop should reappear, and it should have two new *MacPaint* <u>document icons</u> on it, representing each of your new *MacPaint* creations:



14. Double-click (boot) the *MacWrite* application icon. When the *MacWrite* window opens, it should look something like this:



15. Pull down **File** to **Page Setup...** A dialog box titled **LaserWriter** or **Im-ageWriter**, depending upon which printer you selected with the **Chooser**, should appear. If you don't want to change anything, click the "ok" button, and the dialog box should go away.

16. Type some sentences into *MacWrite*. <u>Type fast</u>; we are going for maximum quantity of words in minimum time; <u>guality is of no concern whatsoever</u>.

Note: Don't be afraid of making mistakes; you can easily change anything in the paper, anytime you want to change it:

a.) To correct single letter errors, use the mouse to put the "<u>I beam</u>" after the letter you don't like, and click. (This moves the insertion point.) Backspace over the offending letter, and type in your correction.

a.) To correct more than a few letters: <u>select</u> what you don't like <u>by clicking and dragging</u> over it. Then, if you want to destroy it, press backspace. If you only want to move it, pull
down Edit to Cut; then move the insertion point (move the "I" beam and click) to where you want the deleted word or line to appear; then pull down Edit to Paste.

Cut and Paste are among the most powerful of the word processor commands. They are what allow you to pick up and move what you've already typed to a new location. (If you want, copy some words you've already typed to another part of your paper, and if you don't want to delete the original, follow the above directions; but pull down Edit to Copy instead of Cut.)

Warning: <u>Do not use return when you get to the end of a line</u>, unless you want a new paragraph. The "wordwrap" feature of the word processor takes care of this automatically. If you use return to start a new lines, it defeats the word processor, and makes a terrible mess. Use return **only** to change paragraphs.

- 17. Paste the art which you put in the Scrapbook into your MacWrite document:
  - a.) Pull down d to Scrapbook. The scrapbook window should pop up:



b.) Use the scroll bar at the bottom of the scrapbook window to "turn the pages" in your scrapbook until you find the page you want.

Note: Scroll bars are used in most Macintosh applications, not just the Scrapbook: clicking the grey portion of the <u>Scroll Bar</u> turns one page at a time; clicking the <u>Scroll Arrow</u> turns the pages much more rapidly; dragging the white <u>Scroll Box</u> allows you to move quickly to a particular place in the application.

c.) Pull down File to Copy. Click the Scrapbook close box.

d.) Click at the location in your *MacWrite* document where you want to past your *MacPaint* creation. Pull down **File** to **Paste**.

e.) Repeat steps a through d for your other picture.

Note: The Scrapbook, the Clipboard, and other methods of working between applications are all discussed at length in the "Integrating Multiple Applications" Chapter.

18. When you are ready to print; **Save**. Type your new document's name in the dialog box, and click the **Save** button; then do the steps on the next page:

The Desktop 180

a.) Make sure the printer is turned on:

a.) If you are using a **LaserWriter**, the <u>On/Off switch</u> is on the left end, just around the backside corner from the <u>Power Cord Socket</u>:



The green light on the front flashes as the LaserWriter warms up; then the yellow light starts flashing to show that the LaserWriter is processing a test print. The LaserWriter should deliver its own test print within two minutes. The yellow light will go out when the LaserWriter delivers the test print. When the green light is on steady, the LaserWriter is ready to print.

b.) If you are using an ImageWriter, turn it on by depressing the on/off button, which is on the right side of the ImageWriter's top. Three green lights adjacent to the on/off button should come on. If you are using an old ImageWriter, there will be only two green lights. (If you don't get the right number of green lights, or the ImageWriter needs paper, and you don't know what to do, read the "ImageWriter" chapter.)

b.) Pull down File to Print. When the dialog box appears...

a.) ...for the LaserWriter, click the "ok" button.

b.) ...for the **ImageWriter** click the **Best** or **Faster** or **Draft** button (**Best** is slow, good-looking, and most copyable; **Draft** is fast and awful; **Faster** is in between.); then click the "ok" button.

It may take a minute or two, but if all goes well, Mac ought to start printing.

c.) In case of difficulty...

a.) ...if nothing happens, you may have skipped steps 3, 6, or 15: that is, you must have a printer driver icon for the printer you intend to use present in your system folder; the AppleTalk "on-off" switch must be set the

right way and the appropriate printer and port must have been selected in **Chooser**; and **File** must have been pulled down to **Page Setup...** 

19. When you are ready to quit **<u>DO NOT</u>** turn off the computer. If you turn off the computer without going through proper shutdown procedure, you may lose hours of work, or even damage your disk.

a.) When you are ready to quit, pull down **File** to **Quit**. If you have not saved lately, a dialog box will ask you if you want to save your work. Click "yes" or "no." After the disk drive hums briefly, the desktop will reappear. (If you can already see the desktop, skip this step.)

b.) Once you are back to the desktop, the best way to quit is to pull down **Special** to **Shut Down**. This ejects all disks and <u>resets</u> the computer. If you are done, you can turn off the computer; or if you want change startup disks and do something totally different with the computer, you can reboot with a different startup disk.

c.) You can also quit by dragging the disk into the trash. After Mac spits out the disk, turn him off.

d.) If you want to keep the present disk as the startup disk, and keep its directory window on the screen; perhaps while you copy a file from one disk to another, select (click on) the disk icon, and pull down **File** to **Eject**, or type **36** -E. Mac will spit out the disk that was selected.

20. When you want to go back to work, boot the system, and open the directory window. The document icons representing the your work of the past few steps should be there with the names you gave them.

21. No matter which applications you use, files you create will begin to fill up your desktop at a frightening rate. If you aren't careful, after a few weeks of working with Mac, your desktop will be a hopeless jumble of icons. You will quickly find that you need to stay organized as you work.

a.) The <u>folder</u> is a useful tool for staying organized in any office. To make a new folder for your Mac's desktop, pull down **File** to **New Folder**. A new folder should pop into existence in the directory window. Rename the folder by selecting, "Empty Folder" (Click and drag across it.) and typing a new name, say, "GreatArt." Make the name represent what the contents will be; but don't duplicate another icon's name.

i.) You can put document icons in your new folder by dragging them into the folder. When the folder turns black, release the mouse button, and the icon will disappear into it.

ii.) If you want to organize your folder as you fill it up, open it, use the size box to size it as you see fit; and drag the icons into your folder's open directory window in the pattern you want. You can line them up neatly by pulling down Special to Clean Up.

The Desktop 182

b.) Make a second folder for your MacWrite document(s), and drag them into it.

22. The <u>hierarchical file system</u> (<u>HFS</u>) allows you to put folders inside of folders inside of folders. Make a third folder, and call it something like, "CreativeWork." Put your other two folders inside of it.

Here's how I organized the first edition of this book when I was writing it:

a.) I kept the book on a <u>data disk</u> called "NewIdiotBook." The applications were on "MacWordingSet 1," my <u>working disk</u>. I kept three folders on data disk"NewIdiotBook," one for each of the three parts. The directory window was opened by double-clicking on the disk icon:

r	¢	File	Edit	View	Special	l	
			Newl	diotBo	ok 📰	四重	Mandiageatt
	-	6 items	689	K in disk	84K availa	ble	Internet director
		$\frown$	ſ	<b>~</b>	$\frown$	샵	
	c	Part I	P	art II	Part III		NewIdiotEool
	k					公子	
	5	100000000000000000000000000000000000000	ot - 1000	00000000000	000000000000000000000000000000000000000		

b.) The "Part II" folder (which I could also open by double-clicking) contained four more folders, one per section. And the "IIBGraphics" section folder (opened the same way) contained the chapters in the graphics section:



If I wanted to go back and work on a file, say "mChap8(Draw)," I could double-click that file, and if the application for that file was present, the file would open, and I could start working on **Chapter Eight** again.

23. The <u>hierarchical file system's</u> (<u>HFS</u>) value becomes apparent when you want to open a file from within an application such as *Word*. Reboot *MacPaint*, and after it opens, click the close box, and pull down **File** to **Open**. An HFS dialog box will appear. To see how it works, continue reading:

Let's suppose I'm typing along in some new part to my book, and I want to go back and use something that I have already typed in **Chapter Eight**. It takes a long time to quit from an application, go back to the desktop, and open another file. I don't want to do this and neither will you. So, to open another file while working within a particular application see procedures on the next page:

a.) Pull down File to Open. A dialog box will appear. If it displays the "wrong" disk name below the words "Select a Document," click on the Drive button.



(If you don't have an external disk drive, click Eject, and when Mac spits out the first disk, insert the disk which contains the file you want.)

b.) A new box will appear for the new disk, containing the names of the folders, applications, or files which are in its directory window. Click on the name of the folder you would like to open, then click the **Open** button. (Or, as a shortcut, you can just <u>double</u>-click the name of the folder you would like to open.)



c.) You may recall that I had folders inside of that folder, so when the **Part II** folder "opens" it will reveal the names of <u>more</u> folders. So it is necessary, in turn, to open the folder for **IIBGraphics**:



d.) And inside it, is the the file (document) we were looking for:



If you double-click on it, you can open it without having to quit the application you happen to be working in.

Now try making the HFS system work with your folders and documents!

The Mac D Idiot Book How to Copy Font/DA Mover Copy II Hard Disk™ 5.2 COpy

Putting information into a computer for the first time can be a terribly painstaking process. But one of the great advantages of the computer is its ability to make almost instantaneous copies of that information once it has been entered. "Insurance" is the most common reason for copying; we want to insure that our painstaking labor will not be lost.

Note: One of the great <u>dis</u>advantages of the computer is its ability to allow hours of painstaking work to instantaneously disappear forever. Usually such disappearances are due to voltage surges, power failures, defective disks, or human stupidity. Whatever the cause, it is absolutely essential to make "back-ups" of every thing you do. If you don't, then one day for sure, you will be sorry you didn't.

There are several different copying processes to understand:

- 1. Duplication of single documents, etc. within a disk (step 1, below)
- 2. Copying of documents, etc. from "original" disk to "destination" disk (step 2)
- 3. Copying one entire disk, with all of its contents, onto another (step 3)
- 4. Creation of a "customized" work disk (step 4)

You must know which process is which. Otherwise, in your ignorant attempt to copy one thing, you may well destroy something else. Here are the summaries of each different copying process:

1. Duplication of single documents, files, or applications within a disk.

a.) To do this <u>when you are on the desktop</u>: Select (click on) the icon which represents the file, document, or application you want to copy; then pull down **File** to **Duplicate**. Another icon will appear, labeled. "Copy of ...(whatever the name of the original was):"



b.) To do this <u>when you are within an application</u>, pull down **File** to **Save As...** When the dialog box box pops up, type in the name you want the duplicate to have, and click the "save" button. You will be able to continue working on the new copy, or open the original copy by pulling down **File** to **Open**. But, when you quit, and go back to the desktop, there will be icons there for both copies. 2. <u>Copying a file from one disk to another (copying a document or application from an "original" disk to a "destination" disk</u>). To do this while you are in the desk top:

a.) Insert the destination disk into the external disk drive. (If you don't have an external disk drive, press **#\_-E** to eject the original disk, then insert the destination disk in the internal drive.)

If the destination disk is brand new, a dialog box will pop up and ask if you want to initialize the disk. Click **Two-Sided** or whatever is appropriate. There will be a pause while the Mac puts Mac tracks on the new disk. When Mac is done, another dialog box will ask you what to name the disk. Type an appropriate name such as "BillsData" Click "ok".

#### OR

If the destination disk has old stuff on it that you don't want any more, pull down Special to Erase Disk. Click Two-Sided or whatever is appropriate. Wait while Mac erases your old stuff. If you want to change your working disk's title, it is immediately below the disk icon. Click and drag through it. Then type in the title for your new data disk.

b.) Open the destination disk's directory window. Click on the icon you wish to copy, and while holding the mouse button down. drag the icon from the first disk's window into the second disk's window:



The drives will hum briefly during the copying process. (If you have only one drive, exchange disks as directed by Mac.) When it is over you will have a copy on each disk.

3. Copying one entire disk (original ), with all of its contents, onto another (destination) disk

Warning: Do <u>not</u> use the following processes to copy single documents, files, or graphics !!! If you only want to copy a single document, file, or graphic from one disk to another; <u>use the process</u> <u>described in step 2 on the preceding page</u>. The process we are about to describe in this step copies an entire original disk onto a destination disk; it will completely erase whatever is presently on the future destination disk.

a.) Insert the destination disk into the external disk drive. (If you don't have an external disk drive, press **#\_-E** to eject the original disk, then insert the destination disk.)

If the destination disk is brand new, a dialog box will ask if you want to initialize the disk. Click **Two-Sided** or whatever is appropriate. There will be a pause while the Mac puts Mac tracks on the new disk. When Mac is done, another dialog box will ask you what to name the disk. Type an appropriate name such as "BillsMacWrite." Click "ok".

OR

If the destination disk has old stuff on it that you don't want any more, pull down Special to Erase Disk. Click Two-Sided or whatever is appropriate. Wait while Mac erases your old stuff. If you want to change your working disk's title, it is immediately below the disk icon. Click and drag through it. Then type in the title for your new copy.

b.) When the destination disk icon appears, drag the original disk icon onto the destination disk icon. When Mac's dialog box asks if this is what you really want to do, click "ok."



The drives will hum at length during the copying process. (If you have only one drive, exchange disks as directed by Mac.) When it is over you will have two identical copies of the same disk.

If your new copy won't work, the master is probably "copy-protected." A method for copying "copy-protected" disks is discussed on page 153.

4. <u>Creation of a "customized" work disk</u>. (You will need a "master," and a blank disk (or a disk you don't care about), and the *Macintosh System Tools*.)

Warning: Do <u>not</u> use the following processes to copy single documents, files, or graphics !!! <u>If</u> <u>you only want to copy a single document, file, or graphic</u> from one disk to another; <u>use the process</u> <u>described in step 2 on the preceding page</u>. The process we are about to describe in this step creates entirely new content for a new work disk; it completely erases whatever is presently on it.

a.) Insert the Macintosh System Tools disk in the internal drive.

b.) Insert the blank or "used" disk into the external disk drive. This disk is called the <u>destination disk</u>. (If you want your working disk to be double-sided, the external drive must be a double sided drive. If you don't have an external drive that fits your requirements, or you don't have an external drive at all, use **C** - E to eject the System Tools disk from the internal drive, and insert the destination disk there.)

If the destination disk is brand new, a dialog box will ask if you want to initialize the disk. Click **Two-Sided** or whatever is appropriate. There will be a pause while the Mac puts Mac tracks on the new disk. When Mac is done, another dialog box will ask you what to name the disk. Type an appropriate name such as "BillsMacWrite." Click "ok".

#### OR

It the destination disk has old stuff on it that you don't want any more, pull down Special to Erase Disk. Click Two-Sided or whatever is appropriate. Wait while Mac erases your old stuff. If you want to change your working disk's title, it is immediately below the disk icon. Click and drag through it. Then type in the title for your new working disk.

c.) Open the directory windows for both disks. Open the Utilities Folder of the *System Tools*. Drag the "Desk Accessories" and "Fonts" icons out into the *System Tools* directory window. Close the Utilities Folder. Click on empty space to "unselect" the Utilities Folder.

d.) Hold down the shift key while you select the System Folder, the "Desk Accessories" and the "Fonts" icons. Drag all three of them from the System Tools directory window to the directory window of the destination disk. If you don't have an external disk drive, exchange disks as directed by Mac. Wait for the process to stop. (You've just copied three icons from one disk to another. You can do the same thing with any other folder, file, or copyable application.)

e.) Pull down **Special** to **Shut Down**, then reboot the system with the destination disk. Your destination disk is now a <u>startup disk</u>.

You will want your work disk to have room to work and have the fonts and desk accessories you want. A good many "MacHeadaches" come from running out of memory, so it's often wise to remove every non-essential bit possible.

Because of this, you need to decide now what your printer situation will be. If you will never use a LaserWriter, and your Mac is not connected to an AppleTalk network, the ImageWriter is the only printer icon you will need. If you will only be using a Laser-Writer, then you will only need the LaserWriter and Laser Prep icons; but if you will

### How to Copy 190

also be using an ImageWriter tied into a network, then you will also need an AppleTalk ImageWriter icon, etc.

f.) Open the system folder. Drag the printer icons you don't need into the trash. Jiggle each doomed icon, by itself, over the trash can, until the trash can darkens. (If Mac tells you an icon is "locked," select it, pull down **File** to **Get Info**, and click the "X" out of the **Locked** box. At this point, even though an icon has been trashed, you can still change your mind by double-clicking the trash can, and dragging the lost items back into the directory window.) Next empty the trash by pulling down **Special** to **Empty Trash**. (Now it's too late to change your mind!)

Fonts take up space too. This is how to exchange the fonts you don't need for the fonts you want:

g.) Double-click on the **Font/DA Mover** icon. (It should be in the system folder.) The fonts which are in the system now should listed on the left. If they aren't, click the font button. Click the **Open** button on the right. When the dialog box appears, select (click) "Fonts" from the list (you may have to click the little disk icon first, in order to find "Fonts") and click **Open**. A list of the fonts available in the "Fonts" file will appear in the list on the right side.

h.) From the list on the left side, <u>select</u> (that is, click, drag over, and highlight) the names of all the listed fonts and sizes in the left (systems) list of the dialog box. There may be zillions of names and sizes like Courier 10-12, Venice 14, New York 9-36, Times 10-12, etc. Select them all; then click the **>>Copy>>** button. This copies the system fonts over into the "Fonts" file in case you want them later.

i.) Now click the **Remove** button, while all the system fonts are still selected. Mac will tell you not to take his system fonts. Not to worry, you can't take them even if you want to; there will still be a few fonts left for the two of you! Click "ok." Trust me! You do not need all these fonts! Wait while Mac strips out all his useless fonts.

j.) Select the fonts you want for your working disk from the right ("Fonts") side of the dialog box. Hold the shift key down as you select, so you can get every-thing you want on the first try.

If you will be using the LaserWriter for your finished work, you should use Helvetica 12 or Times 12. If you are going to be using a variety of font sizes, and you want them to show clearly on Mac's screen, then throw in the other font sizes, but <u>the LaserWriter doesn't need more than one size</u> of a given font! if you will be using the ImageWriter only, I recommend Geneva 9 through 24. (Because the ImageWriter does require all the different sizes.) Of course there are many other alternatives to consider. There are samples of each font in the Font Appendix in the back of this book.

When everything you want is highlighted, click **<<Copy<<** to install the selected fonts in Mac's system.

You may also want to remove desk accessories you will not need. Consider the following:

i. You must always have at least one desk accessory installed, or the system will crash.

ii. If you will be working with the AppleTalk network, or the LaserWriter, you will need Chooser and the Control Panel for sure.

iii. The Scrapbook and Art Grabber+ are quite useful for moving graphics (drawings) into written documents; but if this will be a data processing working disk, consider removing them.

iv. Key Caps is quite useful for quickly establishing which fonts are on your disk, and for previewing which key does what, on some of the most exotic fonts.

v. The Calculator and the Alarm Clock are sometimes useful for certain activities; but they can be a waste of disk space.

vi. Definitely remove the *Puzzle*, and *Note Pad* or any other strange desk accessories which happen to be there. (Some "home built" desk accessories cause unpredictable system crashes.)

k.) Click the **Desk Accessory** button. Click the **Open** button under the list on the right. When the dialog box appears, click "Desk Accessories" (you may have to click the little disk icon to find it) and click **Open**. A list of the desk accessories available in the "Desk Accessories" file will appear on the right. From the left-hand list, select the desk accessories you <u>don't</u> want. Click >>Copy>> . Click the **Remove** button. Wait. If there are any desk accessories you want on the right side, copy them over to the left (system) side. Click **Quit**.

