CLARIS™   MacPaint®

LIMITED WARRANTY AND DISCLAIMERS

A. Limited Warranty on Media. CLARIS™ warrants the diskettes on which the Software is recorded to be free from defects in materials and faulty workmanship under normal use for a period of ninety (90) days from the date of delivery as evidenced by a copy of the sales receipt. CLARIS™ will, at its option, replace or refund the purchase price of the diskette at no charge to you, provided you return the faulty diskette with the sales receipt to CLARIS™ or an authorized CLARIS™ Dealer. CLARIS™ shall have no responsibility to replace or refund the purchase price of a diskette damaged by accident, abuse or misapplication. ANY IMPLIED WARRANTIES ON THE DISKETTES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO 90 DAYS FROM THE DATE OF DELIVERY.

B. Disclaimer of Warranty on Software. THE SOFTWARE IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, AND CLARIS™ EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANT-ABILITY AND FITNESS FOR A PARTICULAR PURPOSE. CLARIS™ DOES NOT WARRANT, GUARANTEE, OR MAKE ANY REPRESENTATIONS REGARDING THE USE OR THE RESULTS OF THE USE OF THE SOFTWARE OR ANY ACCOMPANYING WRITTEN MATERIALS IN TERMS OF THEIR CORRECTNESS, ACCURACY, RELIABILITY, CURRENTNESS, OR OTHERWISE. THE ENTIRE RISK AS TO THE RESULTS AND PERFORMANCE OF THE SOFTWARE AND WRITTEN MATERIALS IS ASSUMED BY YOU. CLARIS™ DOES NOT WARRANT THAT THE SOFTWARE WILL WORK CORRECTLY IN YOUR MULTI-USER ENVIRONMENT. IF THE SOFTWARE IS DEFECTIVE, YOU, AND NOT CLARIS™ OR ITS DEALERS, DISTRIBUTORS, AGENTS, OR EMPLOYEES, ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR, OR CORRECTION. SOME STATES DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU.

C. Complete Statement of Warranty. THE LIMITED WARRANTIES PROVIDED IN PARAGRAPHS A AND B ABOVE ARE THE ONLY WARRANTIES OF ANY KIND THAT ARE MADE BY CLARIS™ ON THIS CLARIS™ PRODUCT. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY CLARIS™, ITS DEALERS, DISTRIBUTORS, AGENTS, OR EMPLOYEES SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS WARRANTY, AND YOU MAY NOT RELY ON ANY SUCH INFORMATION OR ADVICE. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

U.S. GOVERNMENT END-USER PROVISIONS. If this Software is acquired by or on behalf of a unit or agency of the United States Government this provision applies. This Software: (a) was developed at private expense, and no part of it was developed with government funds, (b) is a trade secret of CLARIS™ for all purposes of the Freedom of Information Act, (c) is "commercial computer software" subject to limited utilization as provided in the contract between the vendor and the governmental entity and (d) in all respects is proprietary data belonging solely to CLARIS™.

For units of the Department of Defense (DOD), this Software is sold only with "Restricted Rights" as that term is defined n the DOD Supplement to the Federal Acquisition Regulations, 52.227-7013 (b) (3) (ii) and: *Use, duplication or disclosure is subject to restrictions as set forth in subdivision (b) (3) (ii) of the Rights in Technical Data and Computer Software clause at 52.227-7013. Manufacturer: CLARIS™ Corporation, 440 Clyde Ave., Mountain View, California 94043.*

If this Software was acquired under a GSA Schedule the U.S. Government has agreed to refrain from changing or removing any insignia or lettering from the Software or the accompanying written

Contents

Figures

Chapter 3   MacPaint Reference 97

Preface

About MacPaint

MacPaint® 2.0 is for creating pictures. It's for professional artists, people who enjoy drawing, business people who need to spruce up reports with illustrations—even people who think they have no artistic skills. It's for people who love to make pictures and anyone who needs an easy-to-use tool to sketch out ideas and plans.

With MacPaint, you can

- draw straight lines and round circles and create precise shapes and intricate patterns with ease

- add patterns to your pictures by "painting" with several sizes and shapes of brushes that you never have to clean

- select any part of a picture and move, duplicate, rotate, flip, stretch, shrink, or invert it

- add text to a picture in a variety of fonts, font sizes, and font styles

- move in for close-up views of a picture—as if you had a magnifying glass—so you can do detail work

- enjoy the freedom to experiment, try new effects, undo what you don't like, create several versions of an idea, combine images from several different sources, and finally, put your work on paper when it's just right

- create or edit pictures that you can "paste" into documents created with word processing or page-layout programs

As you create pictures with MacPaint, you may find MacPaint complements the artist in you by giving you an easy-to-use tool that produces good-looking results.

What you need

MacPaint 2.0 works on the Macintosh™ 512K enhanced, Macintosh Plus, Macintosh SE, and Macintosh II. A second disk drive is required; a printer is recommended but not required.

About this guide

This guide assumes that you have set up your Macintosh and have read the owner's manual. You should know how to use menus, how to click and drag with the mouse, and how to copy documents and applications in the **Finder.**

You don't have to read this guide straight through. Dive in, try things out, experiment, have fun.

Here are some suggestions for using the guide:

□ If you've never used a Macintosh graphics program before, turn to the tutorial exercises in Chapter 1, "Learning MacPaint."

□ If you're experienced with Macintosh graphics, you can skip directly to Chapter 2, "Using MacPaint." This chapter presents a series of step-by-step procedures, each describing how to perform one task with MacPaint.

□ If you've already used earlier versions of MacPaint, the summary of new features at the end of this preface may be all you need to get started.

□ When you need to know about a specific menu, command, or dialog box, see Chapter 3, "MacPaint Reference," which briefly describes every MacPaint command.

❖ *About the Command key:* Throughout this guide, you'll see references to the **Command key.** On some Macintosh keyboards, the Command key is labeled with the cloverleaf symbol. On other keyboards, it bears the Apple® symbol as well as the cloverleaf. This guide refers to both of these keys as the Command key.

Click   Double   Drag
         click

These are the symbols that this guide uses for click, double click, and drag.
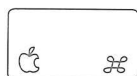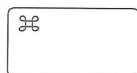
Different versions of the Command key

Summary of new features

MacPaint 2.0 is an enhanced version of MacPaint, the first graphics application for Macintosh computers. Here's how version 2.0 differs from earlier versions of MacPaint.

□ You can open up to nine documents at a time, depending on how much memory is available in your Macintosh. (With a Macintosh 512K enhanced, you may be limited to opening two windows at a time.)

□ When you open a document, MacPaint creates a window as large as the screen allows, up to the size of a MacPaint document (8 by 10 inches).

□ Tools and patterns are located in menus that you can pull down or relocate anywhere on the screen.

□ A document scrolls automatically when a drawing or selection tool reaches the edge of a window, letting you draw or select objects beyond the limits of the window.

□ You can zoom in to magnify a picture 200, 400, or 800 percent and use all the tools in the magnified view.

□ You can zoom out to see a document reduced by 50 percent and use all the tools in the reduced view.

□ You can draw ovals, circles, rectangles, and rounded rectangles from the center outward or from corner to corner.

□ As you create a document, you can take a "snapshot" of a picture, which MacPaint keeps as you work. Then at any time, you can change all or part of the document back to the way it originally appeared in the snapshot.

□ You can use a "magic" eraser to make erased images reappear in a picture.

□ You can temporarily change all the tools (except the text tool) to the grabber (the hand tool) by holding down the Option key.

□ You can draw shapes with different vertical and horizontal line weights. Curves and diagonal lines can graduate from one line weight to another.

□ You can choose how patterns mix, letting one pattern appear transparently through another, or completely cover another. You can even "erase" with a pattern.

□ You use the Command key (instead of the Option key) to create patterned lines and borders.

□ You can specify the spacing between grid lines as 2, 4, 8, 16, or 32 pixels (or screen dots). (In earlier MacPaint versions, the spacing is 8 pixels.)

□ The selection rectangle disappears as you move a selection, allowing you easily to position small selections with precision.

□ A mouse position inset (a small window) provides a gauge displaying the location and distances the pointer moves in pixels, inches, or centimeters, helping you draw lines and shapes with precision.

□ You can set up a document, choosing the options and drawing the images you use routinely, and save it as "stationery." You can then open the stationery document when you need to create a new document and start work with the basic document format already set up.

Some conventions used in this guide

Several special elements in this manual's text are designed to make learning easier.

❖ *By the way:* A note like this presents additonal information or interesting sidelights.

Important

Be sure to read every item that's labeled this way.

Warning

Warnings like this alert you to situations where you could damage software or hardware or could lose data.

Definitions of terms and references to other parts of the book sometimes appear this way, in the margin.

Terms in **boldface type** are defined in the glossary. Sometimes the definition or additional information also appears in the margin.

❖ **Keyboard equivalent:** These notes tell you keyboard shortcuts for menu commands.
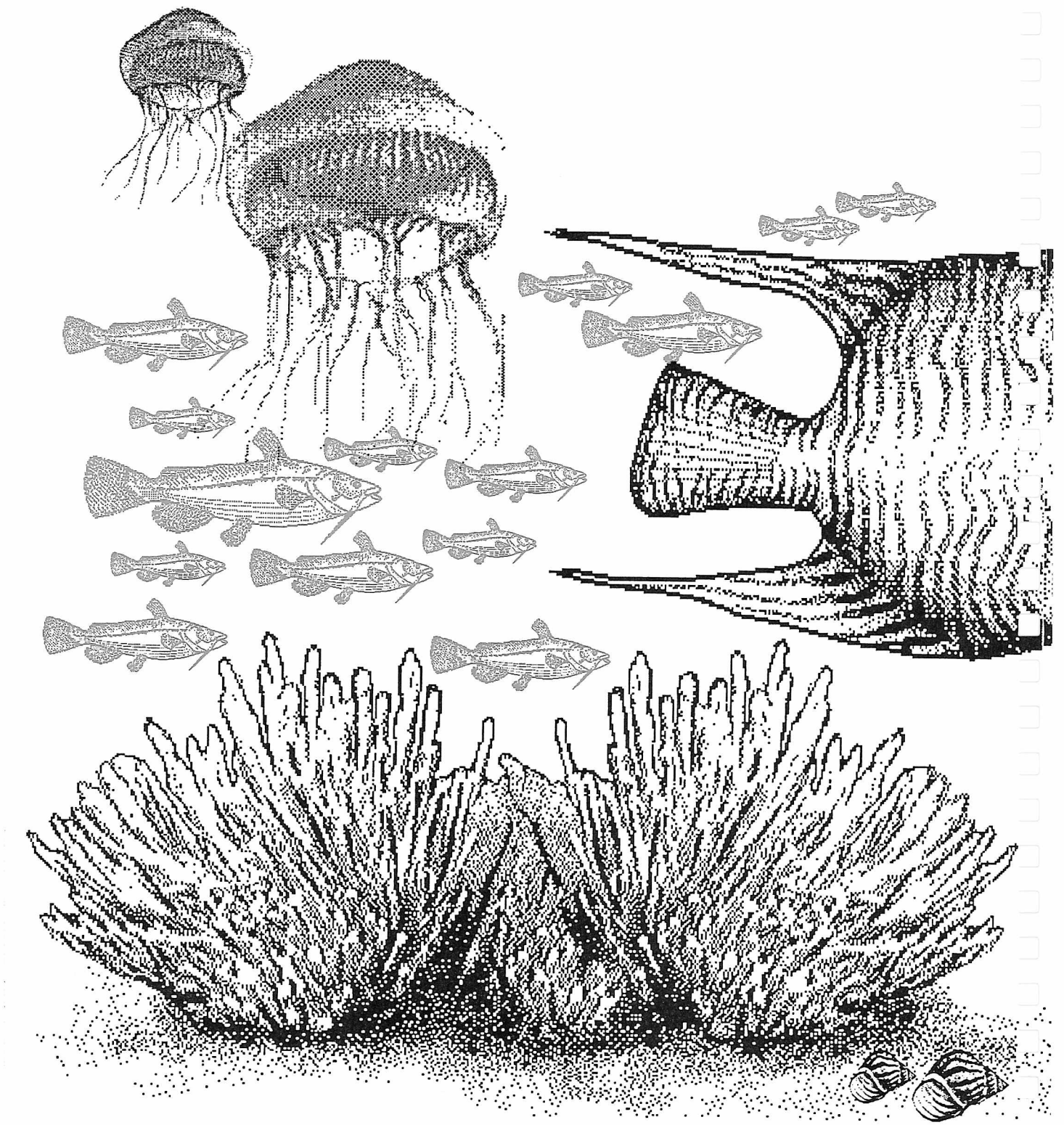
Chapter 1