I.) When you get back to the desktop, trash the **Font/DA Mover**. Click "ok". Close the system folder. Insert the *System Tools* again (eject the destination disk if necessary) Drag the "Fonts" and "Desk Accessories" icons back across to the *System Tools* window, so the fonts and desk accessories which you removed will be available if you want them another time. Eject the *System Tools* . Trash the remaining "Fonts" and "Desk accessories" icons which are still in

the directory window of the destination disk. Empty the trash.

m.) Move the tab in the corner of the master disk so there is a hole you can see through:



This way, the master is "locked" and it will be impossible to ruin it by accidentally copying the something onto it, or erasing it. n.) Insert the master disk in the external drive. (Or eject the destination disk, and insert the master into the internal drive.) When the master's disk icon appears, open its directory window.

o.) Drag the icons for the applications you want into the directory window of the destination disk. Wait for them to be copied. (Exchange disks if you have to.) Then eject the master.

p.) If you want applications from more than one master on the same disk, repeat steps m.) through o.) until the disk is full, or you have the applications you want.

Your work disk is done. If it won't work, the master was probably copy protected. Masters are sometimes "copy protected" to prevent unscrupulous people from making additional copies and giving away (or selling !) applications to their friends. (Nevertheless, it is possible to copy "copy protected" disks, and I will show you how. It is legal to copy any disk you own <u>as long as such copies are for your own use in only one machine at a time</u>.) Old Microsoft versions of *Word, Excel* and *File* are examples of copy protected applications. New Microsoft applications, and *MacPaint, MacWrite, ReadySetGo*, and *MacDraw* are **not** copy protected.

5. <u>To copy a copy protected master</u>, you will need a copy of *Copy II Hard Disk* and an external disk drive. (If you want your working disk to be double-sided, the external drive must be an 800K drive. The 800K external drives are 2 inches high, and they say "800K" on the bottom; the 400K external drives are 3 inches high, and they don't say what "K" they are.)

a.) Boot the System Tools disk in the internal drive.

b.) Insert your new destination disk into the external disk drive. Erase/initialize your new disk to be **Two-Sided**, like it says in step 4.b.

c.) "Lock" the master as shown in step 4. m.

d.) Press **B** -Shift-1 to eject System Tools, and insert a disk containing Copy II Hard Disk in the internal drive. Open the directory window, and boot Copy II Hard Disk. Read the copyright notice when it appears and click "ok".

e.) Click the **Eject Original** button in the dialog box to eject the *Copy II Hard Disk*.

f.) Insert the <u>locked</u> copy-protected master in the internal drive. Click Start **Copy**. Exchange disks as directed by Mac.

g.) When the "Select Destination" dialog box appears, select the destination disk by clicking **Drive** until the name of your destination disk appears next to the little disk icon. Click **Continue**. Exchange disks as directed.

h.) When the copy is complete, pull down **Control** to **Quit**. Then pull down **Special** to **Shut Down**.

i.) Boot *System Tools* again. Reinsert your destination disk in the external drive. When the destination disk's icon appears, open its directory window. Except for the copy protected application, trash all icons that may have been copied into your destination disk.

j.) Follow the instructions for steps 4.c. through 4.l.

The Mac	Ō	Idiot	Book
Нигту ир	M	ac	



Hurry up Mac

Here are a few ways to hurry up Mac:

1. <u>Keep your hands off the mouse</u> (Cost: \$0). This is the most effective "hurry up" procedure there is for the Macintosh. However, like all truly effective procedures, some self-discipline is required.

The mouse is what makes the Mac so easy to learn in the first place; and in the beginning, it's fun. But when you're messing with the mouse, you ain't typing. When the mouse begins to get in the way of your work, it's time for the disciplined speed of <u>keyboard commands</u>.

Keyboard commands will help within almost every serious application, as well as the Macintosh system. But for applications such as *Word*, keyboard commands can do almost everything that the mouse can do. With such applications, you rarely have to take your hands off the keyboard unless you want to. Once you learn the keyboard commands, you no longer have to fumble for the mouse when the juices are flowing and you are on a roll.

Every time you see this symbol, 💥 ; it means you are to press the command key. Typically, when you use the command key, it is in conjunction with at least one other key. For example, 💥 -C means depress and hold the command key while you also press the letter C. (Even though the letters of a command may appear to be capitalized, do not use the shift unless **shift** is specified as part of the command.)

These first keyboard commands work, regardless of the application you are using. They are Mac's <u>universal keyboard commands</u>:

Сору	ЖС	Eject	Internal Disk	Ж	-shift-1
Paste.	<b>Ж</b> V	Eject	External Disk	ж	-shift-2
Cut	🕱 -Х	Save	Active Window to MacPaint	×	-shift-3
Undo	ЖТ -Z	Print	Active Window	Ж	-shift-4
Stop Exe	ecution of	i Last	Command	and-p	veriod)

# **Common Keyboard Commands :**



# Word-Processing Commands Data-Processing Commands:

	Writa	Word		Filo	Excel
Align Left	88 ]-N	Solution	Calculate Now	×]-=	<b>3</b> - =
Align Right	🕱 - Я	🕱 🗍 -shift-R	Copy same field last line	<b>x</b> ].'	<u>چ</u>
Align Center	М-ГЖ	🕱 ] -shift-C	Date, print today's	<b>F</b>	<b>F</b> 1
Justify	<b>%</b> ]-J	🕱 -shift-J	Fill down		₩ -D
Normal ¶	🕱 - D	🕱 -shift-P	Fill right		🕅 - R
Outline	<b>8</b> -0	🕱 -shift-D	Next Cell, selected area	Return	Enter
Ruler	🕱 -D	🕱 - R	Next Field	Tab	Tab
Shadow	🗭 - S	🕱 -shift-N	One screen down	Opt-Enter	Opt- 🕱 🗍 - J
Subscript	<u>ک</u> ا-۲	🕱 -shift	One screen up	Sft-Opt-Enter	Opt- 🕱 🖥 - K
Superscript	🕱 -н	🕱 -shift- +	Previous Field	Sft-Tab	Sft-Tab
			Same field, next line	🕱 - Enter	Return
			Same Field, previous line	Sft- 2 - Enter	Sft-Return
			Time, print present	ו;	▓ • ;

# Keyboard commands which are unique to Word alone :

Moving the Inser	<u>tion_Point</u>	Scrolling Around		
One char left	Optn-🕱 -K	One line up	Optn-)	
One char rt	Optn-💌 -L	One line down	Optn-📧 -/	
One word left	Optn-📆-J	Page up (back)	Optn-📧 - P	
One word rt	Optn-📰-;	Page down	Optn-💌	
One line up	Optn-🕱 - O	-	• —	
One line down	Optn--,	<u>Dialog Box</u>		
New line,same¶	Shift-return	Next Option	🕱 - Tab	
Page break	Shift-Enter	"Click"	🕱 - Spacebar	
New section	🗭 - Enter	Next Textbox	Tab	

Word Spaces and Hyphens: etc.	
Non-breaking sp between words	🕱 -spbr
Non-breaking hyphen	Option-~
Optional hyphen	<b>%</b>

Some Word	d Selection Short	cuts	
Within the	Text	In the Select	<u>tion Bar</u>
Sentence	Bouble click	Document	S - click
Single Pt	Click	Line	Click



You can use the numeric keypad to move the insertion point around the screen without touching the mouse. If you press the Shift key at the same time, you can select text too!



You can open and close HFS folders by pressing the **S** button in conjunction with the up and down arrows. Also, you can use the keypad to pull down menus. I think it may be possible to use Word without ever touching the mouse:



### 2. Use only the font sizes which are installed on the disk (Cost: \$0).

For *Word* the installed font sizes are listed next to the available font list when you pull down **Character** to **Formats**. For *MacWrite* the installed font sizes are printed in **Outline** style, when you pull down the **Style** menu.

It is possible to select any font size you want by typing it in *Word's* font size selection box, or selecting it from *MacWrite's* **Style** menu; but it is not a good idea. When you tell Mac to use a font size which is not installed, Mac has to size each letter up or down from the existing font size every time you hit a key, and the process is time consuming. You'll find that Mac can only size odd fonts at the rate of about 10 words per minute. Not only that, but when you print your odd "MacCreated" font sizes on the ImageWriter they won't look as good as the installed sizes. (Any size of LaserWriter font looks good on the LaserWriter, however. So if you are using a LaserWriter, and you want to use an odd sized font; type it in an installed font size, then change the font size when you are done.)

### 3. Don't let the disk drive stop (Cost: \$0).

When you boot the system, the disk drive hums and **stops**; then you boot an application, and the drive hums and **stops** again. When you're done, you quit the application, and the drive hums and **stops**. Finally you eject or shut down, and it hums and **stops** one last time. Every time the drive has to stop and start up again, valuable seconds are wasted. Once you are familiar with a particular disk's desktop and the applications on it, you know where the icons and menus are. With concentration it is possible to click on the right words and icons as they come up, but before the drive stops. Do it!

# 4. Use the RAM Cache (\$0 if you have a Mac Plus).

The RAM Cache sets aside a designated amount of the RAM for storing frequently used program directions from your application. This way, whenever the directions are needed, Mac gets it out of the RAM, and not off of the disk. The process is a lot faster. Of course the RAM Cache takes away memory that could be used for other things, so

# Hurry up Mac198

you may not want to use it with applications that require a large amount of memory. But the RAM Cache does not have the risks of the RAMdisk because your latest work is still stored on the disk each time you save. Only frequently used program directions of the application and your unsaved work are in the RAM.

Here's how to use it:

a.) Boot Mac

b.) Pull down 💣 to Control Panel.

c.) Click the "On" button for the RAM cache.

d.) Click on the up or down arrows to adjust the RAM cache size to be slightly larger than the application you will be using, according to the following table:

Application	<u>512K</u>	<u>Mac Plus</u>
Excel	304	380
File	160	224
MacDraw	160	224
MacPaint	184	184
MacWrite	160	224
ReadySetGo	256	256
SuperPaint	432	432
Word	256	416

d.) Click the close box.

If you don't like the Mac Plus RAM Cache, a better one called *TurboCharger 2.0* is made by Nevins Microsystems.

Caution: Be careful to use only one RAM Cache at a time (a RAM cache is built into the HyperDrive.); and avoid using the RAM Cache with Switcher. If you disregard this Caution, your system will crash !!

5. Use a RAM disk (Cost: \$23; but you need at least 512K of memory).

If you like to play fast and loose, this is the most cost effective purchase you can make for the Mac. The RAM disk tricks Mac into thinking that part of his 512K (or 1028K) RAM is really a disk drive; and since access to RAM is practically instantaneous, Mac can use his RAM disk with lightning speed. The RAM disk is ideal for situations where you are frequently stuck waiting for Mac to use the disk drive. However, the catch is that you can lose your work. With the RAM disk, your work is stored in RAM (a temporary electronic memory), instead of on a real disk (which is more or less permanent). If the electricity goes off, or something erases the RAM, your work will disappear forever.

The RAM disk memory is limited to 316K in a 512K Mac, or 828K in the Mac Plus. Mac needs the other 196K to do the things he normally does with his RAM. So you may need to do some planning in creating your RAM disk. If you're using a Mac 512,

**199 Hurry up Mac** 

you may want to include only the applications, desk accessories, fonts, and files which are absolutely necessary to your work while you are using the RAM disk. If you will be using **File** for instance, you will need only **File**, one desk accessory, say *Control Panel*, the minimum system fonts (Chicago 12, Geneva 9 &12, and Monaco 9), the System, the Finder, and the file with which you will be working.

Here's how to use the RAM disk:

a.) Drag the RAM disk application icon onto a disk containing the other applications, desk accessories, fonts, and files you which you intend to use. It's okay if there are other things you <u>don't</u> intend to use (like the ImageWriter driver) on the disk too; you just don't want to load them on the RAM disk.

b.) Boot the RAM disk application. After about 5 seconds you'll get a dialog box. Click the "Create Temporary Disk" box. Click "ok."

c.) You'll get another dialog box. This one controls the RAM disk memory. Click and drag the six-sided figure, which at first contains the number "35K," up to the 316K (or 828K) mark. Click "ok."

d.) Mac will take you back to the desktop, which looks pretty much the same as before, except that now you have a second disk icon, the RAM disk, on the right side of your desktop, below your startup disk icon. Open the RAM disk <u>disk</u> icon (<u>not</u> the RAM disk application icon!). It should be empty.

e.) Hold the shift key down while you click on all the icons to be loaded onto the RAM disk. Do not click on anything you don't need; and especially don't click on the RAM disk or the ImageWriter. Drag everything you have selected, in one group, onto the RAM disk.

f.) Now boot an application which is loaded on the RAM disk. (When you boot an application, the disk holding that application becomes the startup disk.) Play with the application for a while if you want. Then pull down **File** to **Quit**. You should already notice a remarkable increase in speed.

g.) Eject the disk that was the startup disk, but has now been relegated to second place. This isn't mandatory, but if the disk is in there, Mac will want to talk to it, and this will slow things down.

h.) Boot your application again. This time the air should all but crackle as you fly into your application. Do whatever it is you have to do with the application. You should notice a vast improvement.

Warning: When you are done, be sure you drag whatever you want to save over onto a real disk; otherwise when you shut the system down, it will be gone forever!!!!

### 6. <u>Use the Switcher</u> (Cost: \$0)

If you have to move quickly from one application to another, *Switcher* is for you. There is a complete set of instructions for using *Switcher* in the "Integrating Applications" Chapter.

### 7. Use the Minifinder. Set Startup. or "File to Open" (Cost: \$0).

They won't work for everyone, and the first two suggestions may not be a good idea for anyone. But you really should try each of them out, in your particular situation, and see.

a.) To install the <u>Minifinder</u>, select (shift-click) the applications and files you want to include in the minifinder (they must all be visible on the desktop); then pull down **Special** to **Use Minifinder...**. When the dialog box appears, click **Install.** From now on, until you click on the **Finder** button, return to the desk top, and turn the minifinder off, you will see the Minifinder instead of the desktop whenever you boot the system or quit an application. <u>Personally I hate it</u>.

The minifinder has icons; and you use them them same way you've been using the icons on the regular Mac desktop. It is slightly faster, but there are two problems:

i.) When you create a new file, you have to go back to the finder in order to install it in the minifinder; so if you create new files frequently, the minifinder may end up requiring more of your time than the finder.

ii.) The minifinder does not keep you as well informed as the finder, about what is happening on the desktop with regard to the accumulation of files and the amounts of disk space involved. Such a lack of information may cause you to lose part of your work when the machine or disk runs out of memory.

b.) <u>Set startup</u> takes you straight into a previously selected document or application whenever you boot the system. It allows you to skip the finder completely; in fact you can even trash the finder if you need the space. If you always use one and only one application when you use a particular disk, set startup can save you lots of fooling around on the desktop. But like the Minifinder it keeps you in ignorance about what is happening on the desktop; and one day, without warning, you may suddenly run out of disk space.

### To use Set Startup:

i.) Open the directory window.

ii.) Select (click on) the application that you want to have open whenever you boot the disk.

iii.) Pull down Special to Set Startup.

The next time you boot the system with this disk, you'll go immediately into the application you have selected. If you tried **Set Startup** and you didn't like it:

- i.) Quit the application
- ii.) Select the Finder.
- iii.) Pull down Special to Set Startup.

c.) File to Open, can take you straight from one document to any other document prepared with the same application, without going back to the finder: Pull down File to Open, select the document you want from the list in the dialog box, and click "open." If it's on a different disk and in the other drive, click the "drive" button. (Or if you have no external drive, click eject and insert the other disk; then select the document you want and click "open.") Do not use "eject" as a shortcut for quitting, however. If you do, you will accumulate strange documents on your desktop, and your disk will eventually "crash."

### 8. Buy an external 800K disk drive (Cost: \$349).

If you have done the **"How to Copy"** Chapter, and worked other parts of the book already, you can see the advantages of this:

a.) When you make copies, you can insert both the source and destination disks at the same time; which cuts the disk swapping down to zero.

b.) You can keep your applications (working disks) and your files (data disks) on separate disks. This allows you to organize your disks better; and it allows you to create huge documents which are limited only by the disk's capacity.

# 9. Upgrade to a Mac Plus (Cost:\$895) or 512 Extended (Cost:\$299).

The Apple Macintosh was introduced to the world in January of 1984. It loaded its programs too slowly and it ran out of memory frequently. The first little Mac is known in polite company today as the **Mac 128**. But by fall of that year, the **Mac 512** was available. Because it had 512K RAM, it ran out of memory less often.

The numbers 512 and 128 refer to a <u>random access memory (RAM)</u> that the Mac has only when it is turned on. The RAM's data storage capabilities are different than the data storage capabilities of a 3.5" disk or a hard disc. 3.5" discs are much cheaper, they can retain their memories when the machine is turned off; they can be removed from the machine; and potentially they have a much larger capacity. Unfortunately, it

# Hurry up Mac202

is many times more time-consuming to get at the memories in a disk. The RAM's memory is electronic: Mac can get to it "instantly". Unfortunately, when the power goes off, the RAM is gone "instantly".

A 512K Mac has four times as much RAM as a 128K Mac. It can hold more of a file or application in its RAM at one time. A 512K Mac can hold all the data of a 400K 3.5" disk in its electronic memory at once. This has two big advantages:

a.) When a 512K Mac makes a copy, it only needs one "look" at the source disk, which greatly decreases the potential number of disk swaps.

b.) More of an application and any related files can be held in the RAM, making disk accessing less frequent. That is, you don't have to stop and listen to the disk drive hum while you are wrapped up in your work.

But Mac's graphics and page processing capabilities; and its many beautiful fonts and applications require huge amounts of memory storage. The 400K internal disc drive is still not adequate, the 512K Mac still runs out of memory from time to time; and it continues to load its programs too slowly. Thus the **Mac Plus** and the **Mac 512 Enhanced** have appeared.

The 512 Enhanced and the Mac Plus both have a 128K ROM (instead of 64K) which allows the programs to load and operate much more quickly; and they both have double-sided disk drives which essentially double the disk memory storage capacity to 800K. But in addition to these features, the Mac Plus has 1028K (a full megabyte) of RAM (giving it **eight** times the memory of the Mac 128!), and a SCSI port which allows one to connect it to a fast external hard disk.

#### 10. Install a SCSI-ported Hard Disk (\$795 and up).

A SCSI-ported Hard Disk is essentially the same as the HyperDrive, except that it plugs into the SCSI port in the back of the Mac Plus, and thus will work only with a Mac Plus. It is not mounted internally, and is therefore a separate box that must be moved whenever the Mac is moved.

Your Mac will not be very portable if you want to use any hard disk drive other than an internally mounted drive. If you elect not to use the hard disk drive when you travel, you will have to take along all the little microfloppies and your external 3.5" drive; you will probably have some software/computer file organization problems, and you may begin to wonder to yourself why you bought the other (cheaper) hard disk drive.

The SCSI-ported or any other hard disk drive will have the big capacity advantage we already discussed. But any hard disk drive may have that potential problem in loading or running your favorite applications too. So you probably should attempt to load your favorite applications and try them out in the HyperDrive before you buy it.