Learning MacPaint
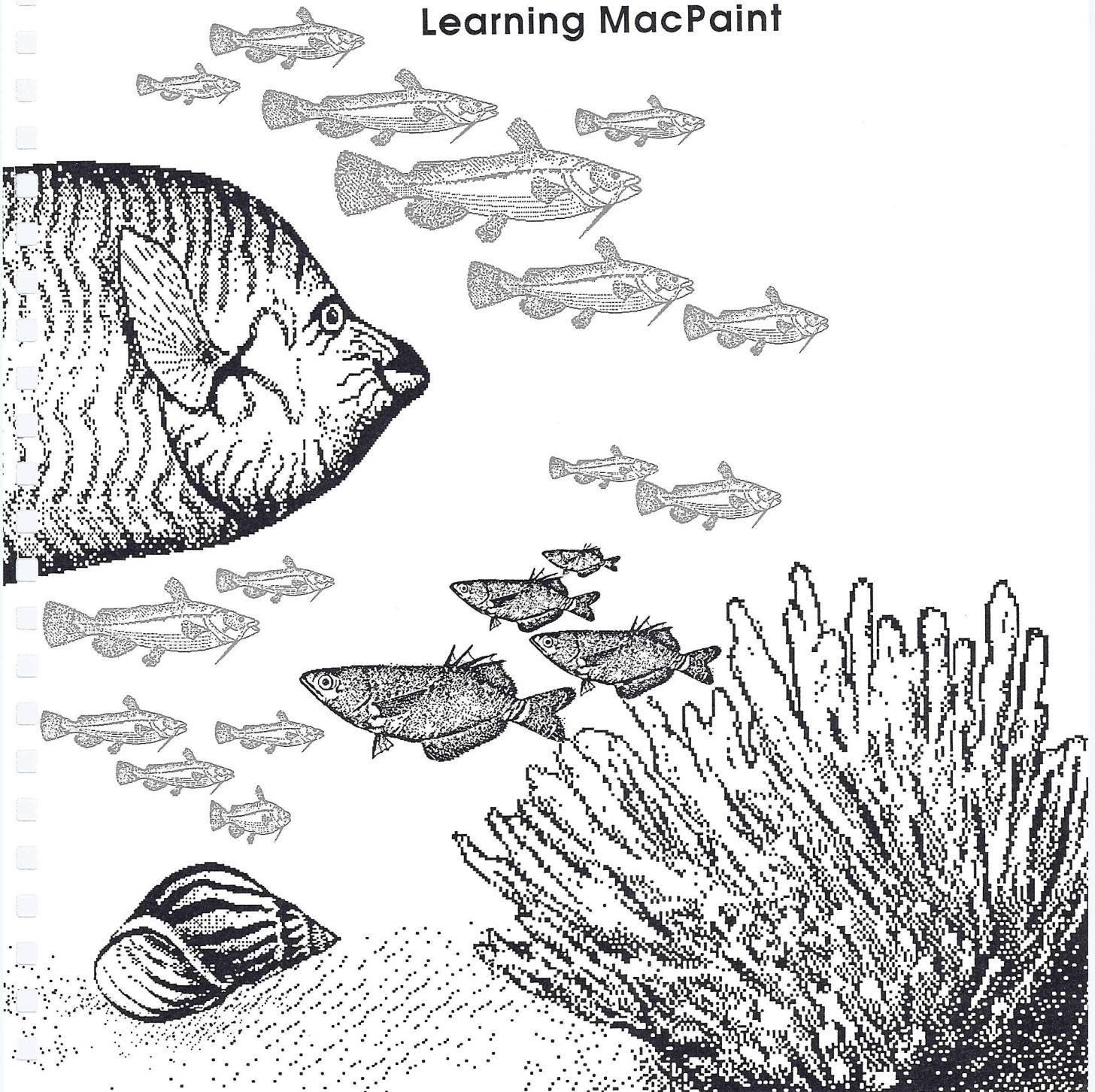
Chapter 1, "Learning MacPaint" introduces the basic drawing procedures used to create MacPaint documents. You'll use many of MacPaint's features as you create several drawings. You'll learn to draw lines, rectangles, and ovals; to paint with the paintbrush, spray can, and paint bucket; and to change, erase, and copy portions of a drawing, as well as many other drawing procedures.

This chapter provides step-by-step instructions that explain how to use MacPaint. After reading a hands-on introduction to MacPaint's tools, you'll perform two exercises in which you'll complete a landscape and a business logo. If you don't consider yourself particularly expert at producing art, don't worry. This tutorial explains and shows exactly what to do.

After completing the exercises, you should be familiar enough with MacPaint to strike out on your own. You can then refer to Chapter 2, "Using MacPaint," when you want instructions for specific MacPaint procedures. You can turn to Chapter 3, "MacPaint Reference," when you want to look up the meaning and use of a MacPaint command.

Before you use MacPaint, you should make a working copy of the program disk and keep the original in a safe place. Refer to your Macintosh owner's guide for information about copying disks. Use the working copy during the tutorials and when you create MacPaint documents on your own. If you use a hard disk with your Macintosh, copy the contents of the program disk onto the hard disk. Also make sure that the system you use is the same version (or later) of the system specified on the MacPaint box.

Starting MacPaint

1. Turn on the Macintosh.

Important	If you have copied the program disk onto a hard disk, locate the MacPaint application and sample documents on the desktop or open the folder that contains them and skip to step 4.

2. Insert a system disk in a disk drive.

3. Put the working copy of your MacPaint program disk in a disk drive.

An **icon** is an image that graphically represents an object, a concept, or a message.

After a few moments, the **icon** for the MacPaint disk appears. A window opens displaying the MacPaint program icon and an icon for a MacPaint document called *Landscape*, among several other icons (see Figure 1-1). You'll start by opening and examining the Landscape document.

Landscape document icon

MacPaint disk icon
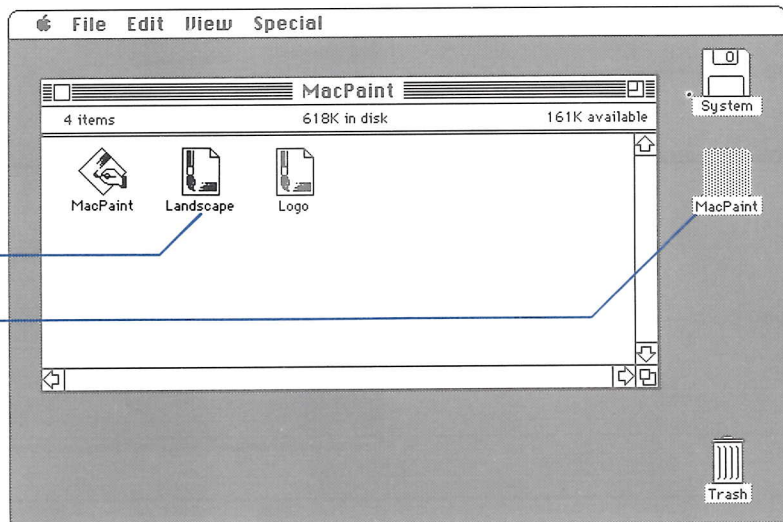
Figure 1-1
The MacPaint desktop

Important	If the window displaying the MacPaint program icon doesn't appear, either click the MacPaint disk icon to select it and then choose Open from the File menu, or double-click the MacPaint disk icon.

4. Either click the Landscape document icon to select it (the icon appears highlighted when selected) and choose Open from the File menu, or double-click the Landscape document.

After a few moments, a window opens showing a landscape created with MacPaint (see Figure 1-2). Later in this tutorial you'll complete the landscape by drawing a tree like the others pictured here and placing it over the X.

The drawing tools and patterns used to create a drawing such as the one in Figure 1-2 are found in the Tools and Patterns menus.

Menu bar
Close box
Title bar
Zoom box

Drawing area

Scroll bars

Size box
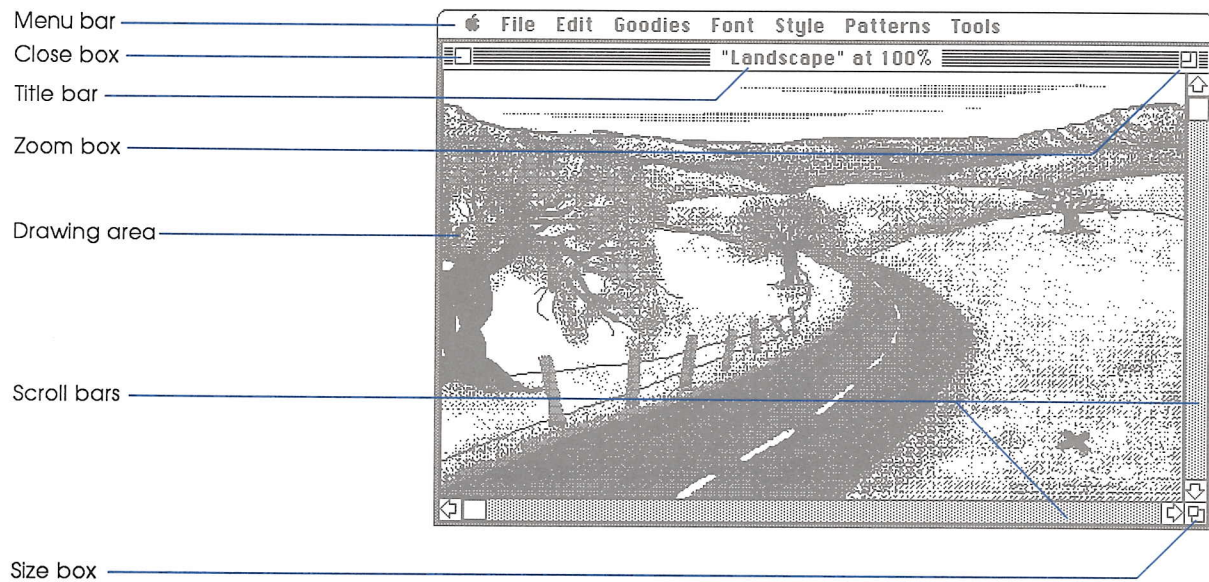
Figure 1-2
MacPaint landscape

❖ *By the way:* If you're using a large-screen monitor, you may wish to resize the window so that it approximately matches the screen size shown in the figure. That way, what you see on the screen will match the illustrations in this guide.

4. Position the pointer on the Tools menu and press and hold down the mouse button.

The Tools menu appears as shown in Figure 1-3.

Oval tool
Pencil
Eraser
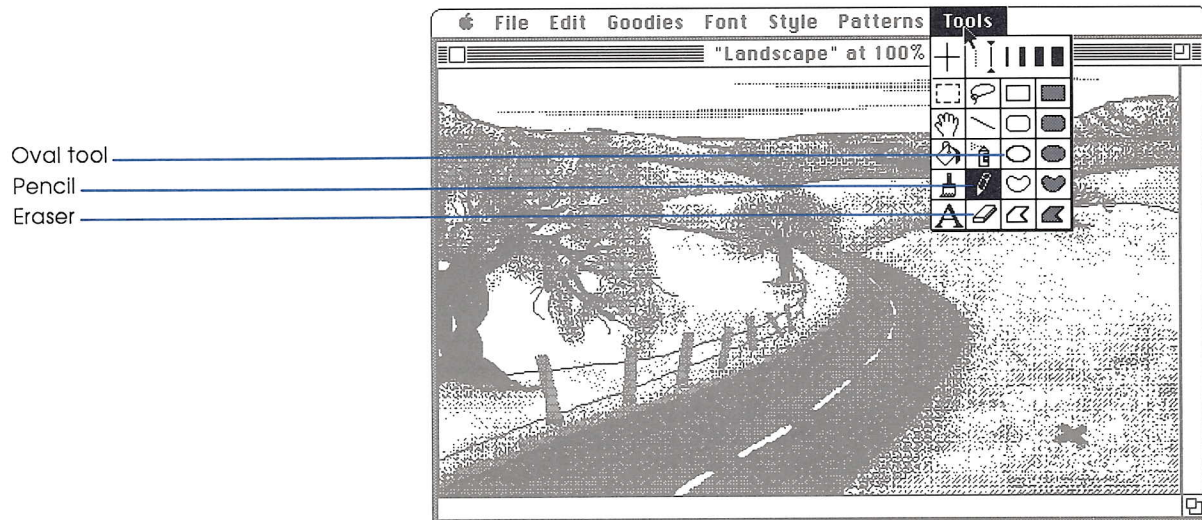
Figure 1-3
The MacPaint Tools menu