# 11. Install a HyperDrive or Other Internally Mounted Hard Disk (Cost: \$995 to \$3195).

The HyperDrive (or other internally mounted hard disk) is a huge data storage device installed <u>inside</u> the Mac, wired directly to the <u>microprocessor</u> (Mac's brain); it doesn't have to communicate with the Mac through an external, <u>serial port</u>. (Serial ports only pass one bit of information at a time, so they can slow things down occasionally.) The HyperDrive stores its data on a <u>hard disk</u> which spins many times faster than the regular Macintosh 3.5" disk.

A HyperDrive can store 20,000 K of memories; a double-sided 3.5" disk, 800K. Thus, the HyperDrive can store 25 times as much data. This means that a typical Mac user may be able to continuously store most regularly used applications and documents on the single HyperDrive hard disk inside the Mac. With a HyperDrive, it is only necessary to fumble with the little disks when you load an application for the first time, or when you are making a backup copy of your work. Because the HyperDrive gives you a total of two internal drives (the HyperDrive and the 3.5"internal), no external disk drive will be required. When you travel with the , you need carry only your backup disks, and there is no need for an external drive. Thus, the Mac can be more portable and have a **much** larger memory at the same time.

Sometimes there are problems when one tries to load copy protected applications such as *Word* into a hard disk like HyperDrive. *Copy II Hard Disk* can usually solve the problem. Also, some applications such as *Switcher* will not run reliably in the HyperDrive; so the caution still applies: "load and try before you buy."

Here are some speed comparisons for some of the "hurry up" alternatives. The "Boot System" times are how long it takes the desktop to appear from the time the machine is turned on. The "Boot 65K MacWrite" times are how long it takes a big (65K) MacWrite file to load, from the time its icon is double-clicked. The Exit times are how long it take to get back to the desktop from the time you pull down **File** to **Quit**:

Program Operation Boot System	Old Mac 128 21 seconds	<u>Mac Plus</u> 18 seconds	HyperDrive 20 16 seconds	Paradise Mac10 49 seconds
Boot 65K MacWrite	27 seconds	13 seconds	8 seconds	19 seconds
Exit 65K MacWrite	20 seconds	9 seconds	4 seconds	16 seconds

The Paradise is an externally connected, non-SCSI (\$795) hard disc that performs rather well. The HyperDrive and Paradise times are much better if the hard disks are connected to a Mac Plus.

The Mac D Idiot Book Integrating Applications



If you need to put words and pictures together, you need to move from one application to another; you need to **integrate** your applications. For example, *Word* does not stand alone. To use it well, you must prepare graphics in *Thunderscan, MacDraw, SuperPaint, Excel,* or *MacPaint*; and you may need to move back and forth between several of these applications and the desktop. There are always at least two, and sometimes as many as four pathways between any two applications. The pathways are the **Clipboard**, the **Scrapbook**, **File** to **Open...**(or **Get Text** or **Get Picture**), **Art Grabber+**, and *Switcher*. Each of them has its own little set of hazards and virtues. You need to be able to pick the shortest, safest path between any two applications. That's what this chapter is about.

This time I'm assuming that you have done at least some word processing with either *MacWrite* or *Word*, and some graphics work with *MacDraw* or *MacPaint*. If you have not, you need to go back to the applications chapters, and learn something about word processing and graphics first.

1. By now you have probably learned that **Cut** (or **Copy**) and **Paste** are among the most powerful of word processor commands. When you use these commands, you are using the <u>Clipboard</u>. When you select a piece of whatever you are working on, and pull down **Edit** to **Cut** (or **Copy**), you are putting that piece into a special section of Mac's <u>RAM</u> (temporary electronic memory) called the <u>clipboard</u>. Mac holds that piece in his RAM as long as he is turned on, as long as you stay in that application, and as long as you <u>don't **Cut**(or **Copy**) anything else. When you click an insertion point, and pull down **Edit** to **Paste**, Mac dumps whatever is in his clipboard memory out onto the lines after that insertion point.</u>

You can also use the clipboard to **Cut** (or **Copy**) and **Paste** between different applications as long as you stay on the same startup disk.<sup>1</sup> "Staying on the same startup disk" means that the applications must all be on the same disk, or if they are on different disks, one of the disks must <u>not</u> have a system file on it. You see, the clipboard is kept in the system file, and If both disks have system files, when you open the other application on the other disk, you will have "changed" clipboards; and what you **Cut** (or) **Copied** into one system's clipboard memory, will not be there in the other memory.

<sup>&</sup>lt;sup>1</sup>However, if you are using *Switcher*, you much press the **Option** button as you travel between applications.

2. The <u>scrapbook also</u> works to **Cut** (or **Copy**) and **Paste** between applications. It is not as fast, because there are many more steps involved; but the scrapbook does have some real advantages, which we will discuss in a minute. To use the scrapbook:

a.) Select whatever you want to transfer; and Cut(or Copy) it.

b.) Pull down **(f)** to **Scrapbook**, and when the scrapbook window opens, **Paste** your item. Click the close box.

c.) Do whatever else you want to do. You can use the clipboard, quit for the day, or take a vacation. What you paste in the scrapbook is safely stored on the disk, it will not disappear when the power goes off, like things which are stored in the clipboard.

d.) When you are ready to paste the item you put in the scrapbook, pull down to Scrapbook; and when the scrapbook appears, page through it, using the scroll bar below its window, until you find your item.

e.) Cut(or Copy) the item from the scrapbook. Click the close box.

f.) Click where you want it pasted, and Paste.

As with the clipboard, you should probably stay on the same startup disk when you are using the scrapbook. However, there is a way to move your scrapbook onto a different startup disk. Here's how:

a.) Open the directory window of the startup disk containing the scrapbook you want to use. On the same desktop, open the the directory window of the disk you want to use as a startup disk. Resize the directory windows so you can see both of them.

b.) Change the name of the scrapbook file you want to use. Any other name will do; the name is strictly temporary.

c.) Move (copy) the scrapbook file you want to use onto the directory of the startup disk you want to use.

d.) If you want to save the other scrapbook, change its name to something memorable. If you don't want it, trash it.

e.) Change the temporary name of the scrapbook file you want to use back to "Scrapbook File."

In steps 1 and 2, you have seen that you can move any selected item into either the clipboard or the scrapbook; change applications; and paste that item into your new application:



Unfortunately, the size of anything you select in *MacPaint* is limited to the size of the *MacPaint* window; and anything you paste into *MacPaint* will be crudely "trimmed" to "fit" into the window, and probably ruined if the drawing is larger than the window. (However there is a way around this problem, which we will discuss later in the chapter.) This is a limitation of *MacPaint* only; this window "trim to fit" limit does not apply to the scrapbook or *Art Grabber+* even though they also have windows.

Unfortunately, when you **Cut** and **Paste** from either word processor into anything else, including another word processor, the fancy fonts disappear. The only way to keep the fonts, font sizes, and styles you select in a word processor, is to stay in that word processor.

Here is a summary of the virtues and limitations of the clipboard and the scrapbook.

### Clipboard

- > Only one cut (copy) can be stored in the Clipboard. If you forget and do another cut before you have pasted the first one, you will wipe it out.
- > Few steps: Cut. Change applications. Paste.

### <u>Scrapbook</u>

- Many different copies can be stored, with one copy on each scrapbook pay No chance of wiping copies out by making cuts before you use what's in your scrapbook.
- > Many steps: Cut. Open scrapbook. Paste. Close scrapbook. Change applications. Open scrapbook. Copy Close scrapbook. Paste.
- > Lost easily. Stored in RAM.
  > Safe. Stored on disk.

3. But you don't always need the clipboard or scrapbook. In certain cases, it is sufficient to Save, then pull down File to Open.., or (in RSG) Get Text or Get Picture.

If you are working within *MacWrite*, and you want to get at a different story that you **Saved** at another time, **Save**. Pull down **File** to **Close**. Then pull down **File** to **Open**. When the dialog box appears, double click on the story you want to open. You may have to open a folder by double clicking on it, or you may have to click the "drive" or "eject" button to look at the list on a different disk.

If you are working within *Word*, everything is the same as *MacWrite*, except that you don't have to pull down **File** to **Close**. You don't have to **Close** because *Word* can have many windows open at once, which is a real help for working between *Word* documents.

Once you have **Saved** your document prepared in *MacPaint, MacDraw, MacWrite,* or *Word*, it is safely stored on the disk; and there will be a little file icon in the disk directory that stands for it. If you examine the file icons carefully, you can tell the difference between the files:



If you are working within ReadySetGo,

you select the destination <u>text block</u> with the I-beam tool, then pull down **File** to **Get Text**, to open the *Word* or *MacWrite* document which contains your story. The same old dialog box will appear, and it will work the same way that it does in *MacWrite*. Just double click on the story you want. The dialog box should disappear, and your selected text block should fill with text.

### OR

you select the destination <u>picture block</u> with the cropper tool, then pull down **File** to **Get Picture**, to open the *MacPaint* or *MacDraw* document which contains your picture. The same old dialog box will appear, and it will work the same way that it does in *MacWrite*. Just double click on the title of the picture you want. The dialog box should disappear, and your selected picture block should fill with a picture. 4. Art Grabber+ is an amazingly clever device which allows you to import MacPaint documents in much the same way as we were importing word processing documents in the last paragraph. Art Grabber+ allows you to "grab" any rectangular piece you want out of any MacPaint document stored on disk, while you are working within ReadySetGo, MacWrite, Word, or MacDraw. Here's how:

a.) Pull down **(f)** to **Art Grabber+**. The word **"Grabber+"** will appear on the menu bar, and the *Art Grabber* window will appear.

b.) Pull down **Grabber+** to **Open**. A dialog box with a list of *MacPaint* documents in it should appear. Double click the one you want. As usual, you may have to open folders, click on "drive", etc.

c.) When your desired *MacPaint* document opens, click and drag the "+" mouse pointer from the upper left corner to the lower right corner of the part of the *MacPaint* document you want to use. Pull down **Edit** to **Copy**. Click the close box of the *Art Grabber+* window.

d.) Click where you want your selected part of the *MacPaint* document to be. Pull down **Edit** to **Paste**.

You can create full page *MacPaint* documents in any of three ways:

a.) you can press **36** -shift-3 and make a *MacPaint* picture of whatever happens to be on Mac's computer screen anytime you want.

b.) you can pull down **File** to **Save as Paint Doc...**while you are working within *Thunderscan*.

c.) you can draw your own MacPaint document while working in MacPaint .



However, if you try to **Cut** and **Paste** your magnificent full page document from *Mac-Paint* into the scrapbook or anything else, idiot *MacPaint* will clip off anything that

isn't actually showing in the *MacPaint* window at the time. Art Grabber+ does two truly great things:

a.) It allows you to select as much as you want of your full page *MacPaint* documents.

b.) It allows you to "grab" any rectangular piece you want out of any *MacPaint* document you have stored on disk <u>while you are working within</u> *ReadySetGo*, *MacWrite*, *Word*, or *MacDraw*.

5. Art Grabber+ is wonderful. But by far the most spectacular device for integrating applications is *Switcher*. You can "rotate" from one application to another in less than a second while you are using *Switcher*. And if you hold the option key down while you "rotate" between applications you can carry the contents of the clipboard with you!



Here's how to use Switcher.

a.) Find a working disk with *Switcher 5.1* (or better) and some applications you want to use on it.. You may have to study **"How to Copy"** to prepare such a disk. Turn on the Mac, and insert the disk.

**Caution:** If you are going to use switcher, you must turn any RAM disk caching systems off cr the system will eventually crash. To turn off the Mac Plus RAM Cache, pull down to Control Panel, and click the RAM Cache off button.

Double click the disk icon to open the directory window, then double click the *Switcher* application icon. When *Switcher* opens, the menu should look something like this:



Integrating Applications 210

b.) Pull down **Switcher** to **Configure then install...** A dialog box listing the applications on your disk will appear. You may need to open a folder, or click the "drive" button to find the applications you want.

c.) Double click the first application you want to use with *Switcher*. A **Configuration** box will appear. You will need specify the amount of memory you want *Switcher* to set aside for your first application. I suggest the amounts of memory specified in the <u>Preferred</u> column for the following applications:

<u>Application</u>	Preferred	<u>Minimum</u>
Excel	512K	256K
File	288K	128K
Finder	192K	96K
MacDraw	200K	128K
MacPaint	178K	178K
MacWrite	128K	200K
ReadySetGo	320K	320K
SuperPaint	432K	432K
Thunderscan	256K	128K
Word	416K	256K

Do not plan to use more memory than your machine has. If you are using a 512K machine, you may want to try lesser amounts of memory, and you will not be able to use more than two applications in *Switcher* at once. You can avoid using an extra 22K per application by clicking a "Ø" into the little Mac screens next to the names of each installed application on the *Switcher* main screen.

Click an "X" into Save Screen box. Click "Permanent." The Configuration box will go away.

d.) Click <u>once</u> on the next "?" application icon on the *Switcher* main screen. Pull down **Switcher** to **Configure then install...**again. Repeat steps b and c until you have installed all the applications you intend to use or have memory for. If you are not using *Word*, install the Finder as well. It makes things a whole lot safer and easier.



e.) Pull down **Switcher** to **Options.** "Unclick" all of the "X's" in the option boxes; you do not want any of the options. (They make *Switcher* even more dangerous than it already is.) Click "ok."

f.) Type **S** -shift-]. One of the applications you selected should open. There may be noise from the disk drive, and a tendency to go back to *Switcher's* main screen at first, but keep typing **S** -shift-]. Eventually, you should be rotating smoothly between the applications you selected.

You can open any document stored on disk from within applications mounted in *Switcher*: Just do it as I explained in step 3 above. You can use the clipboard and scrapbook and *Art Grabber* as you normally would; except that you must hold down the option key if you want to carry along the clipboard when you change applications.

g.) To return to the Switcher main screen, type S -shift-\.

h.) Pull down **t** to **About the Switcher...** There's a some more good information there. Click anywhere in the screen to make it go away.

i.) After you've used your particular combination of applications in *Switcher* for a while, you may decide you want to save this combination, and make it easier to install the next time. If this is the case pull down **File** to **Save Set.** A dialog box will appear. Name your *Switcher* application set. Click "save". The next time you want to use *Switcher*, there will be a a *Switcher* file icon with the

### Integrating Applications 212

name you selected on it. When you double click that icon, *Switcher* will start up and install your combination of applications automatically.

*Switcher* is unquestionably dangerous. That's one reason I suggested installing the Finder (unless you are using *Word* !!). It allows you to keep track of anything strange that may be going on, like the appearance of mysterious icons that take up huge amounts of memory. If this happens, or your applications begin to behave strangely, quit from *Switcher*, clean things up, and start over. If you don't, the disk will "crash" and you'll lose everything.

The other reason for installing the Finder in *Switcher* (unless you are using *Word* !!), is that it allows you to update your backup disks or otherwise "putter around" with the desktop, while you are working in *Switcher*. (Don't try to throw away files that have been opened while in *Switcher* however.)

To quit from *Switcher*, quit from each application first, **Saving** as necessary. Then pull down *Switcher's* File to Quit.

The Mac 🛄 Idiot Book Mac-Disasters



# How to Prevent Them:

1. <u>Save</u> every time you get up from working at the Mac; at at least every ten minutes whether you get up or not. If the power goes off, you will only lose 10 minutes of work at most.

2. <u>Make backup copies</u> on separate disks, of everything you value. Make it a practice to backup large documents <u>before</u> you print them; and for sure at the end of every day. This way you're less likely to forget. Not many experiences can match the sickening sensation of discovering that a one-of-a-kind data disk containing documents representing hundreds of hours of your work has "crashed." It has happened to me. Twice. I now make <u>two</u> backup copies of the stuff I value. Incidentally, after a disk "crashes," don't use your backup disk until you figure out what happened to the first disk. Otherwise you may get to see not one, folks, but **two**, count'em; <u>two</u> disk crashes in a row.

3. Get your hands off of both the mouse and the keyboard, at the very first indication that something has gone wrong. Do not press so much as a single key! Do not push the mouse button even once! Don't do anything until you have analyzed the situation. The **Undo** command has the power to undo the effect of the **last** keystroke. It will not undo the effect of the last two keystrokes. Also, other malfunctions can be aggravated by frantic punching at the keyboard. When Mac tells you he doesn't have room to save or print etc., and the system seems to be locked-up; things are really not as bad as they seem. With patience, you can frequently solve the problem.

# 4. Think before, during, and after you delete.

a.) When you delete by selecting, and then typing whatever is to replace the selected material; or when you delete by backspacing, or pulling down **Edit** to **Clear** selected material, the text deleted in this manner is <u>not</u> saved to the clipboard. You can get it back with **Undo**. <u>However</u>, as soon as you type even one keystroke, that option is gone for good.

b.) When you delete by pulling down **Edit** to **Cut**, that material <u>will</u> be saved to the clipboard. But even then it is not secure, because the clipboard will only hold one thing at a time; and the next thing that is **Cut** to the clipboard will erase what was already there. So if you want to save what you **Cut**, you should follow your **Cut** immediately with a **Paste**; even if you just stick it temporarily at the end of your document.

c.) Pulling down **Search** to **Change** can destroy your document. For example, imagine what would happen if you used this feature to ask*Word* to find every instance of "the" and delete it (by leaving the "Change To" box blank). Once every "the" sequence of letters is removed from a document, there is no way to "find" all the empty spaces and put "the" or anything else back.

5. <u>Consider locking certain disks and files</u>. It is possible to "lock" a disk so that it cannot be altered, even though its contents can be viewed on the computer screen. To do this, move the tab in the corner of the disk so there is a hole you can see through:



If you lock *Word* or *File* you will not be able to do anything with them except look at them. The time to lock a disk is when you plan to copy it, so you don't accidentally copy the blank onto the master. Or you might want to lock up a spreadsheet that is going to be passed around, but is not going to be altered any more. If a disk is locked, a little padlock will appear just below the close box of the directory window. If you try to change anything on it, Mac will patiently tell you that the disk is locked.

Unfortunately, Mac has another, different, "locking" feature which is practically worthless, but can be a real pain in your serial port. To use it, select the application, document, or file you want "locked"; then pull down **File** to **Get Info**. Click in the box next to "**Locked**."

"Locking" a file in this manner means that it can't be trashed, and the title can't be changed; however it can be altered by the normal editing process; and the entire disk can be erased, no problem. Sometimes when you are trying to trash several documents in a hurry, it can be rather aggravating to repeatedly encounter "That item is locked, and can't be removed." To quickly establish which icons have been locked, select an icon, and move the mouse pointer into the title. If the pointer changes to an "I" beam, the title can be edited and the icon isn't "locked." If the pointer remains a pointer, when it is dragged across the title, then the icon is locked, and you must open **Get Info** to unlock it. If you are using text instead of icons in your directory window, a little padlock appears to the right of each document or application which has been locked with **Get Info**.