The Tools menu contains tools that let you draw lines and shapes, add patterns and text, and change your picture. For example, the **pencil** is used for drawing lines, the **oval tool** for drawing ovals and circles, and the **eraser** for erasing unwanted portions of a drawing.

If you like, you can "tear off" the Tools menu from the menu bar and place it anywhere on the screen.

5. **Hold down the mouse button to display the Tools menu and then move the mouse to drag the menu to the position shown in Figure 1-4. Release the mouse button.**

Tools menu drag bar
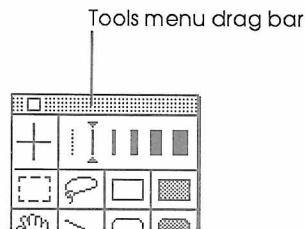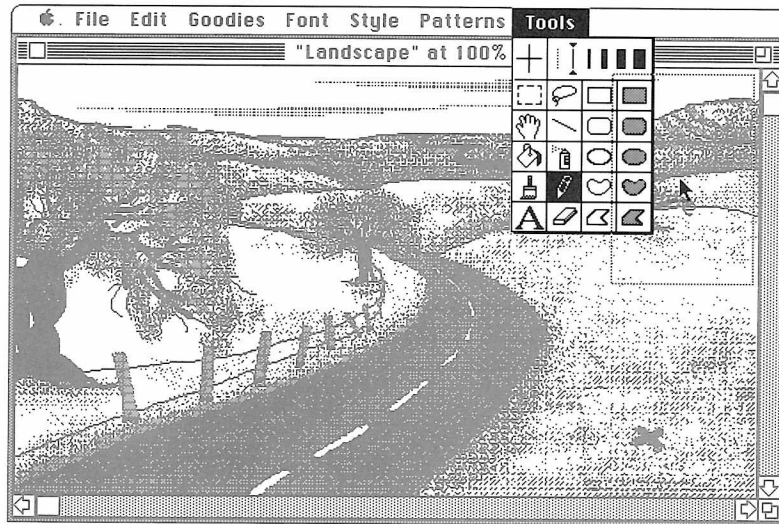
Figure 1-4
The Tools menu being torn off and repositioned on the screen

As you position the menu, an outline appears showing the location of the menu when you release the mouse button. If you want to reposition the menu, position the pointer on the drag bar at the top of the window and drag the menu to a new location. (You can also pull down the menu again, tear it off, and place it in a new position.)

Now examine the patterns you can use to create a MacPaint document.

6. **Position the pointer on the Patterns menu, press and hold down the mouse button, drag the menu to the position shown in Figure 1-5, and release the mouse button.**
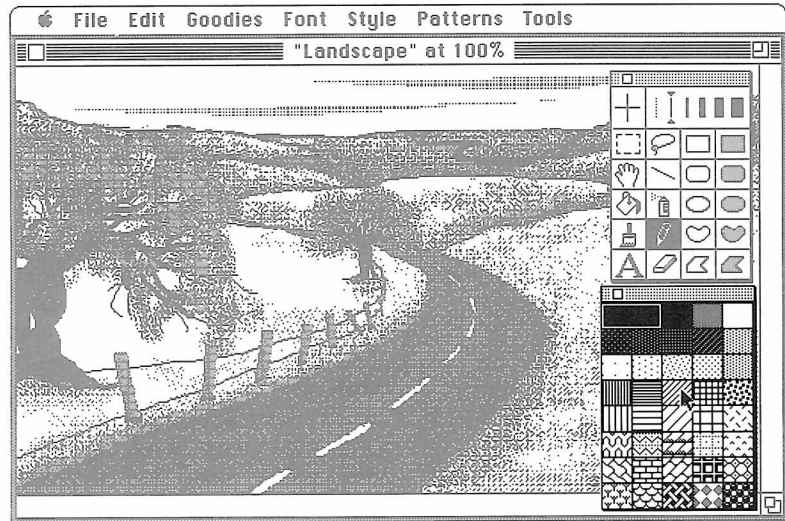
Figure 1-5
The Patterns menu torn off and repositioned on the screen

Similar to an artist's palette, the **Patterns menu** holds a selection of patterns ready for use in a drawing. You can apply patterns to the pictures you draw in much the same way as you apply paint. For example, you can use the paintbrush tool to add strokes of black, white, or any other pattern to your picture.

You can create MacPaint documents with or without the Tools or Patterns menus on the screen. If one of the menus gets in the way, drag the menu around the screen with the drag bar or click the close box to put it away. After you put a menu away, you can still choose a pattern or tool by pulling down the appropriate menu from the menu bar.

You can also have MacPaint record the way you like to work with the menus by choosing the **Preferences** command in the Goodies menu. After you indicate your preferences, MacPaint will set up the menus just as you want them each time you open the document.

Now you're set to start drawing. Your tools and patterns are in view, and you have a clear picture of the road ahead.

A quick tour of the tools

Next, you'll try each of the tools on the Tools menu. You'll use the tools to draw lines and shapes; to paint with patterns; to erase, reposition, and change parts of a drawing; to draw with lines of different thicknesses, or weights; and to add text to a document.

Important   As you complete the tutorial, you'll work with several documents on the screen at one time. If you have a 512K Macintosh, your computer cannot open more than two documents at a time. If you open two documents at the same time, you cannot use the Take Snapshot command because of memory limitations. During this tutorial, work with only one document open at a time. When asked to open a new document, close the currently open document and then open a new one.