# 6. Keep everything Spartan, well organized, and clearly labeled.

a.) Pay attention to your desktop. View unusual and unexpected documents with suspicion. *MacPaint* and *Word* both create these sorts of strange documents when the wrong shutdown procedure is used. *Word* also does it when the "make backup" feature is used improperly. The presence of such documents may be a warning; if you are shutting things down incorrectly, you may
one day lose an important document. Try to figure out where the weird documents are coming from, and as soon as you know they are not important, get rid of them. The space they take up may cause you to run out of space at an unexpected and inopportune moment.

b.) Label your disks clearly. Here's how: First, boot the system. If the icons whose names you want on the label are in a folder, open the folder. If you want the icons listed by name, pull down **View** to **By Name**; otherwise your label will show the icons themselves. Second, pull down **File** to **Print Catalog**. After it prints, trim it to proper size, and glue your newly printed label to the disk; or better, print the label on Avery S-2448 or S4848 gummed labels.

c.) Keep your icon names short and in lower case: pull down **File** to **Get Info**, and use the space at the bottom of the **Get Info** box, if you want to describe the contents of the file; but don't try to describe the contents in the label.

i.) If an icon name is inadvertently destroyed, <u>do not touch the mouse or</u> <u>the keyboard</u>, except as follows: First, select whatever is left of the ruined file name. Second, press backspace. Third, click on the grey (nonwindow) part of the screen. And lo, the old icon name will return!

ii.) If you must have long file names, and you can't read them because they get in each other's way; just click on the icon of interest to highlight it. You'll be able to read it just fine.

iii.) If you pick a file name identical to a disk name, Mac will tell you, "That name has been taken, please pick another name." But a file name can incorporate a disk name, if you want to be sure that the file will be saved to a particular disk. When you label a file, just type a colon between the disk name and the file name like this: MacBook:MacDisasters.

d.) Keep related files in one file folder, and label the folder accordingly. (You can get empty file folders by pulling down **File** to **New Folder**.) Keep all files for a given application on one disk. If you have an external disk drive, you can keep nothing but documents on the disk. (A disk without applications or system files is called a <u>data disk</u>.)

## 7. Take good care of Mac. his disk drives. and printers.

a.) Momentary increases in line voltage can completely disable a LaserWriter, and damage Mac over a period of time. Even though he seems to be working just fine; minor damage due to small, repeated voltage surges can be accumulating in his power supply; and one day he may abruptly quit. I've seen it happen to two Commodore 64's and an Apple II. Incidentally, the voltage surges may also affect software, documents, print quality, and ImageWriter health as well. Prevent damage from voltage surges. Use these precautions:

i.) Do not plug Mac or his printer into the same circuit with devices which contain large electric motors, such as refrigerators, garage door openers, power saws, vacuum cleaners, etc. They sometimes create voltage surges when they are turned off.

ii.) Buy surge protectors and use them. Radio Shack's are sufficient.

iii.) Make sure the third ground outlet connection for Mac and his printer is functioning. Hardware stores such as Ernst have outlet checking devices for about \$3 which will do this. Do not ever plug Mac into a two prong outlet, or use an adapter to do this. Do not ever use a two wire extension cord for Mac or his printer.

iv.) Eject disks before you turn Mac off; do not insert disks before you turn Mac on. The voltage surges can damage them, and wipe out your work.

v.) The external disk drive can be easily damaged by surges of the static electricity generated by such simple activities as walking on a carpet. Therefore, keep an antistatic bag over the end of the external disk drive connector, when it is not connected. Ground yourself, by touching a grounded metal surface, before you connect the external drive. Do not ever touch the little pins on the end of the external disk drive connector.

vi.) It cost me \$175 to learn that you <u>do not ever connect or disconnect a</u> <u>computer, printer, or any other peripheral while it is turned on</u>. If you do this, there is a chance of burning out the printer logic board.

vii.) Do not turn Mac on and off needlessly. The repeated surges of electricity, even at proper line voltage, through a cold circuit can do damage over a period of time. Use the **Shut Down** feature, or install the reset button and use that to recycle the machine; but don't turn the Mac's power off and on more than once or twice each day. If you are quitting, but you will be returning to the Mac later during your workday, leave Mac on, with the screen brightness turned low.

b.) On the other hand, Apple suggests using your Mac for a night light. Since the life of a cathode ray tube is finite, and since your Mac's screen is, after all, the front end of a cathode ray tube, it is probably a dumb idea to use Mac as a \$1500 night light. If you do intend to leave Mac on for an extended period, turn down the brightness.

c.) Keep Mac away from heat. Make sure he can "breathe." Keep other objects, walls, shelves, etc. at least an inch away from the vented areas in the sides and the top. Especially, do not allow the external disk drive to block the vents on the left side. This is where the power supply is, and it must be able to cool efficiently. Old Mac 128's which have been upgraded to a Mac Plus have an inadequate power supply (analog board). The analog board may quite lit-

erally go up in smoke unless you add a cooling fan. Many types are available from various mail order houses.

d.) Mac and his disks can also be damaged by dirt, dust, fumes, and sunlight. Use good sense in this regard.

e.) To clean the case, spray a mild household detergent cleaner, such as 409 or Fantastik, onto a damp, lint free cloth; and wipe the Mac off with the cloth. Don't spray the machine directly. Don't use glass cleaner on the screen; it will remove the anti-glare coating. Treat the screen like a fine camera lens.

f.) Your dealer and(or) Nortronics (8101 10th Ave N., Minneapolis, 55427) have head cleaning kits for your Mac disk drives. Get one and use it every six months.

8. <u>Do not use more than one RAM caching system at a time</u>. <u>Do not use a RAM</u> <u>cache in combination with *Switcher*</u>. When you use more than one of these utilities at a time, they somehow "feed" on each other, and after a period of several hours, they will cause the system to crash violently. I have had more than one of these crashes destroy the disk at the same time. The **Mac Plus** and the **HyperDrive** both come with their own built-in RAM cache; and the Nevins company make a third RAM cache called the *TurboCharger* that is superior to either of the first two. Turn off the **Mac Plus** RAM cache at the **Control Panel**, and leave it off. If you have a **HyperDrive**, Double click on the **HyperDrive** manager icon, then pull down to **Options** to turn off the **HyperDrive** RAM cache.

## What to Do When MacDisasters Happen:

9. <u>Aaaack! Insufficient disk space</u>! I tried to warn you that this would happen! That's why **"How to Copy"** suggests stripping your disks down to the essentials, with only the fonts and desk accessories you really need. But now that it's happened anyway, what are we going to do?

a.) <u>First</u>, stay cool. You are not in trouble yet, but thoughtless punching of the keyboard or the mouse will get you in trouble for sure. There is a way out.

b.) <u>Second</u>, stay cool and find a formatted disk with lots of room. (A formatted disk is a disk that has been successfully inserted in the Mac, and erased or formatted at some time in the past. Don't try to use a brand new blank disk. It has **not** been formatted.)

c.) Third, click "ok" to get rid of the bad news box.

d.) Fourth, pull down File to Save As...

e.) <u>Fifth</u>, when the dialog box appears make an empty slot for your roomy disc (if you don't have an empty slot already). Click the **Eject** button in the dialog box.

f.) <u>Sixth</u>, insert the roomy disk, click on the **Drive** button till the roomy disc's name appears next to the little disc icon, then click the **Save** button. Wait. Now your document is safe on another disk.

Here are a few other ideas to consider when you run out of room while working within an application:

i.) "Save As..." your work in the name of another known file on the same disk which you no longer want; this effectively deletes the old file, and replaces it with your current, more valuable one.

ii.) "Empty" the clipboard by deliberately "**copy**ing" a period, or something else very small. This will give you whatever space the clipboard was occupying.

If you can get back to the desktop safely, there are a some other last ditch methods for squeezing out a little more space:

i.) <u>First</u>, select the document you are working in, and pull down **Special** to **Set Startup**; then pull down **Special** to **Shut Down**. <u>Second</u>, boot Mac with another disk. Eject. <u>Third</u>, insert the first (Set Startup) disk; and throw out its finder. This is drastic surgery, and not normally recommended; but it does get you another 56K of disk space. The catch is that you don't have a desktop anymore; but as long as you don't need anything except the document in "set startup," there should be no problem. Whenever you want to shut down your newly revised disk, save and pull down **File** to **Close**, then eject using **S**-**shift-1**.

ii.) Consider throwing out the printer icons. You can always drag in new ones later. *MacPaint* never needs an ImageWriter; even if you intend to print. (Of course, if you don't intend to print, nothing needs a printer!) Throwing out the ImageWriter icon will give you another 31K. (The LaserWriter and LaserPrep icons take up even more space than the ImageWriter.)

iii.) Consider throwing out any applications you aren't using. You can always drag in new ones later. After all, this is one reason for using a work disk, and not the master. (Don't be quite so quick to trash "copy-protected" applications; they are not quite as easy to replace.)

iv.) You can get another 2-10K by wiping out all the junk that Mac accumulates in the desktop, even if you don't wipe out the finder. Do it by holding down the **Option** and **S** buttons while you boot the disk. You will lose all your file folders, but if you're desperate, what the heck? 10. What can you do about a damaged disk? Usually, you know there's a problem when you try to boot the system, and the happy little Mac face turns into a sad face at about the same time Mac spits the disk back out. So now what?

a.) Switch Mac off, count to 20, then hold down the **3** and **Option** buttons while you reboot the "bad" disk. Keep both buttons down until you can see the menu bar. If this works, you will lose all your file folders, but your applications, system files, and documents should survive. If this doesn't work, then...

b.) Switch Mac off, count to 20, then boot a good disk. (Then eject if you have only one drive.) Now insert the "bad" disk. If Mac accepts the disk, but says, "This disk is unreadable (or this isn't a Macintosh disk); do you want to initialize it?"; **don't initialize**; click eject, unless you want to erase everything on your "bad" disk. If Mac accepts it completely, replace or put in a good system file; because your bad disk apparently didn't have one. (See "How to Copy" Chapter to do this.) If this doesn't work, then...

c.) Inspect the "bad" disk for fingerprints, etc. by sliding the little metal door on the disk to one side; and, at the same time, rotating the disk. If you see any-thing suspicious, try gently swabbing it clean with a Q-tip and a little alcohol. If this doesn't work, then...

d.) Switch Mac off, count to 20, then boot a good disk which contains a "good" version of the application for the documents you lost. Boot the application, then pull down **File** to **Open**. When the dialog box appears (click "eject" if you have only one drive), insert the "bad" disk, click "drive" in the dialog box; and you may get a list of the lost documents. If you get the list, you may be able to open them, then "**Save As...**" them, one at a time to the "good" disk. If this doesn't work, then...

e.) Try using the *MacTools* which come with *Copy II Mac* to find the bad sectors. You may be able to repair or remove them. But if you can't, you will at least be able to cry while viewing the last remains of your disk's content, by pulling down **Disk** to **View Edit**, and using the scroll bar. If *MacTools* won't work, then (unless you can afford the services of a professional programmer) the time has probably come to consider reinitializing the disk (which means its content will be lost forever).

f.) Since Mac probably won't accept your "bad" disk even to initialize it, you will have to fool him: First, boot the system and eject. Second, insert a good disk, and pull down **Special** to **Erase Disk. Do not** click the dialog box. Third, insert the end of a paper clip in the little hole to the right of the disk slot, in order to eject the good disk without Mac knowing. Fourth, insert the "bad" disk, and click "ok" in the dialog box. Mac will erase it because he didn't get a chance to check it first.

Warning: Once a disk has "crashed," you should treat it with grave suspicion. Don't ever use it for anything important again; and if it crashes a second time, trash it !!!

## 11. What if the disk is okay, but a file is lost or damaged?

a.) If you can't find an icon that you know ought to be on your desktop, try pulling down **View** to **by Name**. Now the icons will be listed alphabetically, and your lost file should be easy to find. Select it. Now, when you go back to **by Icon**, the icon will still be selected, and relatively easy to find.

b.) If some of your icons seem to have wandered off a little too far, adjust the scroll bars to display the upper left corner; then pull down **Special** to **Clean Up**, and the icons should come flying back to their rightful location.

c.) If *MacPaint* is interrupted (power failure, etc.), while you are working with it; and you later boot that disk, you will see two strange new files on the desktop called, "**paint 1**" and "**paint 2**." If you ever see two such files, **boot the** *MacPaint* icon and nothing else. If you boot the MacPaint icon, the Mac-Paint document you were working on at the time of the interruption will be rescued, and you will be able to continue normally. If you boot anything other than the MacPaint icon, your work will be lost.

12. <u>Bomb (System) Errors</u>. Fortunately, they are not usually as serious as the cute little bomb would seem to imply. When the Mac "beeps" and the system error (bomb) dialog box appears, it is usually sufficient to <u>record the system error number and any</u> <u>details which preceded the bomb</u>, and press the restart button. (Yes, Virginia, you will lose whatever it is you didn't save; but then that's one reason <u>why</u> you should always save every ten minutes.)

When the disk reboots, look for clues on your desktop to the bomb error problem (out of space or unusual documents). Then boot the application, and see if you can make it happen again. Take notes. Sometimes the error never appears again, and nobody ever knows why (or cares!). If the error does appear again, it may be that a bug has appeared in your application. Try making another copy off of your master (that's one reason for keeping your masters in a separate, safe place). If the bug persists in the new copy as well, then it is time to talk to your dealer, the software producer, and (or) Apple. (And that's the reason why you wrote down the error number and those other details!) Good luck!

13. <u>Can't throw away (or erase) the startup system or disk</u>. After turning the Mac on, the disk you insert <u>first</u> (the disk that boots the system) contains the startup system. Mac won't let you throw it away because he needs it in order to know how to be a computer. If you want to throw away a system file, or erase an entire disk, you have two choices.

a.) **Shut down**; then start up Mac using a <u>different</u> disk. Now insert the disk with the system you want to destroy, and proceed. ( If you have only one drive, eject the <u>different</u> disk you used to reboot Mac, by pressing **%** - E first. ) Your other choice is to...

MacDisasters 222

b.) Start up an application in a different disk which contains its own system. That converts this different disk into a startup disk. Quit the application, and proceed with your destructive plans for the first disk.

14. <u>How can I make it shut up</u>? If the "beep" keeps waking people up, pull down **d** to **Control Panel**. When the **Control Panel** appears, set the speaker volume to "0"; or you can silence it completely by inserting a 3.55 mm earphone plug (Sony Walkman, or similar) into the audio output jack in the back of the Mac; or, if you like the "beep," you can listen to it on a Sony Walkman headset!

The Mac	Ō	<b>Idiot Book</b>
ImageWi	ite	r



1. The Apple menu, **\$\$**, lists <u>desk accessories</u> on your disk, such as the **Scrapbook** and **Chooser**. Use **Chooser** before you begin, to prepare Mac for the kind of printing he will do when you are ready to print your creation: pull down **\$\$** to **Chooser**. When the Chooser window appears....

A.) If you will be using an ImageWriter connected to the AppleTalk network, <u>click</u> on the "active" button, the printer icon, and the printer's name, if they do not "highlight" when you click on them, then something is wrong.

If the AppleTalk ImageWriter icon isn't there, you need to move one into the system file of the disk you are using. See the "How to Copy" chapter. If the printer's name isn't there, or if it refuses to highlight (white print on black) when you click on it, then the printer is not turned on; or the printer and(or) your Mac are not connected to the AppleTalk network. See the "AppleTalk" chapter.

B.) If you will be printing on an ImageWriter connected to your Mac only, click the "Inactive" button for AppleTalk; then click on the ImageWriter icon, and click on the icon of the printer port to which the printer is connected. You can tell which port by looking to see where the ImageWriter plugs into Mac's back.



If there is no ImageWriter Icon, then you need to move a ImageWriter "driver" into your system folder. See the "How to Copy" Chapter.) Then...

Warning: Do not ever connect or disconnect a printer and computer while it and the computer are turned on !!!!! Ignoring this rule cost me \$175 for a new printer logic board.

C.) Click the close box.

2. Open the application you intend to use. Then pull down File to Page Setup....

A.) When the dialog box appears, check to make sure that it is **not** a **Laser-Writer** dialog box. **Page Setup** dialog boxes are different for different applications; so not all of these options will be in every box. But consider the following: if you intend to have drawings, diagrams, or other graphics in your paper, or if you intend to print this on the LaserWriter later, <u>click tall adjusted</u>. Leave the other options as they are, unless you want something special. If the LaserWriter dialog box appears, repeat step 1. If that doesn't work, it may be because the "startup" disk does not contain an ImageWriter driver. You may have to quit and "reboot" with a disk that has a ImageWriter Driver; or you may have to move an ImageWriter driver onto your "startup" disk. See the "How to Copy" Chapter.

B.) Click "ok".

3. If your work will eventually be printed on a LaserWriter, even though it may be printed as a rough draft on an ImageWriter first, do your work using LaserWriter fonts: Times, Helvetica, Courier, and(or) Symbol.

If you are in the unfortunate position of having something you will eventually want to print on the LaserWriter, which was already typed before the first three steps were done, you will have to do these steps now. You cannot use the ImageWriter to predict where the LaserWriter page breaks will be unless you click Tall Adjusted in Page Setup...(or Print), and use Laser fonts. To change the fonts, you will have to select the blocks of text using each different ImageWriter font, pull down Character to Formats..., and click on the equivalent LaserWriter fonts:

ImageWriter	LaserWriter
Geneva	=Helvetica
New York	=Times
Monaco	=Courier
Math-Greek	=Symbol

Some ImageWriter fonts, such as London, San Francisco, Cairo, Mobile, Taliesin, etc. have no LaserWriter equivalent. These fonts will still print on the LaserWriter, and they will look just fine; the catch is that they take a lot longer to print.

## 4. When you are ready to print ...

A.) Save (If you are using Word, pull down Document to Repaginate first).

B.) Pull down **File** to **Page Preview**..if you are using *Word*, and make sure that what you will print is what you want.

C.) Check to make sure that the printer is loaded with a ribbon cartridge and paper. If it's not, you'll see how to load it in steps 5 and 6

D.) Turn on the ImageWriter II by depressing the on/off button, which is on the right side of the ImageWriter's top. Three green lights adjacent to the on/off button should come on. If you are using an old ImageWriter, there will be only

two green lights. If you don't get the right number of green lights, or you get red instead, it's explained in step 9.

E.) Pull down **File** to **Print**. (Click the **Page Preview** dialog box if you are using *Excel*.) When the dialog box appears, click the **Best** or **Faster** or **Draft** button (**Best** is slow, good-looking, and most copyable; **Draft** is fast and awful; **Faster** is in between.); then click the "ok" button. It may take a minute or two, but if all goes well, Mac ought to start printing.

To stop quickly, if something goes wrong during the printing process, first, turn off the printer by pressing its on/off button; then press command-period. (During printing, a dialog box tells you to stop printing by pressing **SE** -. (command-period) If you want to stop, don't waste your time with this: **SE** -. takes a long time to take effect.

If you have problems with these first four steps, there may be help in the rest of this chapter. What follows will tell you how to change the ribbon (step 5), how to load paper (steps 6-8), what the buttons and lights are for (step 9), when and what to service yourself (step 10), how to set the dip switches (step 11), and what to do if the printer refuses to function (step 12).

#### 5. How to replace the Ribbon Cartridge:

A.) Unplug the printer. Turn off the computer.

Warning: Don"t reach inside the printer while it is turned on. The print head is hot, and it can move very fast; and cause serious injury!!!

Warning: Do not ever connect or disconnect a printer and computer while it and the computer are turned on !!!!! Ignoring this rule cost me \$175 for a new printer logic board.

B.) Remove the top forward cover.



C.) Gently grasp the <u>Print Head</u> (do <u>not</u> grasp the cartridge) and move it to the middle of the carriage.

D.) Remove the old ribbon cartridge from the ImageWriter by gently prying out the tabs on each side, and lifting the cartridge out.

E.) Turn the <u>Ribbon Knob</u> clockwise to tighten the ribbon.

F.) Take the new ribbon cartridge in both hands, and slip the ribbon between the <u>Ribbon Guide</u> and the <u>Platten</u>; lower it onto the ribbon deck and click it into place. The two Tabs should snap into the notches on the sides of the Scanner Cartridge; be sure you hear two distinct clicks.