Close the currently open document by choosing Close from the Edit menu. You may see a dialog box asking if you wish to save the document. Save the document, if you wish, but it is not necessary to save it to complete the tutorial. You can then choose New to open a new document. Tear off the Tools and Patterns menus as you did in the previous section and continue following this tutorial.

Drawing lines

Before you add anything to the landscape, you'll create a new document to use as a scratch pad for practice drawing.

1. Choose New from the File menu.

A new document appears partially covering the Landscape document. You now have two documents open at the same time.

Depending on how much memory your Macintosh has, you can work on up to nine documents at the same time. Now for some practice drawing.
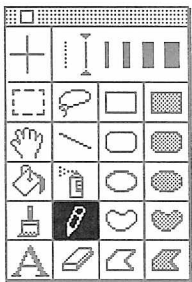
The pencil tool is currently selected. (If it is not selected, click the pencil tool on the Tools menu.) Notice that the pencil tool in the Tools menu is highlighted, and the pointer becomes a pencil whenever it is positioned over the drawing area.

2. **Position the pointer over the document at the place you wish to begin drawing a line.**

3. **Hold down the mouse button, move the mouse in the direction you want to draw, and release the mouse button to stop drawing.**

   Don't worry about how the line looks; this is just practice.

   If you do something you wish you hadn't, you can undo your last action.

4. **Choose Undo from the Edit menu.**

   Your line disappears, allowing you to draw a new one. Undo works on any command or drawing procedure that changes the content of a document. It undoes only the last action you took, however.

   Drawing straight lines can sometimes be a painstaking task with paper, pens, and rulers. Not so with MacPaint.

5. **Click the line tool on the Tools menu.**

6. **Position the pointer over the document at the place you wish to begin drawing a line.**
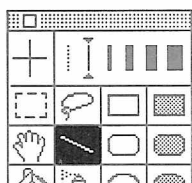
7. Hold down the mouse button, move the mouse in the direction you want the line to go, and release the button when you want to stop drawing.

As long as you hold down the mouse button, you can stretch and reposition the line as you wish. Try drawing several vertical, horizontal, and diagonal lines.
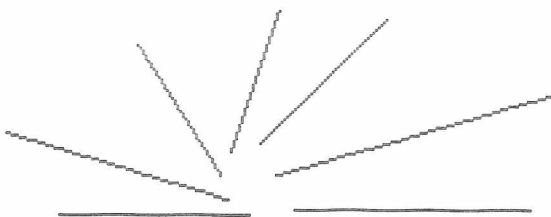
❖ *Note:* Most of MacPaint's tools work the same way, requiring you to hold down the mouse button, move the mouse, and release the mouse button to stop using the tool. From now on, instructions will simply ask you to *drag* with the mouse when using a tool.
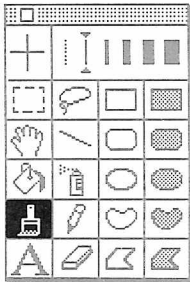
Painting

1. Click the paintbrush on the Tools menu.

In addition to painting with solid colors, you can choose a pattern to apply like paint.

2. Click a gray pattern in the Patterns menu, as shown in Figure 1-6.

Pattern box
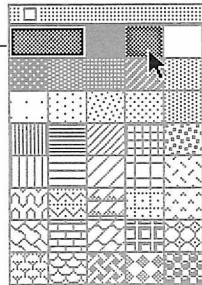
Figure 1-6
Selecting a gray pattern

The pattern you select appears in the pattern box at the top of the Patterns menu. MacPaint applies this pattern as you paint until you select a different pattern.

3. Position the pointer in the drawing area.

4. Drag the pointer across the document and release the mouse button to stop painting.

Try painting with several different patterns. Later, you'll learn to paint with brushes of different sizes and shapes.

Now see how the spray can lets you apply patterns using a different technique.
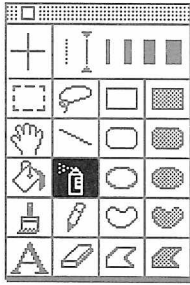
5. **Click the spray can on the Tools menu.**

6. **Click the brick pattern in the Patterns menu, as shown in Figure 1-7.**
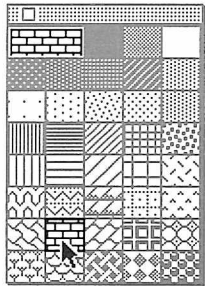
Figure 1-7
Selecting the brick pattern

7. **Position the pointer over the drawing area.**

8. **Drag the spray can pointer to apply the pattern; release the button when you want to stop.**
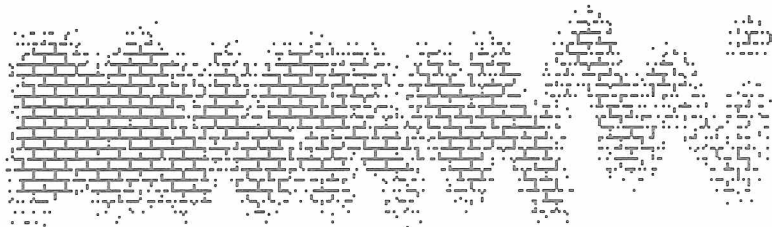
You can also point and click with the spray can to apply individual spots of paint. Notice that if you spray paint over the same spot, the pattern becomes more apparent. Try it.

You've experimented with drawing lines and painting. Now clean up some of your handiwork with the eraser.

Erasing

You use the eraser to sweep over and erase images and text, much like you use a chalkboard eraser. But what happens if you accidentally erase something you wanted to keep? MacPaint also provides a "magic" eraser that makes erased images reappear in your document.

1. Choose Take Snapshot from the File menu.

Whenever you're about to erase or to perform a drawing procedure that you're unsure of, you can take a snapshot of the document, so that MacPaint memorizes the way the document looks.

If you become dissatisfied with your drawing, you can later use the snapshot to return the document or a part of the document to the way it appeared originally. You'll see how this technique works in a moment, when you use the magic eraser.
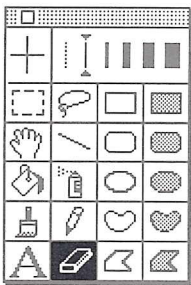
2. Click the eraser in the Tools menu.

3. Position the pointer over an image that you want to erase in the drawing area.

4. Drag the eraser and release the button when you want to stop erasing (see Figure 1-8).
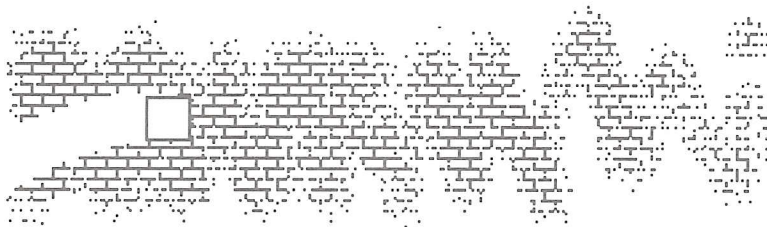
Figure 1-8
A picture being erased with the eraser tool

What if you erase too much? You can use the magic eraser to bring the original drawing back into view.

5. Hold down the Command key and drag the eraser over part of the document that's been erased.

The images in your document reappear. By alternating the eraser and the magic eraser, you can erase just the parts of the drawing that you want to eliminate.

If you want to erase an entire document, MacPaint provides a shortcut.

6. While holding down the Shift key, double-click the eraser tool on the Tools menu to erase the entire document.

With two clicks, the document is wiped clean, and you're ready for more drawing.

Rectangle tool

Rounded rectangle tool

Oval tool
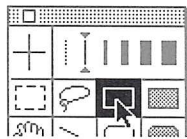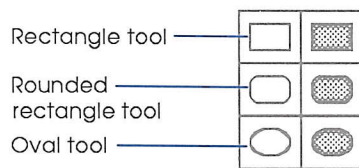
Figure 1-9
Selecting the rectangle tool

Drawing rectangles and ovals

MacPaint provides tools that make it easy to draw rectangles, ovals, circles, and squares. You can choose whether the shapes are hollow or filled with a pattern.

Now try drawing a few shapes.

1. Click the hollow rectangle tool in the Tools menu, as shown in Figure 1-9.

2. Position the pointer near the upper-left corner of the document, where the corner of the rectangle will appear.

The pointer becomes a crossbar, with the center point indicating where the rectangle will begin.

3. **Hold down the mouse button and drag diagonally to where the opposite corner of the rectangle should be, as shown in Figure 1-10.**
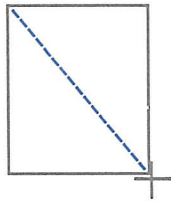
Figure 1-10
Drawing a rectangle

As long as you hold down the mouse button, you can adjust the size of the rectangle. Once you release the button, however, the rectangle is complete.

4. **Release the mouse button to stop drawing the rectangle.**

With the rectangle and oval tools, you draw shapes by dragging in the manner described here. From now on, instructions will simply tell you to *drag* diagonally rather than giving the steps for pressing and releasing the mouse button.

Next you'll draw rectangles, squares, ovals, and circles similar to those pictured in Figure 1-11.

Rectangle

Oval

Rounded rectangle
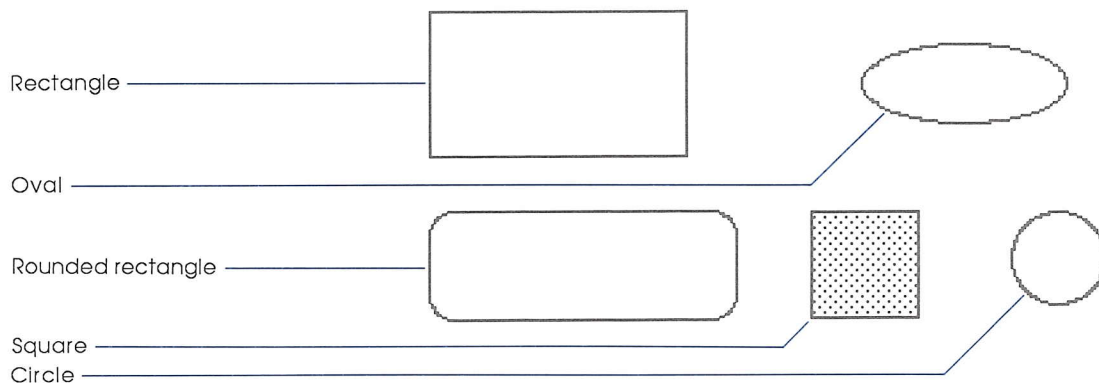
Square
Circle

Figure 1-11
A rectangle, a rounded rectangle, a square, an oval, and a circle

5. Click the filled rectangle tool (which appears gray next to the hollow rectangle tool in the Tools menu).

6. Drag diagonally with the mouse to draw a filled rectangle.

Isn't it amazing to draw rectangles that fill with a pattern so easily? You can fill rectangles or ovals with any pattern you select from the Patterns menu.

Here's how to draw squares.

7. Click a different pattern on the Patterns menu.

8. Hold down the Shift key and drag with the mouse to draw a filled square.

Holding down the Shift key as you draw **constrains** the rectangle tool so that it produces squares only.

To **constrain** a tool limits its use to drawing specific shapes or moving the pointer in specific directions.

9. Click the hollow rounded rectangle tool on the Tools menu.

10. Position the pointer over the drawing area and drag diagonally to draw a rounded rectangle.

11. Click the hollow oval tool in the Tools menu.

12. Position the pointer over the document and drag diagonally to draw an oval.

13. To draw a circle, position the pointer over the document, hold down the Shift key, and drag diagonally.

Try experimenting with the rectangle and oval tools as you practice drawing these shapes.