G.) Turn the Ribbon Knob clockwise to tighten the ribbon again.

H.) Put the cover back on the printer.

6. How to load pin-feed paper (the kind with the holes along the edges):

A.) Turn off the computer, unplug the printer, and remove the both printer covers, front and back. Gently move the Bale away from the Platen.

Warning: Don"t reach inside the printer while it is turned on. The print head is hot, and it can move very fast; and cause serious injury!!!

Warning: Do not ever connect or disconnect a printer and computer while it and the computer are turned on !!!!! Ignoring this rule cost me \$175 for a new printer logic board.

B.) Find the paper release lever on the outside of the ImageWriter case, and set it in the friction feed position:

Friction Feed - Pin Feed  $\overline{\mathbf{O}}$ 



C.) Flip open both of the black plastic paper clamps that normally hold the paper down over the sprocket/tractors with the pins sticking out of them.

D.) Lay down the lead sheet of pin-feed paper so that the same three tractor/sprocket pins on each side poke through the first three holes on each side of the lead sheet of paper. If the paper holes seem to fit the paper on both sides, and it looks like the paper will feed okay, close the paper clamps and go to step H; if not, go to step E.

E.) If the paper doesn't fit, you will have to adjust the sprocket/tractors. Flip the sprocket/tractor release levers into the up position. They are to the rear of the sprocket/tractors. (Old ImageWriter, they are white plastic and move toward the rear. <u>ImageWriter II</u>, they are black plastic and lift toward the front.)

F.) Slide the sprocket/tractors along the shaft until the paper holes seem to fit the paper on both sides, and it looks like the paper will feed okay. Close the paper clamps. Pull the paper into the printer by turning the Platen knob clockwise.

G.) Find the two little red lines on the Bale which holds the paper against the Platen. They are the ImageWriter's maximum margins; you will probably want

to center the paper so left red line's distance from the left paper edge is equal to the right red line's distance from the right paper edge. Gently, slide the two sprocket/tractors until the paper is centered and tight. Close the paper clamps.

H.) Pull the paper into the printer by turning the Platen knob clockwise until the top edge of the paper is under the Bale.

I.) Gently move the Bale into position so it holds the paper against the Platen.

- J.) Set the paper release lever to the pin feed position.
- K.) Replace the covers and plug in the ImageWriter.

#### 7. How to load single sheet (unholy) paper.

A.) Turn off the computer and the ImageWriter.

Warning: Don't reach inside the printer while it is turned on. The print head is hot, and it can move very fast; and cause serious injury!!!

Warning: Do not ever connect or disconnect a printer and computer while it and the computer are turned on !!!!! Ignoring this rule cost me \$175 for a new printer logic board.

B.) Old ImageWriter: back the pin-feed paper all the way out, and move the Bale away from the Platen. ImageWriter II: back the pin feed paper out to the sprocket/tractors.

C.) All ImageWriters: set the paper release lever to the friction feed position.

D.) Position the single sheet in the slot in the cover behind the Platen so the little red marks on the Bale will be properly centered, then pull the paper into the ImageWriter by turning the Platen knob clockwise until the edge of the paper is under the Bale. (Old ImageWriter, move the Bale into position.)

E.) If the paper is crooked, move the paper release to pin feed, straighten the paper, and move the release back to friction feed.

#### 8. Paper Thickness:

A.) The ImageWriter works best on 16 to 24 lb bond paper. If you use flimsy paper, you will have problems.

B.) The ImageWriter will accept up to four sheets at a time; but you will have to adjust the paper thickness lever. It is at the right end of the shaft that the print head slides back and forth on. (Old ImageWriter, white plastic; ImageWriter II, black plastic.) If you are using only one page thickness, the lever goes all the

way forward (toward the Platen). If you are using two pages, move the lever one click back; three pages, two clicks, etc.

9. <u>Using the buttons and lights</u>: If there is power to the ImageWriter, the power light should glow green. If it doesn't, check to see if the ImageWriter is plugged in, and try clicking the on/off button again.

If the red paper error light is on steady, you have less than an inch of paper left., and you will probably need to reload. If the printer has stopped, and you want to print just one or two more lines, you can override the error light by pressing the select button.

On the ImageWriter II: If the error light is blinking regularly, the front cover is not properly positioned, or the paper is jammed. If it is blinking irregularly, the DIP switches are not properly set. See step 11.



The ImageWriter II also has a print quality button. It is important <u>only</u> if you selected **Draft** when you pulled down **File** to **Print** in step 4. If you select draft when you order the Mac to print, and <u>both</u> quality lights are lit on the ImageWriter, you will get "near letter quality." If the right quality light is on, you will get standard quality; and if the left one is on, you really will get draft.

## 10. Servicing the ImageWriter:

Clean and service your ImageWriter every six months. You will need a small vacuum cleaner or a small can of clean compressed air, a clean soft lint-free cloth and, if you have an old ImageWriter, a clean artist's paintbrush, and a can of "3 in 1" oil.

A.) Turn off Mac, unplug the ImageWriter and remove both printer covers.

B.) Remove the printer ribbon cartridge by gently prying out the tabs on each side, and lifting the cartridge out. (See diagram: step 5)

## C.) If you have an old ImageWriter:

i.) Remove the printer head by rotating the shiny metal lock plates on each side of it outward, to the left and right, and lifting the head upward. It also must be "unplugged" electrically from its base.

ii.) Use the clean artist's paintbrush to gently clear paper dust from the printer head.

iii.) Put two drops of "3 in 1" light machine oil on the white felt lube ring, which circles the print head guide bar, just below the normal position of the print head.

iv.) Replace the printer head.

D.) <u>All ImageWriters</u>: Vacuum (or blow, using clean, canned compressed air) dust and pieces of paper out of the machine.

- E.) Wipe off the carrier rod.
- F.) Replace the ribbon cassette and both covers plug the ImageWriter in.

11. <u>If your ImageWriter goes berserk</u>, and starts printing gibberish and(or) throwing paper all over the place; or cranking out a perfectly good, but blank, piece of paper every time you print something:

A.) Quit the application you are using; and switch the ImageWriter off, then on again. Sometimes this will correct the problem. If not, then...

B.) Someone may have set your dip switches incorrectly. When the ImageWriter is used with a Lisa, Apple II e, Apple II c, or some other computer, the dip switches are set differently than they are for the Mac.

On the <u>old ImageWriter</u>, the dip switches are found inside the printer, below and to the left of the on/off pushbutton, down in the bottom of the trough for the flat wire that goes to the print head. To get the print head and this flat wire out of the way, turn the ImageWriter on and then off again; the print head will move over to the left end of the ImageWriter and stay there. The dip switches are covered with a thin sheet of clear plastic with the letters SW 1 and SW 2 directly over the dip switches. Gently lift the thin sheet of plastic off of the dip switches. Use a thin plastic rod, such as the thin pointed non-writing end of a ballpoint pen, to move the dip switches. If you are using the old, old ImageWriter connection cable, that was sold in the first four months of 1984, the switches should be set this way for the Mac:

If you are using the more sw 1 recent, old ImageWriter cable, this switch must be sw 2 moved down:



,	
on <b>/off</b>	

On the <u>ImageWriter II</u>, the dip switches are found inside the printer, in the opposite front corner from the on/off pushbutton, down in the front of the trough that the ribbon cartridge travels in. Use a thin plastic rod, such as the thin pointed non-writing end of a ballpoint pen, to move the dip switches. The switches should be set this way:



C.) Usually, the printer cranks out blank paper because you allowed some "empty" formatting to creep over onto a "blank page" during your word processing. You can tell whether or not this is happening by selecting a whole document. If black, but empty, selected area is displayed on a "blank" page, then the computer will tell the printer to "print" a blank page. You will need to delete this "empty" formatting from your document. (This happens more frequently in *MacWrite*.)

If the printer persists in doing this, try typing in the page numbers which are to be printed, when Mac displays the "Print" dialog box.

As a last resort, shut off the printer, by pressing its on/off pushbutton, when you see that it has finished printing what you want. After all, you are the one in charge! You really ought to be keeping an eye on the printer and a hand near the pushbutton anyway, if you are doing anything irregular.

## 12. If your ImageWriter refuses to functions at all:

A.) No green power on light:

i.) Test the outlet with another appliance.

ii.) If the appliance works, take the ImageWriter to a technician to have its fuse replaced.

B.) Green light, but nothing happens:

i.) Make sure the select is on.

ii.)Try another application on another disk that is known to work. (Your software may be bad.)

iii.) Is the computer end of the cable connected to the correct socket?

iv.) If you have AppleTalk, is it turned on at the control panel. If you don't have AppleTalk, is it turned off?

v.) Try the ImageWriter self-test feature: Turn off the select, then turn off the power. Hold the form feed button down, while you turn the power back on. Release both buttons. The ImageWriter should print its own complete set of characters over and over until you turn it off. If it does, you probably have a cable or computer problem. If it doesn't, you have printer problem. For an AppleTalk ImageWriter: If the red error light flashes during the self-test and you're not out of paper, the AppleTalk card is not responding. The Mac 🖵 Idiot Book Laser-Writer&AppleTalk Laser Writer Laser Prep Pole Talk

LaserWriter

1. The Apple menu, **\$\$**, lists <u>desk accessories</u> on your disk, such as the **Scrapbook** and **Chooser**. Use **Chooser** before you begin, to prepare Mac for the kind of LaserWriter printing he will do when you are ready to print your creation: pull down **\$\$** to **Chooser**. When the Chooser window appears....

a.) If you will be using a LaserWriter or an ImageWriter connected to the AppleTalk network, <u>click on the "active" button</u>, the printer icon, and the printer's name, if they do not "highlight" when you click on them, then something is wrong:



>If there is no LaserWriter Icon, then you need to move a LaserWriter "driver" and LaserPrep icons into your system folder. See the "How to Copy" Chapter.)

>The words, LaserWriter or LaserWriter Plus, in the box on the right should be "highlighted" in black. (If there is no highlighted name, the LaserWriter itself may have been turned off. If it is already on, check all AppleTalk connections in the system:



This is how an Apple Talk network should be connected

>There must be no dangling cable ends: every cable must be plugged into an AppleTalk connector. The Mac end of each AppleTalk connector must be plugged tightly into the <u>orinter</u> port (the plug with the little printer icon) in the back of each participating Mac.



This AppleTalk network won't work because it has a dangling cable end.

>Also, the AppleTalk system must <u>not</u> make a complete circle; that is, there should always be two endpoints to the system.

>And there cannot be any "branches" the wiring must go from one endpoint, through <u>every</u> printer and computer in the system, to the other endpoint. There cannot be alternate paths; and there cannot be more than two endpoints.

Warning: Do not ever connect or disconnect a printer and computer while it and the computer are turned on !!!!! Ignoring this rule cost me \$175 for a new printer logic board.

- c.) Click the Chooser's close box.
- 3. Open the application you intend to use. Then pull down File to Page Setup....

a.) When the dialog box appears, check to make sure that it is **not** an **ImageWriter** dialog box. **Page Setup** dialog boxes are different for different applications; so not all of these options will be in every box. But consider the following options:

Reduce or Enlarge reduces or enlarges your page by the amount you specify.
Orlentation will print your page sideways, if you click the "sideways" man or the Wide button.
Font Substitution automatically substitutes LaserWriter fonts for ImageWriter fonts; but <u>it is not a cood idea to allow this</u> !! Click the "X" out of this box. Your paper will look a lot better if you use LaserWriter fonts from the beginning, or do the substituting yourself, as I suggest in step 4.
Smoothing is usually ok, but you'll have to determine some cases for yourself by trial and error. Don't use it with Thunder scan images.
Definitely use the Widow Control feature if you have it. It prevents single lines from being isolated on a different page from the rest of their paragraph.

>And you may be able to set up your outer margins at this time.

Click the "ok" button.

Note: If an <u>Image</u>Writer page setup dialog box appears instead, something is wrong. Repeat steps 1 and 2. If that doesn't work, it may be because the "startup" disk does not contain a LaserWriter driver. You may have to quit and "reboot" with a disk that has a LaserWriter Driver; or you may have to move a LaserWriter driver onto your "startup" disk. See the "How to Copy" Chapter.

# 4. Do your work using LaserWriter fonts: Times, Helvetica, Courier, Mobile, and(or) Symbol. (If you don't have any LaserWriter fonts, see the Font appendix.)

If you want to "LaserWrite" something which has already been typed with ImageWriter settings and fonts, you will have to do steps 1 through 4 now. You cannot tell where the page breaks will be unless the settings and fonts are the ones which will be used when the printing takes place; and of course the LaserWriter (or any any other printer) won" even print, if the software isn't set up for that printer. To change the fonts, you will have to select the blocks of text using each different ImageWriter font, pull down Character to Formats... and click on the equivalent LaserWriter fonts:

<u>ImageWriter</u>	<u>LaserWriter</u>
Geneva	=Helvetica
New York	=Times
Monaco	=Courier
Math-Greek	=Symbol

Some ImageWriter fonts, such as London, SanFrancisco, Cairo, Mobile, Taliesin, etc. have no LaserWriter equivalent. These fonts will still print on the LaserWriter, and they will look just fine; the catch is that it takes a lot longer to print. Just be sure that the font substitution box is <u>not</u> checked on Page Setup...

5. When you are ready to print with the LaserWriter...

a.) Save (If you are using Word, pull down Document to Repaginate first).

b.) Pull down **File** to **Page Preview**..if you are using *Word*, and make sure that what you will print is what you want.

c.) Pull down **File** to **Print**. (Click the **Page Preview** dialog box if you are using *Excel*.) When the dialog box appears, click the options you want (see the notes about smoothing and font substitution in step 3), then click "ok."

If you have problems with steps 1 through 5, there may be help in the rest of this chapter. What follows will tell you how to turn on the LaserWriter, interpret the lights, load paper, change the toner cartridge, when and what to service yourself, how to clear paper jams, and how to disconnect from AppleTalk.

# 6. To turn on the LaserWriter:

a.) Make sure it is off, then plug it in to a <u>grounded</u>, surge-protected AC outlet. (The LaserWriter won't work if the voltage source is unstable.)

b.) Plug in the AppleTalk connector, if it isn't plugged in already.

c.) Switch on the LaserWriter. (The <u>On/Off switch</u> is on the left end, just around the corner from the <u>Power Cord Socket</u>.)



The LaserWriter should deliver its own test print within two minutes.

If the test print is too light adjust the <u>Print Density Dial</u> on the back, one division darker. If it is too dark, adjust the dial one division lighter (toward the little "sun" icon).

The green light on the front flashes as the LaserWriter warms up; then the yellow light starts flashing to show that the LaserWriter is processing a test print. The yellow light will go out when the LaserWriter delivers the test print. When the green light is on steady, the LaserWriter is ready to print. If the test print is messed up, or something else isn't right, read on.



7. <u>Interpreting the lights</u>: The LaserWriter has four lights: three in front and one in back. The front three indicator lights are green, yellow, and red. The back light is also green, and it is called the "test" light.

green	vellow	red	<u>"test"</u>	meaning(s)	action
off	off	off	off	no power	check power cord
off	off	off	off	no toner cartridge	see step 10
flashing	off	off	off	warming up	wait
on	off	off	off	ready	pull down File to Print
on	flashing	off	off	processing a job	wait
on	on	off	off	manual feed	insert paper in manual feed
off	on	off	off	out of paper	see step 8
on	off	on	off	paper jam	see step 13
on	off	off	оп	electronic failure	curse, call Apple, spend money

#### 8. How to load the paper cassette :

a.) Remove the paper cassette from the LaserWriter. It's at the left end, in the lower slot; under the paper output tray. (See diagram above.)

b.) Fan a stack of about 100 sheets of paper, place it in the cassette, and tap the ends of the sheets so they are up against the outside (non-clip) end of the cassette.

>Use 16-20 lb Xerox paper.

>If the paper is letterhead or three-hole-punched paper, load it face down, with the letterhead at the clip-end of the tray.

c.) Push the stack under the clips.

d.) Slide the cassette back into the slot, clip-end first. It's in place when you can't push it in any farther.

#### 9. How to hand-feed the LaserWriter.

a.) Pull down **File** to **Print**. When the dialog box appears, click the **Manual Feed** button, and specify what pages you want to print. Click "ok."

From the time you click "ok" you have 1.5 minutes to insert the first sheet in the manual feed guide. If you don't make it, you get to start over again.

b.) The <u>manual feed guide</u> is at the right end of the LaserWriter. When the middle yellow light comes on steady, line up the paper (head first, face up, if it's letterhead, etc.) on the right side on the manual feed guide. When the LaserWriter is ready to print, it draws the paper in.

c.) <u>To print on both sides</u> of the paper: after the first side has been printed, put it back in the manual feed guide, printed side down, head first.

d.) When your printing job is done, the middle yellow light goes off and the printer reverts to automatic feed using the paper cassette.

<u>Toner</u> is the LaserWriter's "ink." It comes in a a <u>Toner Cartridge</u>. The cartridge is good for about 3000 prints, then it has to be replaced. The best way to tell when it needs replacing is to weigh it. A new cartridge contains 160 grams of toner; so when a cartridge has "lost" 160 grams, its time has come. However, not everyone has a balance handy. A more convenient method for keeping track of the cartridge is the <u>Toner Cartridge Indicator</u>, which is on the front of the <u>Toner Cartridge Door</u>:



Just realize that this gage is not infallible. It only counts pages, not the amount of toner left. If the past thousand pages have have required less black toner than "normal," you may have a lot of toner left when the gage says the toner is used up.

Some toner cartridges need to make about 90 prints before the LaserWriter prints look their best; so don't despair at the low quality of the first few prints with a new toner cartridge. However, there have been a few defective toner cartridges sold; so if the prints after print number 90 are still looking bad, you may what to consider asking Apple for a refund.

10. How to replace the Toner Cartridge and Cleaning Pad:

a.) Unplug the LaserWriter. Turn off the computer.

b.) Open the upper unit of the LaserWriter by pulling up on the <u>release lever</u>. (See diagrams in step 6.) The upper unit tilts up to the right on a hinge.

c.) Open the Toner Cartridge Door.

Note: be careful with the next step, or you will make a terrible mess!!!

d.) Remove the old toner cartridge by grabbing it on the end and pulling it out; but <u>don't continue to hold it by this end</u>, with the other end pointed at the floor. If you do this, toner will spill out the bottom, all over everything.

e.) Remove the new cartridge from its bag, holding it by the handle.

f.) Take the new toner cartridge in both hands, and rock it gently back and forth



about five times as shown in the sketch above to distribute the toner. You can use this same strategy to get a little more toner out of a dying toner cartridge.

g.) Slide the cartridge into the LaserWriter until it "clicks" into place.

h.) Flex the black tab on the right side of the cartridge until it breaks loose. Pull the tab, and the tape which is attached to it out until the tape is completely removed. (The tape is about two feet long!) If the tab and the tape come apart, take hold of the tape itself and pull it all the way out.

i.) Close the Toner Cartridge Door.

j.) Open the green cover inside the main unit if it's not already open.

Warning: If the LaserWriter has been on, the green cover will be hot, and the orange rollers will be hot enough to burn you!!!

k.) Notice the cutaway on the top of the green cover where the green end of the cleaning pad fits. Take hold of the green end and slide out the cleaning pad. Slide the new cleaning pad into the same grove.

I.) Close the green cover.

m.) Dip a Q-tip in isopropyl alcohol and <u>gently</u> wipe the transfer wire until no more residue appears on the Q-tip.

The transfer wire is behind the green cover in the main unit; located under the almost transparent crossed wires which you can see in the middle area inside the printer. It is very thin, fragile, and hard to see.

n.) Dampen a cloth with water and wipe the tranfer guide clean.

The transfer guide is the brass-colored metal plate behind the transfer wire.

o.) Close the main unit.

<u>Sevicing the LaserWriter</u>: Clean and service your Imagewriter whenever you replace the toner cartridge as described in step 10 above. In addition, the following services will be required from time to time:

11. If you see fuzzy vertical lines on the "LaserPrinted" page:

a.) Unplug the LaserWriter. Turn off the computer.

b.) Open the upper unit of the LaserWriter by pulling up on the release lever. (See diagrams in step 6.) The upper unit tilts up to the right on a hinge.

c.) Open the cartridge door.

Note: be careful with the next step, or you will make a terrible mess!!!

d.) Remove the old toner cartridge by grabbing it on the end and pulling it out; but <u>DON'T continue to hold it by this end. with the other end pointed at the floor.</u> If you do this, toner will spill out the bottom, all over everything.

e.) Get the green <u>toner cartridge wire cleaner</u>. Unless some other idiot has misplaced it, it should be sitting inside the LaserWriter, at the cartridge (open) end, near the front.

f.) Insert it in the long slot on top of the cartridge and slide it back and forth several times (the cleaning tool slides along a black protective plastic cover inside the slot).

g.) Put the cartridge back in the printer, and close the door. Close the main unit.

# 12. If you see stains on the back of a printed page:

a.) Turn off the LaserWriter and let the rollers cool !!!

b.) Open the upper unit of the LaserWriter by pulling up on the release lever. The upper unit tilts up to the right on a hinge.

c.) Open the green cover inside the main unit if it's not already open.

# LaserWriter & AppleTalk 242

Warning: If the LaserWriter has been on, the green cover will be hot, and the orange rollers will be hot enough to burn you!!!

- k.) Clean the black and orange rollers with a damp cloth; then dry them.
- I.) Close the green cover. Close the main unit.
- 13. When paper iams the LaserWriter (red light, green light):

a.) Turn off the LaserWriter.

b.) Open the upper unit of the LaserWriter by pulling up on the release lever. (See diagrams in step 6.) The upper unit tilts up to the right on a hinge.

c.) Open the green cover inside the main unit if it's not already open.

Warning: If the LaserWriter has been on, the green cover will be hot, and the orange rollers will be hot enough to burn you!!!

d.) Gently pull the paper from behind the cover, toward the front of the printer.

e.) If you don't find paper jammed inside the printer, open the printer's lower right door, under the manual feed, and check there. Pull the paper out, and close the door.

## 14. If paper is not feeding properly, and is repeatedly jamming the printer:

a.) Open the upper unit of the LaserWriter by pulling up on the release lever. (See diagrams in step 6.) The upper unit tilts up to the right on a hinge.

b.) Find the separation belt. It is a small clear plastic strip with a spring on the end, located near the back of the printer, behind the green cover. Take note of how it is positioned.

c.) Slip the loop off the handles, and slide it out from under the roller.

d.) Take a new separation belt, and slip the top loop over the peg at the top. (The end nearest the top unit hinge.) *Be sure the indentation is on the right side.* 

e.) Pass the new separation belt over the first roller (nearest the hinge) and under the second roller.

f.) Grasp the spring by the little circular handle on its very end, and hook the other spring circle (nearer the spring) over the lower handle. (away from the hinge).

g.) Close the main unit.

15. If a black line is appearing down the right side of your printed pages: remove the separation belt as described above, clean with a water-dampened Q-tip; and reinstall it as described above.

16. If the LaserWriter won't print:

a.) Check the lights first. See step 7.

b.) Turn the LaserWriter off, then on.

>If it produces a test print go to step c because the problem is with the AppleTalk wiring, or the computer, or the disk.

>If it doesn't produce a test print, call an Apple dealer. (Good luck!)

c.) Do step 1-3 at the beginnning of this Chapter. If the LaserWriter still doesn't print, then...

d.) Open the system folder, select (click on) the LaserWriter driver icon, and check the **Get Info** on every disk in use; make sure that <u>everyone</u> on the AppleTalk network is using the same version of each type of printer resource. (Whenever one person in the network updates their disks, everyone else must

update their disks too.<sup>1</sup> To replace the printer resource, see the "How to Copy" Chapter.)

e.) Print the LaserWriter Test document which is on the disk that came with the LaserWriter; if the document prints, then you have a disk/software problem. Make another work disk, and try again.

17. If you want to disconnect your Mac from the AppleTalk system or reconnect it ...

a.) Make sure your Mac is turned off.

b.) Unplug the AppleTalk connector from the Mac, but leave the long cables plugged-in to the connector.

Warning: If a long cables are disconnected from an AppleTalk connector while the sytem is in use, it will raise havoc with the users.

>If you remove a connector from the AppleTalk network, be sure to plug both cable ends into a cable extender. If you leave a free cable end, you will shut down the system for other users.

>You cannot remove a connector from either end of the AppleTalk network, because that will result in a free cable end, no matter what you do.

<sup>&</sup>lt;sup>1</sup>As of this writing, the current LaserWriter printer icon is version 3.1; and the AppleTalk ImageWriter icon version is 2.3.

>Don't remove a connector if there is any possibility that someone is using the network. <u>The</u> <u>AppleTalk network is thoroughly disrupted if any AppleTalk connectors are disconnected while the</u> <u>system is in use</u>III

The system will work as long as all the long cables are plugged-in to a connector. It doesn't matter if some connectors are not connected to Macs:



This network will still work because all the cables are still plugged into connectors.

c.) When you want to reconnect, make sure your Mac is off, and plug the Mac end of the connector back in again.

18. If you want to format your documents for the LaserWriter while you are working away from the AppleTalk network, you must have a LaserWriter driver in the system file of the disk you are using. After the disk's desktop appears...

a.) Open the **Chooser**, click on the "Active" **AppleTalk** button, and click on the LaserWriter icon. If it isn't there, you will have to move it onto your disk.

b.) Then, after you are in the application (*Word, RSG, etc.*), pull down **File** to **Page Setup...**, you should get either a "generic" or a <u>LaserWriter</u> **Page Setup** box. It must not be an <u>ImageWriter</u> box.

As long as **AppleTalk** is "Active," the LaserWriter icon is selected, the **Page** is **Setup** for the LaserWriter, and you use LaserWriter fonts; your documents will be formatted for the LaserWriter, and what you see will be a little closer to what you get.



# How This Book Happened

I teach high school Chemistry and Physics. About three years ago, I assigned a research paper to my physics classes, and provided several Macs for them to use in preparing the paper. Many of my students had not done word processing before; and none of them had used the Mac. The Mac is easy to use, but the books that come with the Mac's applications do not take advantage of this virtue. They are not designed for people who want to be "up and running" as quickly as possible. So I wrote a simplified set of instructions for my students to use. When they used my instructions, they were usually able to do word processing in less than ten minutes with no additional assistance from me.

When the physics research papers were done, the main office secretary, Corey Corkill, started using one of the Macs I had borrowed for the project. Like the kids, she also was able to use my instructions to do word processing within a few minutes. She did the school bulletin and some correspondence for the principal on the first day she had the machine. But she wanted to do some database and spreadsheet work as well; so I wrote a set of instructions for these applications also.

Other secretaries and student aides used my instructions with equal success. That one little Apple Macintosh revolutionized the main office. Last year they were using two Macs and a LaserWriter. Our school newspaper used two more Macs to produce the school paper. So I wrote instructions for the graphics and page processing software too. We got a Mac for the science department, and the other science teachers started to use it. I watched in humiliation while staff members and students struggled with the now expanded instructions. I revised the instructions, and my "test" population tried again. I revised again, etc.

The much-revised pile of instructions began to look like a book, so we put the pile together and called it **The Mac** ldiot **Book**.

# The Macintosh (Mac)

The Apple Macintosh was introduced to the world in January of 1984. It had 128K of RAM (128,000 bytes of erasable internal machine memory), 64K of ROM (64,000 bytes of permanent internal machine memory), one 400K single-sided internal disk drive, and two pieces of software: *MacWrite* and *MacPaint*. It loaded its programs too slowly, it ran out of memory frequently, and copying disks was incredibly irritating because of the need to repeatedly exchange the disks in its one single-sided disk drive. This first little Mac is known in polite company today as the **Mac 128**.

247 History

By fall of that year, the **Mac 512** and a second external disk drive were available. Because it had 512K of memory, the Mac 512 ran out of memory less often; and the external disk drive allowed owners to keep applications they were using on a work disk, and the files or documents they were creating on a second <u>data disk</u>. It also made disk copying less tedious.

Approximately four months later the **LaserWriter** printer was announced, and the Mac 512 was suddenly a first class printing machine. Printed output from the Mac/LaserWriter system looked professional; it no longer gave the impression of a typewriter or a dot matrix computer printer. The system could print beautifully in any one of a number of different type fonts, and it could print good-looking graphics too !

But the graphics and page processing documents; and the many beautiful fonts and applications required huge amounts of memory storage. The 400K disc drives were no longer adequate, the Mac still ran out of memory from time to time; and it continued to load its programs too slowly. Thus, in January of 1986, the **Mac Plus** and the **Mac 512 Extended** were born. They both have a 128K ROM (instead of 64K) which allows the programs to load and operate much more quickly; and they have double-sided disk drives which nearly double the disk memory storage capacity to 800K. In addition to these features, the **Mac Plus** has 1028K (1 megabyte) of RAM and a SCSI port which allows it to run an external hard disk at reasonable speed. We have writ-

ten the Mac lot Book with the assumption that you are using either the Mac Plus or the Mac 512 Extended.

But Apple never quits! In the spring of 1987 they introduced two more great Macs: the **Mac SE** and the **Mac II**. The **SE** is essentially a **Mac Plus** with the following differences: a 256K ROM; a cooling fan; room for a second internal disk drive and expansion card; and different connectors for the keyboard and mouse. Except for the new connectors, these changes are for the better; but unless the price of the new **SE** is quite competitive, the **Mac Plus** will continue to be a very satisfactory machine.

However the **Mac II** is quite another story. It has <u>color</u>, room for truly **UNBELIEV-ABLE** expansion (up to 64 *mega* bytes on the main board!), speed to take your breath away, and room for many expansion cards (MS-DOS? UNIX?). It is not at all portable: it looks more like an IBM PC than a **Mac**. Most significant existing Mac software will run on the **Mac II**, but not all: for example, *Word* and *Excel* will; but *MacWrite* and the *Flight Simulator* won't. The desktop is almost the same; but the operating system is somewhat different. It will be a wonderful machine for desktop publishers and engineers, when new software is written to take advantage of its mindblowing power; but it may be more than the average computer user needs at this time





*MacDraw* is usually best for "drafting" advertisements, posters, or precision drawings; *MacPaint* is usually best for "drawing" freehand sketches. *SuperPaint* is a greatly improved *MacPaint* with the features of *MacDraw* thrown in. (However *SuperPaint* requires 430K of memory in order to work properly; it works best in a **Mac Plus**.)

Once you have pasted a part of your drawing in place in *MacPaint*, it loses its identity as a particular part and becomes nothing more than a collection of dots (pixels) at that location. But different parts of a *MacDraw* drawing exist as separate entities in Mac's memory, like the separate components of an artist's <u>collage</u>. *MacDraw* allows you to "slide" the different parts of your drawing around on the screen until you get just the right effect. *MacDraw* is therefore called an "object oriented" graphics program, while *MacPaint* is said to be "bit-mapped." When *SuperPaint* is operating in its "Draw" layer, it behaves like *MacDraw*. In its "Paint" layer, it behaves like *MacPaint*.

It is easier to "fine tune" a *MacDraw* drawing (or the "draw" layer of *SuperPaint*) after you are "done"; and *MacDraw* pictures can be stretched with less distortion than *MacPaint* drawings. But *MacPaint* (or the "paint" layer of *SuperPaint*) is so simple that two year old kids can make drawings after two minutes of instruction. *MacDraw* is intimidating at first. However, learning to use either program (or layer) well requires about the same amount of effort.

*MacPaint* does allow you to make little erasures and additions bit by bit, until your drawing is just right; and this is a virtue that *MacDraw* lacks. If you use *Thunderscan* to electronically copy photographs into the Macintosh, you will probably use *MacPaint* to modify the drawings. If you plan to use the **Art Grabber+** to reach out and grab graphics while you are working within *Word, MacWrite,* or *RSG*, you will <u>have to</u> use *MacPaint*, because **Art Grabber+** won't work with *MacDraw* graphics.

*MacPaint* will allow you to paste text anywhere you like; but once you have pasted it, you can't process it any more. *MacDraw* allows some limited word processing, but it was designed to be a graphics tool. Word processing in *MacDraw* is frustrating because its "caption" text will cut and paste, but it won't word wrap; and it's "paragraph" text will word wrap, but it won't cut and paste. Text, in the "draw" mode of *SuperPaint* combines the good features of "caption" and "paragraph" text, however there is one other problem: everything in one *MacDraw* or *SuperPaint* text block must be the same font, size and style; which defeats one of the Mac's greatest virtues.

*MacDraw* artwork looks better on the LaserWriter. But to do good graphics work, one really needs to know *MacPaint* and *MacDraw* (or the "paint" and "draw" layers) well. Then it is possible to make an intelligent choice when trying to decide which graphics program (or layer) will best solve a particular graphics problem.

## MacWrite, Word, and ReadySetGo are all good word processors:

- >They are easy to learn, they are easy to use, they do quality work, and they are efficient.
- >They have "cut and paste" allowing you to delete or add any amount of text anywhere in the document at any time, and have the text you've already typed adjust to the new changes.
- >They "wordwrap"; that is, the words flow automatically from one line to the next as you type, or change the margins or font sizes, or insert new text.
- >What you see on the screen, is pretty much what you get when Mac print's on paper.
- >They can print in dozens of different type styles, sizes, and fonts.
- >They allow you to "import" drawings, charts, or other graphics; and will print these graphics as part of the document.

#### Nevertheless, there are some important differences:

- >Word has "windows." It's many windows allow you to view and edit two different parts of your story simultaneously; or view several different documents simultaneously. You can cut and paste between the different documents, make ongoing comparisons, and see the effects of your changes on each document immediately. MacWrite can't do this.
- >Word merges documents when, for example, you need essentially the same letter mailed to many different people, with only the names and address being different from one letter to the next. Give Word a list of names and addresses and a basic form letter and it will automatically type out a "personal" letter to every person on the list. Merge is impossible with MacWrite.
- >Word does footnotes beautifully and effortlessly, MacWrite won't do footnotes conveniently.
- >Word has more optional keyboard commands, and a greater variety of selection methods than MacWrite. Keyboard commands permit experienced operators to work more rapidly by using the keyboard to do the mouse's work. (Every time you take your hands off of the keyboard, you quit typing, and it slows you down.)
- >Word can make an index or table of contents automatically. It has a built in spelling checker.
- > Word can add columns of numbers and alphabetize lists. You can include small graphics within text, and you can print in columns if you want.

#### But on the other hand:

- >Word costs four times as much as MacWrite.
- >Word does not allow you to see the page numbers or page headers Except in Page Preview. (What you see while you are working is not quite what you get!)

*ReadySetGo* is a <u>page processor</u> application that will allow you to lay out newspapers, or other paper communication in an illustrated multi-column format. While you are working within *ReadySetGo* you can "grab"*Word*, *MacWrite*, *MacPaint*, and *MacDraw* documents, and paste them into *ReadySetGo* blocks. You can drag and size the blocks to any position and shape you want, and the text will "flow" to fit them or you can "slide" the picture around inside the block and crop it to get the best effect. *ReadySetGo* also lets you put dividing lines, and frames around and between selected portions of text and graphics.

You can organize, update, and store financial records or other sets of mathematically related numbers with such **spreadsheet** programs as *Excel*. You can use *File* or *Excel* or other **database** programs to organize, update, and store types of information which might also be kept in card files, tables or lists. This information can be sorted according to any criteria you want to use. For example a collection of credit records could be sorted by name, address, size of debt, income, etc. Work with spreadsheets and databases is usually called **data processing**.

*Excel* has room for more than 16,000 records. It is lightning fast in command execution; and its dozens of keyboard command options (see page 28) give users the potential for even greater speed.

Even though *Excel* is faster, *File* is probably the better database application. *File* has as much room as *Excel*. It is easier to use when you enter the data in the first place, and it's much easier to use when you want to sort or extract data later. It allows you to draft specialized "file cards" of your own design; and you can even keep pictures on the "file cards."

But Excel does several things that File cannot do at all:

*Excel* can draw graphs and charts which are based on the information contained in spreadsheets or databases created in *Excel*. The process is fully automated and, of course, lightning fast. You can paste the graphs and charts into the **scrapbook** for later use; or paste them into *Word*, *MacDraw* or *MacWrite* documents directly from the clipboard.

*Excel* has <u>macro</u> capability. A macro is a set of instructions that tells Mac how to run *Excel* all by himself. All you have to do is show Mac how to do a sequence of operations in *Excel*, while the macro recorder is running. Then the next time you want to do that same sequence of operations, you run the "macro" that you recorded, and Mac will do it automatically.

Excel allows you to change fonts and font sizes from the menu, just like MacWrite and Word.

# The Mac 📮 Idiot Book Appendix Fonts

1. Fonts are typefaces; that is, kinds or styles of printing. There are many different fonts available on the Mac. If you want to see which key will produce which symbol in a given font, use **Key Caps**:

a.) Pull down **d** to **Key Caps**. The word **Key Caps** will appear in the menu bar, and the **Key Caps** window will appear.

b.) Pull down **Key Caps** to the font you want to know about. The symbols on the keyboard in the **Key Caps** window show which symbols will be produced by which key while that font is selected.

c.) Press **Shift** on the keyboard. Now the symbols on the keyboard in the **Key Caps** window show which symbols will be produced by which key when the **Shift** is pressed with that font selected.

d.) Press **Option** on the keyboard. Now the symbols on the keyboard in the **Key Caps** window show which symbols will be produced by which key when the **Option** is pressed with that font selected. The symbol and picture fonts have more symbols in **Option** than the other fonts. For a few fonts, **Option-shift** will produce still more symbols!

2. In the samples that follow, I tell you to use the installed ImageWriter font sizes only. This is not strictly true: you can specify any font size you like. But, if you want your printing to look its very best, you must specify a font size that is <u>exactly half</u> the size of the installed font, when you are printing in **Best** quality on the ImageWriter.

However <u>any</u> LaserWriter font size you specify will look good when printed on the LaserWriter, regardless of the installed sizes. (The LaserWriter "builds" its letters "from scratch" inside the printer. It doesn't need to be told how to make them by the Mac.) The different LaserWriter font sizes only serve to make them sharper when displayed on the Mac screen. In examining the samples, please realize that this book was printed on a LaserWriter; so the LaserWriter fonts look pretty good. The ImageWriter fonts look pretty good on a LaserWriter too, but the catch is, they take <u>a very long time</u> to print. (LaserWriter fonts look <u>terrible</u> on an ImageWriter.)

This is Helvetica, a sans serif LaserWriter font, in 9 point: abcdefg 1234567 ABCDEFG !@#\$%^& This is Helvetica, a sans serif LaserWriter font, in 10 point: abcdefg 1234567 ABCDEFG !@#\$%^& This is Helvetica, a sans serif LaserWriter font, in 12 point: abcdefg 1234567 It's also available in 14, 18 and 24, but size doesn't matter with the LaserWriter.

This is Geneva, a sans serif ImageWriter font, in 9 point: abcdefg 1234567 ABCDEFG !@\*\$% This is Geneva, a sans serif ImageWriter font, in 10 point: abcdefg 1234567 ABCDEFG This is Geneva, a sans serif ImageWriter font, in 12 point: abcdefg Geneva is also available in 14, 18, 20 and 24, be sure to use the installed sizes only This is Courier, a LaserWriter font, in 9 point for fools who love typewriters: abcdefg This is Courier, a LaserWriter font, in 10 point for fools who love typewriter This is Courier, a LaserWriter font, in 12 point for fools who love Courier is also available in 14, 18, and 24, but size doesn't

This is Monaco, an ImageWriter font, in 9 point for fools who love typewriters This is Monaco, an ImageWriter font, in 12 point for fools Monaco It is available only in 9 and 12, fortunately!

This is Times, a formal LaserWriter font, in 9 point: abcdefg 1234567 ABCDEFG !@#\$%^& This is Times, a formal LaserWriter font, in 10 point: abcdefg 1234567 ABCDEFG This is Times, a formal LaserWriter font, in 12 point: abcdefg 1234567 Times is also available in 14, 18, and 24, but it doesn't matter with the LaserWriter.

This is New York, a formal ImageWriter font, in 9 point: abcdefg 1234567 ABCDEFG This is New York, a formal ImageWriter font, in 10 point: abcdefg 1234567 This is New York, a formal ImageWriter font, in 12 point: abcdefg New York is also available in 14, 18, 20, and 24; be sure to use the installed sizes

Manhattan, available in 12 point only, is an ImageWriter font much like New York, but in the Option and Option Shifted positions, it is quite different:



Mobile is an ImageWriter picture font that is available only in 18 points. Mobile is also known as Taliesin. Even though the Mobile and Taliesin fonts are identical, there is a small problem: if you prepare a document using Mobile fonts, and later try to print it using a system disk that has only Taliesin fonts, the fonts will not be displayed.






Here's what's available in Cairo, another ImageWriter picture font, in 18 points only:



Here are some additional ImageWriter fonts, for which there is no LaserWriter equivalent:

This is Chicago, available in only 12 points: abcdefg 1234567 ABCDE This is Venice, available in only 14 points: abcdefg 1234567 This is London, available in only 18 points: abcde This is Athens, available in only 18 points: abcde This is Athens, available in only 18 points: abcde This is Ban Francisco, arai able in only 12point This is Los Angeles, available in 12 points: abcdefg 1234567 ABCDEF This is Los Angeles, available in 12 points: abcdefg 1234567 ABCDEF This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey, available in 12 points: abcdefg 1234567 This is Mos Eistey available in 12 points: abcdefg 1234567 This is Mos Eistey available in 12 points: abcd This is Symbol, a specialized LaserWriter fort, for which there is no ImageWriter equivalent,9, 12, 18 and 24 points:

-1	2	3	4	5	6	7 1	3 9	lo	-	=	
	8	<u></u>					<u>,</u>		-	$\frac{1}{1}$	Τ.
l	ŤŤ	<u>~</u>	<u> </u>	Ļ	1.	ᡰᢩ᠆	Ļ	ř,	<u>"</u> –	<u>-    </u>	
	α	σ	δ	\$ <u>}</u>	<u>ר   ח</u>	φ	ĸ	<u>λ</u>	:	Э	
Symbo	o1 ζ	; ξ	X	۵	β	ν	μ	,	. 1	No	rmal
- !	Ĩ	#	Ε	%	ц	& '	• (	)	Τ_	+	
	Θ	Ω	EP	Т	Ψ	Y	I	0	п	()	1
	A	Σ	Δ	φI	· E	t 9	K	Δ	:	¥	
Symbo	51 Z	: 3	X	ς	В	N	M	< :	> ?	Sh	ifted
- 3		≤	1	•	1	f	∞   ≈		. 2	↑	
	Æ	• •	<b>→</b> •	• (	·×	+	T	4	<b>z</b> (	8 <b>*</b>	' n
	4		2 6	2		10	TT				
	$\Gamma$		· ·			Ľ	בןי	K	>	ין כ	JPTION
Symbo	51	[ <del>−</del> ] [€		8	=	-	~[ ∼[	<b>ℜ</b> •   ₂	⊃   :   √	⊃   ( ′   Noi	rmal
Symbo A V	 ₀ı     ∈			₹ 1	≡	-     	/  J ∝ [ r   ⟨	- <u> </u> 2 - 8	⊃     ▼	⊃ [0 ′ [N₀i   ±	rmal
Symbo A V	   		0   0   1   1     Σ	s     	= ↓ ↓	-       	∨    ∝   1   1	% - ≥   @ ↓		⊃ [0 / №1 [±] © ∏	rmal
Symbo A V	₀1      ⇐   €		Π   ™ Σ L	             	= ↓     	-       	×   ×   r   (   1	%	⊃	⊃ ( Noi ± © ∏ → (	rmal

These are Zapf Dingbats, specialized LaserWriter fonts, for which there is no ImageWriter equivalent, available in 9, 12, 18 and 24 points:

*	4	⇒	•0		/	1	×	(	X	X		X	\$	6	P 4	5	+		
			דו	Þ		• [	ן נ	۷	1		۲	+	1	ב	C	,	*	*	*
Nor	'n	1	0		1	•		*	ł	¢	*	ĸ	*	•	4	·	۹	No	rm
Din	gΒ	ats		Ī	I	*		+	C	)		0	8	3	0	6	≥ C	ingl	3ats
<b>59</b>	1	-	¥	9	-	9€		•	\$	e	) [0	-	<b>&gt;</b>	E	T	*	IG	·	
		*	Τ,	*		Π,	*	*	1		-	1	, [	*	*		6	~	9
					•		••	-	1.		-	17	· •	~	~		- 1		
Shi	fte		×∣	*		+	•	Ĩ	> [	*	10	<u>ا</u> ر	*	<u>~</u>	$\overline{\left[ \cdot \right]}$	┡│	)- 3¢	Shi	fted

*	•	2	•		¥	1	: 6	3	×	1	Ĕ		G		6	0	0	2	
		C	9	0	•	•	٠		1	9	0	1	4	0	•		0	7	8
Opti	ion		{	ĥ	•	0	6	)	+	÷		0	•	C		0	0	0	ption
Ding	gBa	ats		3	6	9 3		e		)	99	0		Ø	8	•	•	Ding	Bats
	7	_	_	-		-	- T -	-	r	<b>.</b>	T		T	-			_	- 1	
<b>→</b>	6	~	≯	·	-		> -	•	нф	a	<b>ا</b> ♦	<b>g</b>		• D		8	) (	6	
				_					_			•						-	
		e	•	>	>	≻∣	•	Г	•	•			⇒∣	0	•	2	0		9
Opt Shii	ion fte		<u>ه</u> ا	<u>ל</u> ר	> : \$	>	•		•	•		• • •	⇒ □	() () () () () () () () () () () () () (		າ ເ ວ	0		) (9) ption hifted

Here are some additional LaserWriter fonts, for which there is no ImageWriter equivalent:

This is Bookman, a formal LaserWriter font, in 10 point: abcdefg 1234567 ABCDEFG!@# This is Bookman, a formal LaserWriter font, in 12 point: abcdefg 1234 This is Bookman, a formal LaserWriter font, in 14 point: abcd Bookman is also available in 18 and 24, but these fonts aren't needed.

This is Narrow Helvetica, a sans serif LaserWriter font, in 10 point: abcdelg1234567A This is Narrow Helvetica, a sans serif LaserWriter font, in 12 point: ab This is Narrow Helvetica, sans serif LaserWriter font, in 14 N Helvetica is also available in 18 and 24, but these fonts aren't needed.

This is Palatino, a formal LaserWriter font, in 10 point: abcdefg 1234567 ABCDEFG !@#\$ This is Palatino, a formal LaserWriter font, in 12 point: abcdefg 12345 This is Palatino, a formal LaserWriter font, in 14 point: abcd Palatino fonts are also available in 18 and 24, but they aren't needed.

This is Zapf Chancery an informal LaserWriter font, in 10 point: abcdefg 1234567 ABCDE This is Zapf Chancery an informal LaserWriter font, in 12 point: abcdef This is Zapf Chancery an informal LaserWriter font, in 14 pt: Zapf Chancery is also available in 18 and 24 but these fonts aren't needed.

This is Avant Garde, a sans serif LaserWriter font, in 10 point: abcdefg 1234567 ABCDEFG This is Avant Garde, a sans serif LaserWriter font, in 12 point: abcdefg This is Avant Garde, a sans serif LaserWriter font, in 14 pt: Avant Garde is also available in 18 and 24, but it isn't needed for the LaserWriter.

This is New Century, a formal LaserWriter font, in 10 point: abcdefg 1234567 ABCDEFG This is New Century, a formal LaserWriter font, in 12 point: abcdefg This is New Century, a formal LaserWriter font, in 14 point: New Century is also available in 18 and 24, but it isn't needed for the LaserWriter. 3. Here's how to change fonts which are installed on a disk:

a.) Insert the *Macintosh System Tools* in the external drive. (If you don't have an 800K external drive, eject the destination disk, and insert *System Tools* in the internal drive.)

b.) Open the directory windows of both disks, then open the *System Tools* system folder and utilities folder. Drag the **Font/DA Mover** and the "fonts" icon (it looks like a little suitcase) across to the destination disk window. If Mac asks you to exchange disks, do it. Eject *System Tools* if it isn't already ejected.

c.) Boot the Font/DA Mover (double-click on the icon). When the dialog box opens, click the Font button if it isn't already blackened. The fonts which are in the system now are listed on the left.

d.) <u>Select</u> (that is, click, drag over, and highlight) the names of all the fonts and sizes you <u>don't</u> <u>want</u> in the left (systems) list of the dialog box. Hold the shift key down as you select, so you can get rid of everything you don't want on the first try. Now click the **Remove** button. Mac will tell you not to take his system fonts. Not to worry, you can't take them even if you want to; there will still be a few fonts left for the two of you! Click "ok." If some of the fonts you do want aren't anywhere to be seen, have patience, we'll get to them later.

e.) Hold the option button down and click Open. When the dialog box appears, select (click) "Fonts" from the list that appears (you may have to click the little clisk icon first, in order to find "Fonts") and click Open. A list of the fonts available in the "Fonts" file will appear on the right.

f.) Select the fonts you want this list. Hold the shift key down as you select, so you can get everything you want on the first try. When everything you want is highlighted, click **<<Copy<<** to install the selected fonts in Mac's system. The fonts you wanted should appear in the list on the left.

g.) Click **Remove**. Click **Quit**. When you get back to the desk top, trash the **Font/DA Mover** and the "Fonts" icons.

4. To type in accent marks:

a.) Type the Option key combination for the accent mark you want:

Option-`	` (grave accent)	Option-e	(acute accent)
Option-i	<ul> <li>(circumflex)</li> </ul>	Option-u	" (umlaut)
-		Option-n	~ (tilde)

- b.) Type the letter you want to accent.
- c.) If you want only the accent mark, type the Option key combination twice.

The Mac Idiot Book Appendix Desk Accessories

Appendix Desk Accessories

Desk accessories are what you get when you pull down **t** to one of the items listed under the dotted line:

A desk accessory is a little application that you can use immediately, without having to quit the big application you happen to be using at the time. Every system must have at least one desk accessory installed in it or the system will crash. The most valuable desk accessories are discussed in detail elsewhere in this book:



- a.) Key Caps, in the Font Appendix .
- b.) Scrapbook, in "The Desktop" and "Integrating Multiple Applications" Chapters.
- c.) Art Grabber+, in "Integrating Multiple Applications" Chapters.
- d.) Chooser, in step 6 of application Chapters such as "Word" or "SuperPaint"

1. But the **Control Panel** is also an important desk accessory. You can use the **Control Panel** to connect or disconnect AppleTalk (depending on whether or not you are wired into it). The printer won't work if the switch is the wrong way.

Con	trol Panel
Desktop Pattern	AppleTalk 7 - Connected - Disconnected 5 - 4 -
Your Double-Click Spee	And Mouse Tracking
Rate of Insertion	Mouse Tablet Volume
Slow Fast	RAM 512K 😧 🔘 🔘 Cache 512K
Key Repeat Rate	Delay until Repeat

263 Desk Accessories

You also need the **Control Panel** to control the RAM cache which was discussed in the "Hurry up Mac" chapter. The other **Control Panel** functions are either self-explanatory (Speaker Volume) or trivial (Desktop Pattern).

The world can probably do without the other hundred or so desk accessories that are for sale and even free, depending on where you look. Some of them mostly take up space on the disk, and (**Caution!**) a few even cause the system to crash.

2. However the Alarm Clock can be convenient:

a.) Pull down 📥 to Alarm Clock. A clock will appear:

🗆 11:14:46 RM 🔥

b.) To see the date or set the date or the time: click in the center of the little note:



To set the alarm clock, click the lower right box with the alarm clock.

To reset the date, click the box with the calandar in it:

To reset the time, click the lower left box with the large traditional analog clock:



Click on hours, minutes, or seconds in the reset box which appears, then set them as desired by clicking on the up or down arrows. When you are satisfied, click in the little note (which is now upside down) again.

3. The spelling checker, MacLightning, can sometimes be useful:

The problem is, it needs a huge (297K minimum!) dictionary file called "Merriam Webster's Ninth." "Merriam Webster's Ninth" has an icon that looks like a dictionary. **MacLightning** won't work without it, but you can have it on a disk in the external drive (and not on the startup/working disk) if you don't have room on the startup/working disk. You can drag the dictionary onto any disk that is in the Mac (see the "How to Copy" chapter).

**MacLightning**, the desk accessory, must be installed just like any other desk accessory (see step 6 of this appendix). The desk accessory portion of **MacLightning** requires another 52K of disk space.

Here's how to use MacLightning:

a.) The application<sup>1</sup> you want **MacLightning** to check must be open. While it is open, pull down  $\notin$  to **MacLightning**. A check mark,  $\sqrt{}$ , will appear near the right end of the menu bar. This is the **MacLightning** menu.<sup>2</sup>

**MacLightning** can operate in either of two modes: <u>interactive</u> or <u>non-interactive</u>. The interactive mode checks your spelling and grammar as you type. Non-interactive proofreads a selected block of text in a few seconds.

## To use the interactive mode,

b.) Pull down  $\sqrt{to}$  Interactive. Start working in your application as you would normally. MacLightning will beep when it finds a suspect word (a word that it thinks is misspelled). Usually the mistake is obvious (just correct it as you normally would); or MacLightning is mistaken (just continue to type).

c.) But if you want to know how to spell the word, type **H** -1. MacLightning will look up the "correct" spelling, highlight it in black, and display it in the dictionary for you. Here's what the dictionary page looks like:



<sup>1</sup>MacLightning will run in MacPaint, MacWrite, Word, and RSG.

<sup>2</sup>If **MacLightning** can't find the dictionary, a dialog box may appear. If you are sure the dictionary is on a disk in one of your drives, click on the "drive" button, and open files, until you find it. Then double click "Merriam Webster's Ninth."

d.) If the highlighted word is correct, or if you see the correct word in the dictionary, click on it (highlighted or not), and type **32**-2. **MacLightning** will correct the mistake automatically. If you decide that what you typed originally was correct, don't click on anything, just type **32**-2, and continue typing.

To use the non-interactive mode,

e.) Select the portion of text you would like to check.

f.) Pull down  $\sqrt{to}$  Check Selection. An Analysis window will be displayed while MacLightning is checking the selection. When the checking process is over, a Misspelled window will appear.

g.) Double click on a misspelled word of interest in the **Misspelled** window. A dictionary page should pop up, with the suggested correct word highlighted.

h.) If the highlighted word is correct, or if you see the correct word in the dictionary, click on it (highlighted or not), and type **-9**. The **Search/Change** window should pop up.

i.) Click the "find next" button. The misspelled word will be displayed in context. If you want it corrected, click the "change" or "change then find" button.

j.) When you are through correcting that word, pull down  $\sqrt{to}$  **Misspelled** to return to the **Misspelled** window. Repeat steps g through j until you have checked all suspect words. Click the "close book" or close box to get rid of the windows.

4. And the Calculator is handy to have every once in a while:



5. How to change desk accessories which are installed on a disk:

a.) Insert the *Macintosh System Tools* in the external drive. (If you don't have an 800K external drive, eject the destination disk, and insert *System Tools* in the internal drive.)

b.) Open the directory windows of both disks, then open the *System Tools* system folder and utilities folder. Drag the **Font/DA Mover** and the "Desk Accessories" icon (it looks like a little suitcase) across to the destination disk window. If Mac asks you to exchange disks, do it. Eject *System Tools* if it isn't already ejected.

c.) Boot the **Font/DA Mover** (double-click on the icon). When the dialog box opens, click the **Desk Accessory** button if it isn't already blackened. The desk accessories which are in the system now are listed on the left.

d.) <u>Select</u> (that is, click, drag over, and highlight) the names of all the desk accessories you <u>don't want</u> in the left (systems) list of the dialog box. Hold the shift key down as you select, so you can get rid of everything you don't want on the first try. Now click the **Remove** button. Click "ok."

e.) Hold the option button down and click **Open**. When the dialog box appears, select (click) "Desk Accessories" from the list that appears (you may have to click the little disk icon first, in order to find "Desk Accessories") and click **Open**. A list of the desk accessories available in the "Desk Accessories" file will appear on the right.

f.) Select the Desk Accessories you want from this list. Hold the shift key down as you select, so you can get everything you want on the first try. When everything you want is highlighted, click **<<Copy<<** to install the selected desk accessories in Mac's system. The desk accessories you want should appear in the list on the left.

g.) Click **Remove**. Click **Quit**. When you get back to the desk top, trash the **Font/DA Mover** and the "Desk Accessories" icons.

Desk Accessories 268

## The Mac Idiot Book

400K external drives, 193 512 Extended, 202 800K external drives, 193 About the Finder, 175 absolute cell references, 144 accent marks, 262 active cell, 131 active" button, 174 Adapter Box, 21, 24 add your own menus, 169 add, 133 additional pages, 121 adjust the column widths, 142 advertisement, 34 aircraft, 83 Alarm Clock, 192, 264 Align text left, 92 align, 61 Alian-center, 77 alphabetize your records, 139 alphabetize, 105, 156 analog board, 218 anti-glare coating, 219 antistatic bag, 218 AppleTalk "on-off" switch, 181 AppleTalk connector, 236, 244 AppleTalk network 175, 235, 244 applications, 173 arrange your records, 156 Art Grabber+, 192, 209 artistic perspective, 55 asterisk, 132 Athens, 259 autoscroll, 69 Avant Garde, 261 Axis, 137 back-up, 156, 187 Backspace, 10, 54, 77, 92, 179 backup copies, 215 bad" disk, 221 Bale, 22 balloons, 37 Basic, 161 beep, 223 Best is slow, good-looking, 181 between applications, 205 between layers, 69 **Bi-Directional**, 24 bit-mapped, 45 black and orange rollers, 243 black line is appearing, 244 blank page, 232 blunder, 80 bomb error, 222 Bookman, 261 booting the system, 171 border, 35 both lavers, 55 bottom of the pile, 68

Brightness, 26, 171 Bring back the datafile, 156 burning out the printer, 218 buttons and lights, 230 Cache, 198, 210, 219 Cairo, 259 Calculation, 105, 132, 143 calculator, 166, 192, 266 can't find an icon, 222 Can't throw away, 222 caption" text, 38 cassette, 239 Category Axis, 137 category values, 137 cell is selected, 131 cells, 131 Center text icon, 91 Change All, 84, 102 change desk accessories, 267 change fonts, 16 change paragraphs, 93 change startup disks, 94, 182 change the fonts listed, 80 change the fonts, 191 change the shape, 122 change the spacing, 81 change title11,36,76,90,115,130 changed" clipboards, 205 chart icon, 127 chart-making features, 135 Chicago, 259 Chooser, 174, 192, 225, 235 clean the case, 219 Clean Up, 182, 222 Cleaning Pad, 240 Clear, 10, 54, 215 click pixels, 52 clicking and dragging, 179 clicking on, 174 Clipboard File, 173 clipboard memory, 205 Clipboard, 178, 205, 215 close box, 174 color, 248 column chart, 135 column headings, 142 column label, 131 columns, 105, 117, 131, 138 command key, 195 Command window, 165 commands, 195 common center, 62 Common Keybd Commands, 195 computer files, 172 computer, 171 concentric circles, 17, 62 Configuration, 24 Configure then install, 211 connect the Scanner, 21

connections, 235 constrain the line, 17, 62 constrain, 16, 36, 61 continuous trail, 9, 54 Contrast, 26 Control Panel, 192, 219, 263 cool efficiently, 218 cooling fan, 219 coordinates, 132, 143 copies the system fonts, 191 copy a copy prot. disk, 193 Copy II Hard Disk, 193 copy on each disk, 188 copy protected, 193 copy the formula across, 133 copy won't work, 189 Copy, 9, 77, 92, 178, 180 Copying one entire disk, 189 copying processes, 187 corrected entry, 132 correction, 92, 179 Courier, 256 crash, 192, 210, 213, 219, 264 crashes, 215 criteria, 140 Cropper, 116 cumulative GPA, 144 custom erasers, 8, 52 custom pull down menus, 80 customized work disk, 190 cut and paste, 166 Cut, 9, 54, 77, 92, 180 damaged disk. 221 dangling cable ends, 236 data disk, 183, 202, 217 Data-Procssng Commands, 196 database management, 149 database,138, 253 datafile window, 154 date, 82, 100, 156 decimal tabs, 80 define a name, 143 delete an entire row, 132 delete by backspacing, 215 delete, 180 Design Grids, 115 desk accs174,190,192,219,263 desktop, 172, 179, 182 destination disk, 188 dialog box, 176 dictionary page, 265 dictionary, 264 different parts, 99 digitized photograph, 21 dip switches, 231 directory window, 172 Disasters, 15, 60, 219 disconnect computer, printer 218 disconnect your Mac. 244

discrete objects, 34, 63 disk crashes, 215 disk drive, 198, 219 disk has crashed, 221 disk icon, 172 disk is locked, 216 disk is unreadable, 221 disk memory, 203 disk swapping, 202 distort, 55 divide, 166 divider lines, 114 do vou want to initialize?, 221 document icons, 179 documents, 173 dotted lines, 17, 62 double spacing, 92 double-click, 172 double-sided disk drives, 203 Draft is fast and awful, 181 Drag the icons, 193 drag the original disk icon, 189 drag, 174 draw laver, 45, 63, 68 draw lines in MacPaint, 16 draw lines, 61 Drive button, 178, 185 Duplicate, 9, 36, 54, 65, 156 Duplication of single docnts, 187 edit a pattern, 18, 62 edit your program, 166 Edit, 77 Eject disks, 218 Eject Internal Disk, 195 eject, 94, 182 electronic failure, 239 electronic grade book, 144 eliminate a text block, 122 Eliminate, 54 emphasize characters, 80, 98 Empty" the clipboard, 220 enclosed shape tools, 8, 53 Enter key, 132 entire 8" X 10" worksheet, 18, 63 equivalent LaserWriter fonts, 237 Erase Disk, 188 erase the startup system, 222 erase, 40, 68 eraser one pixel wide, 8 eraser, 16 error light, 230 errors, 77, 92 essentials, 219 everything guits working, 132 expansion card, 248 Excel window, 130 Excel, 253 external 800K disk drive, 202 external disk drive, 218 extract records, 139 extraction area, 140 FatBits, 7, 27, 52 field names, 138 field, 138, 154

file folder. 217 file from one disk to another, 188 file is lost or damaged, 222 file names, 217 File to Open, 201, 208 File, 154, 253 Fill Pattern, 64 Fill Right, 133 filled shape, 53 find all numbers greater than, 140 Find. 156 Finder in Switcher, 213 Finder, 173 finding the total, 143 fingerprints, 221 first paragraph, 77 Flip. 7. 39 flow into the text, 117 flow the text. 66 Focus the Scanner, 25 folder, 182 folders inside of folders, 183 Font Size menu, 16 font size selection, 198 Font Substitution, 236 Font. 91, 190, 219, 255 Font/DA Mover, 191, 267 fonts available, 191 footer, 104 footnotes, 91, 99 form window, 154 formatted disk, 219 formatting recording, 106 formula bar, 132, 143 formula, 132 freehand tool, 66 freehand, 36 freely rotate, 55 friction feed, 23, 228 Full Screen, 69 fuzzy vertical lines, 242 Geneva, 255 Get Info. 216 Get Picture, 116, 208 Get Text, 117, 208 glass cleaner, 219 Glossary, 100 go back to work, 95 GOTO, 168 GPA equation, 144 Grabber+ to Open, 209 grabber, 6, 8, 50, 52 Grade book, 141 graph, 135 graphics into File, 159 green cover, 243 Green light, 232, 238 Grid. 15, 36, 61, 115 around, 218 Group, 37, 65 hairline, 123 Halftone, 27 hand-feed the LaserWriter, 239 Handles, 35, 64, 102, 122, 136

Hard Disk, 203 head cleaning kits, 219 Header, 81, 104 heat, 218 Helvetica, 255 HFS dialog box, 184 HFS, 183 Hide Palettes, 69 hierarchical file system, 183 histogram, 135 home built desk accessories, 192 Hook up the cables, 21 hopeless jumble of icons, 182 how long it takes, 204 how much space, 83 how to change fonts, 262 how to enter data, 142 how to use Switcher, 210 hurry up Mac. 195 HyperDrive, 204, 219 hyphenate, 105, 122 Hyphens, 197 I beam, 77, 117, 179 icon is "locked, 191 icon name, 217 icons, 173 idiot phrase, 100 **IF THEN, 168** image pane, 26 ImageWriter does berserk, 231 ImageWriter self-test, 233 ImageWriter, 174, 181 Inact. button, AppleTalk, 175, 225 inadvertent cut. 98 indent, 77, 80, 92, 93 Index a field, 156 index, 56, 97, 106 indicator lights, 239 initialize the disk, 188 initialize, 221 **INPUT** statement, 167 insert a new blank row, 132 insert disks, 218 Insert Page Break, 82 Insert Page, 121 insert rows, 142 insertion point, 76, 179 installed font sizes, 198 Insufficient disk space, 219 integrate your applications, 205 interactive mode, 265 Internal Hard Disk, 204 Interpreting the lights, 239 invisible line, 40 invisible box, 40, 68 invisible box, 68 jamming the printer, 243 jump to the first field, 156 Justify text, 81, 92 Key Caps, 192, 255 keyboard command, 59, 195 keyboard, 171 label your axes, 137 Label your disks, 217

Index 270

lasso, 9, 10 Laser Prep, 174 LaserWriter fonts, 237 LaserWriter won't print, 244 LaserWriter, 174, 181, 235, 248 lasso, 54, 55 layers, 45 Leaks, 15, 61 left alignment, 77 legal to copy, 193 Legend, 135 LET, 167 Light Intensity Gauge, 26, 27 limitation of MacPaint, 207 limitation of clipboard, 207 line graph, 136 line numbering, 106 Line Pattern, 64, 114, 123 line spacing, 81 line voltage, 217 lines, 16 link all, 117 link the new Text block, 122 Linker tool, 117 list window, 165 listed by student number, 144 Little black boxes, 136 little padlock, 216 live area, 115 load pin-feed paper, 228 load single sheet paper, 229 lock a disk. 216 Lock, 35, 64 Locking" a file, 216 London, 259 Los Angeles, 259 lost file, 222 Mac128, 247 Mac 512 Extended, 248 Mac 512, 247 Mac II, 248 Mac Plus, 202 Mac Plus, 248 Mac SE, 248 MacDraw does text, 38 MacDraw window, 34 Macintosh, 171 MacLightning, 264 MacPaint is interrupted, 222 MacPaint window, 6, 176 macro icon, 127 macros, 140 MacTools, 221 MacWrite window, 78, 179 MacWrite, 251 Magnification, 25 magnified screen, 52 make copies, 202 make your own window, 168 malfunctions, 215 Manhattan, 256 manipulation of windows, 88 Manual Feed, 239 margins, 81, 91, 236

marquee, 7, 51, 178 master is "locked, 192 mathematical operations, 132 memory specified, 211 menu bar, 172 menu is created, 169 merge documents, 103 Microsoft BASIC 2.0, 161 Minifinder, 201 minus, 166 Misspelled window, 266 mistake, 15, 77, 92, 132, 155 Mobile, 257 modified ImageWriter cover, 23 Monaco, 256 more handles in polygon, 69 more space, 220 Mos Eisley, 259 mouse button, 172 mouse, 172 move it. 77 Move one cell down, 131 move your scrapbook, 206 multi-column newsletter, 109 multiple columns, 105 multiply, 132, 166 name the columns, 131 name the rows, 131 names are hidden, 145 Narrow Helvetica, 261 near letter quality, 230 New Century, 261 new folder, 182 new text blocks, 122 New York, 256 **NEW, 166** next record, 156 no border, 9, 53 non-interactive mode, 266 Note Pad, 192 Nudge, 59 number lines or paragraphs, 106 number the pages, 81 object oriented, 45 objects, 34 off-on switch, 171 open a file from within, 184 Open, 177, 208 orange rollers, 243 organize your folder, 182 organized, 182 Orientation, 236 orig disk to destination disk, 188 out of paper, 239 out of room, 220 out of space 83, 102 outlet checking devices, 218 outlet connection for Mac. 218 cutput window, 165 overflow indicator, 122 padlock, 216 Page breaks, 82, 100 page number, 78, 81 Page Preview, 95, 226, 237

Page scroll boxes, 114 Page Setup, 91,179, 226, 236 paint brush, 8, 52 paint bucket. 6 paint layer, 45 Paint on Black, 53 Paint Opaque, 53 paint transparent, 8, 53 paint/draw toggle, 63 Palatino, 261 Palette, 62 paper cassette, 239 paper clamps, 228 paper clip in the little hole, 221 paper not feeding properly, 243 paper jam, 239, 243 paper release lever, 23, 228 Paper Thickness, 229 parachute, 83 paragraph text, 38 paragraphs numbered, 106 Paste, 9, 54, 77, 92, 180 Pattern Palette, 6 pattern scroll bar, 52 pattern, 62 Pause" button, 27 Pen, 35 pencil, 7, 52 percent equation, 143 picture catalog, 19, 63 Picture Block tool, 116 pie chart, 135 pin-feed paper, 228 Platen, 22 plug it in, 238 plus, 166 pointer, 64, 66, 122, 172 polygon tool, 9, 68 Power Converter, 22 power failure, 15 power supply, 218 precise positioning, 15, 61 Print Density Dial, 238 print head guide bar, 231 Print Head, 23, 227 PRINT is a statement, 165 print on both sides, 239 print quality button, 230 Print Records, 158 print, 95,180 printer drivers, 173 printer puts out blank paper, 232 printer head, 231 printer icon, 174 printer port, 175, 236 printing gibberish, 231 problems, 60 product, 132 programming, 161 pulling down, 174 Puzzle, 192 quit from Switcher, 213 Quit, 94, 179, 182 RAM cache size, 199

**BAM Cache with Switcher, 199** RAM Cache, 198, 210, 264 RAM caching, 219 RAM disk, 199 RAM. 202, 205, 247 random access memory, 202 ReadySetGo, 208, 251 Rearrange your grades, 144 reboot, diff. startup disk, 182 record keeping, 149 record, 138, 155 recorded formatting, 106 recorded series of steps, 141 Rectangles tool, 34 red light, green light, 243 red paper error light, 230 Reduced View, 63 reference box, 131 reflow to fit. 122 reinitializing the disk, 221 release levers, 228 remove desk accessories, 192 remove listed fonts, 80 Remove the printer head, 231 Rename the folder, 182 Reopen, 95 Repaginate, 100 replace Ribbon Cartridge, 227 replace Toner Cartridge, 240 reset, 182 resets. 94 Reshape, 69 return, 77, 93, 180 Revert, 15, 61 ribbon cartridge, 23, 227 rollers, 243 ROM, 247 room, 219 Rotate, 7, 39 row number, 131 row, 131, 138 RSG window, 114 ruler, 34, 63, 77, 80, 91 rules (lines), 114, 123 Run Around, 122 Run your program, 165 RUN, 165 running footer, 104 sad face, 221 San Francisco, 259 Save Active Window, 195 Save As, 102, 220 save space, 19, 63 Save, 176 Scale, 56 Scanner Cartridge, 22 Scanner to Focus, 25 Scrapbook File, 173 Scrapbook, 178, 180, 192, 206 screen brightness, 218 Scroll Arrow, 180 Scroil Bar, 77, 94, 180 Scroll Box, 77, 180 SCSI port, 203

SCSI-ported Hard Disk, 203 Search to Change, 216 search, 140 Select all of the text, 118 Select all, 55, 139 Select Destination, 193 select large areas, 142 select many lines, 81 select the block, 122 select, 66, 77, 92, 179 Selected Fill Pattern, 6, 53, 64 Selected Line Pattern, 53 selected, 131 selection rect, 9, 10, 54, 55, 178 Selection Shortcuts, 197 selection tricks, 81, 98 self-test, 233 Send Behind, 123 Send to Back, 68 separation belt, 243 sequence of steps, 140 serial port. 204 Servicing the ImageWriter, 230 Set Criteria, 140 Set Database, 139 set margins, 81 Set Startup, 201, 220 set tabs. 80 Sevicing the LaserWriter, 242 Short Menus, 91 Show All Records, 156 Show Page, 18 shrinking, 56 Shut Down, 94 shut up. 223 shutdown procedure, 182 single letter errors, 77 single sheet, 229 Single space, 92 Size Box, 88,174 Size to Fit.115 slant images, 55 Smoothing, 236 Snap On, 61 Snap to Off, 122 snap to, 115 sort it in reverse, 156 sort your new list. 142 Sort, 105, 139, 156 space bar, 77, 93 space, 83, 102 Spaces, 197 speaker volume, 223 speed comparisons, 204 spelling checker, 104 spelling checker, 264 spits the disk back out, 221 split screens, 99 spray can, 8 spreadsheet, 131, 253 sprocket/tractors, 228 stains, 242 startup disk 95,171,182, 205, 223 startup system, 222

statement, 165 static electricity, 218 staying organized, 182 stop the program, 166 strange documents, 216 stretch images, 10 stretch, 55 stripping your disks, 219 student number, 145 stupid blunder, 80, 98 style sheet, 106 sum, 133, 143 superimpose letters, 10, 55 SuperPaint, 50 surge protectors, 218 Switcher, 210, 219 Symbol, 260 synthesizing new documents, 178 System Tools, 190 system error number, 222 system folder, 173 system fonts, 191 System Errors, 222 tab style, 93 tab well, 80 Table of Contents, 106 test print is too light. 238 test print.181 test light, 239 Text Block tool, 117 text chain, 117 text in MacPaint, 16 text in SuperPaint, 66 text tool. 6 text, 38 That item is locked, 216 thickness lever, 229 Thin Line Pattern, 123 this isn't a Macintosh disk. 221 throw out its finder, 220 Thunderscan, 21 tighter spacing, 16 time, 82, 100 times.132.166, 204 Times, 256 timing tape, 23 tiny black boxes, 35, 122 title, 77 to backtrack up, 131 toggle the pencil, 8 Togale, 63 Toner Cartridge Indicator, 240 toner cartridge wire cleaner, 242 Toner Cartridge, 240 tool palette, 26, 34 Toolboxes, 114 total the column, 105 total, 133, 143 trace edges, 10 tractor/sprocket, 228 transfer wire, 241 transparent eraser, 8, 52 trash, 182 TurboCharger, 219

turn Mac on and off, 218 turn off the autoscroil, 69 turn off the computer, 94, 182 two layer selector, 55 two prong outlet, 218 two wire extension cord, 218 Two-Sided, 193 two-tone border, 68 underlinina, 80 Undo command, 215 Undo, 15, 60, 80, 98 unerase, 40, 68 universal keybd commands, 195 unlink a text block, 122 unusual icons, 15 Value Axis, 137 Velcro, 23 Venice, 259 vented areas in the sides, 218 vents on the left side, 218 version (b) for binary, 163 version (d) for decimal, 163 view two different, 99 voltage source, 238 voltage surges, 217 what if?, 134 white type on a black, 123 whole page, 115 Widow Control, 91, 236 width of line, 35 wild cards, 140 window split bar, 99 window, 41,168, 174 wipe the transfer wire, 241 wiping out all the junk, 220 Word window, 90 word processors, 251 Word, 251 Word-Procsng Commands, 196 wordwrap, 77, 93, 180 working disks, 202 worksheet icon, 127 worksheet, 131 Write the equation, 143 writing formulas, 132 X axis, 137 yellow light, 238 your icon names, 217 Zapf Chancery, 261 Zapf Dingbats, 260 zoom box, 88, 174





I teach high school Chemistry and Physics. About three years ago, I assigned a research paper to my physics classes, and provided several borrowed Apple Macinto: Computers for them to use in preparing the paper. Many of my students had not do word processing before; and none of them had used the Mac. The Mac is easy to u but books that come with Macintosh software applications often do not take advanta of this virtue. They are not designed for people who want to be "up and running" as quickly as possible. So I wrote a simplified set of instructions for my students to use When they used my instructions, these computer "illiterates" were usually able to sta word processing in less than ten minutes with no additional assistance from me.

When the physics research papers were done, the main office secretary Corey Cork started using one of the Macs I had borrowed for the project. Like the kids, she also was able to use my instructions to start word processing within a few minutes. She the school bulletin and some correspondence for the principal on the first day she h the machine. But she wanted to do some database and spreadsheet work as well; I wrote a set of instructions for these applications also.

Other secretaries and student aides used my instructions with equal success. That one little Apple Macintosh revolutionized the main office. Last year they were using two Macs and a LaserWriter. We got a Mac for the science department, and many other teachers started to use it. Our school newspaper used two more Macs to produce the school paper. So I wrote instructions for the graphics and page processin software too. As the use of the Macs around the High School grew, I continued to r vise, and re-revise the instructions.

The much-revised pile of instructions began to look like a book, so we put the pile to gether and called it **The Mac** lidiot Book.

My wife Thea and I live in Sedro Woolley, Washington with our dog Rosie, and a Hy perDrive equipped Mac Plus. We have three children. Walt is an Air Force pilot. Lara and Ted attend the University of Washington. Walt and Lara each have a Ma Plus; and Ted has a Mac SE. I have a Masters degree in science education from Western Washington University.



ISB-N-0-940254-72-7 21 370 \$18.95 MAC IDIOT BOOK 10/07/88

William W. Flint

ISBN 0-940254-72