Using the grabber

After all your drawing, you may not have much room left on the screen. MacPaint documents can be as large as 8 by 10 inches, however. You can use the scroll bars to bring a different part of your document into view. MacPaint also provides a tool called the **grabber,** which is handy for quickly adjusting the position of a document on the screen.
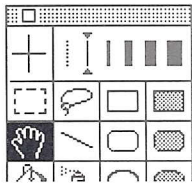
1. **Click the grabber on the Tools menu.**

2. **Position the pointer at the bottom of the screen.**

3. **Hold down the mouse button, drag toward the top of the screen, and release the button when you want to stop scrolling.**

   Scroll the document far enough to give you a nearly blank screen with more room for drawing. Your screen should look similar to Figure 1-12.
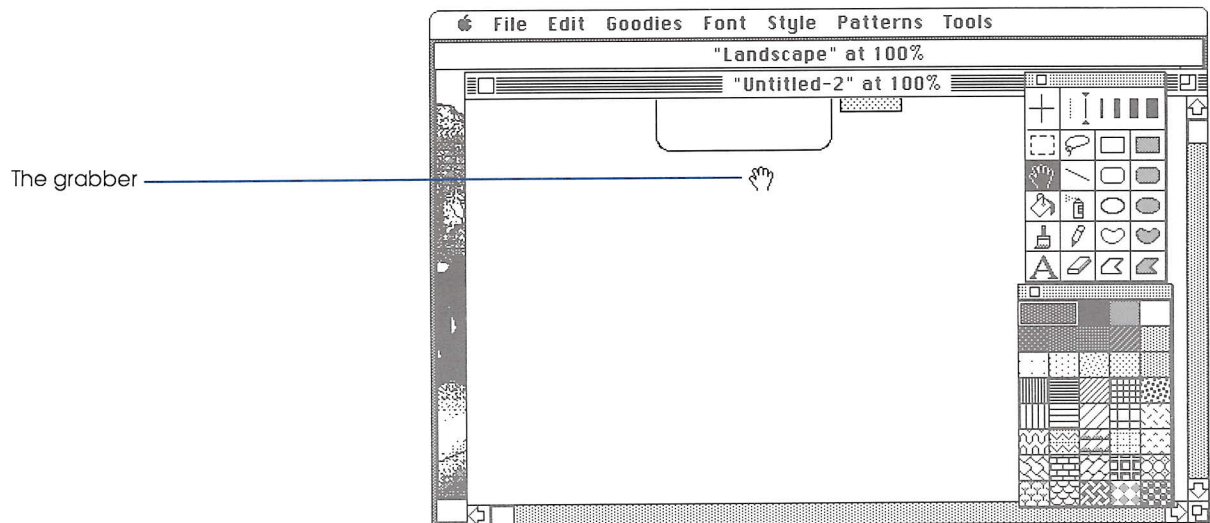
The grabber ————————————————

Figure 1-12
Scrolling with the grabber

❖ *Note:* Except for the text tool, any tool becomes the grabber if you hold down the Option key as you use the tool. This feature lets you easily position your document on the screen at any time.

Drawing freehand shapes and polygons

Sometimes you may want to draw irregular or curved shapes, such as pear shapes, or you may want to produce angular shapes made up of short connected line segments, such as triangles or stars.

You can draw curved irregular shapes with the freehand shape tool, and you can draw shapes made up of angles and lines with the polygon tool. As with the rectangle and oval tools, shapes drawn with the freehand shape and polygon tools can be hollow or filled.
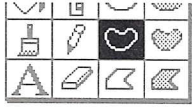
1. **Click the hollow freehand shape tool.**

2. **Drag the freehand shape pointer over the document as you draw a shape similar to the one shown in Figure 1-13.**

Figure 1-13
Freehand shape

Because this is your first try at drawing a freehand shape, don't worry if the shape doesn't match the one in the figure. Remember, you can always choose Undo from the Edit menu and try again.

3. Click the filled freehand shape tool.

4. Click a pattern on the Patterns menu.

5. Drag the freehand shape pointer over the document as you draw a shape similar to the one pictured in Figure 1-14.
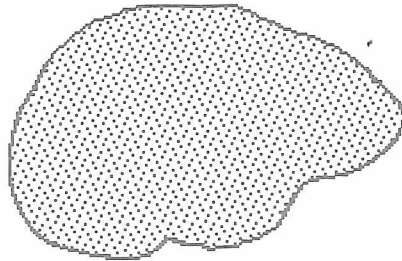
Figure 1-14
A filled freehand shape

Notice how the shape automatically fills with a pattern. If you draw a filled freehand shape in which the two ends of the line don't connect, MacPaint automatically connects the ends with a straight line and fills the shape's interior with a pattern.

Next, you'll draw a polygon.

6. Click the hollow polygon tool.

7. Position the pointer at the bottom of the document, hold down the Option key to display the grabber, and drag upward to make more room for drawing a polygon.

You'll draw a polygon similar to the one shown in Figure 1-15.
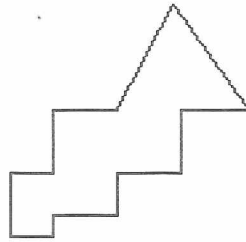
Figure 1-15
A polygon

8. To draw a polygon, position the pointer over the document and click to start drawing a line. (Don't hold the mouse button down; just click once.)

9. Move the mouse to where the end of the first line segment should be and click to tack down the line.

Now you can draw another line at a different angle from the end of the first line.

10. **Move the mouse to where the end of the second line segment should be and click once to tack down the line. Continue drawing line segments this way as you draw an incomplete polygon similar to the one in Figure 1-16.**

Figure 1-16
An incomplete polygon

You can leave a polygon open-ended as in Figure 1-16, or you can connect the last line to the first to create a closed polygon. To stop drawing a polygon, you either double-click where the last line segment should end or position the pointer on the starting point of the polygon and click once.

You'll close up this polygon.

11. **Move the mouse to the starting point of the polygon and click to create a completed polygon similar to the one shown in Figure 1-15.**

Painting with the paint bucket

After you draw a hollow shape—such as a rectangle, oval, freehand shape, or polygon—you can fill the shape with a pattern. You use the paint bucket tool to fill hollow shapes. The effect of the paint bucket tool is similar to pouring paint into a container (your hollow shape) until the shape is entirely filled.

To try out the paint bucket, you'll fill the polygon you just drew.

1. **Click the paint bucket tool.**

2. **Click the waffle pattern (or any other pattern you like) on the Patterns menu, as shown in Figure 1-17.**
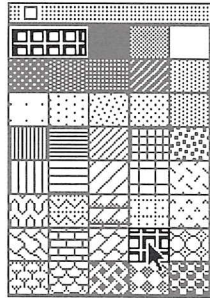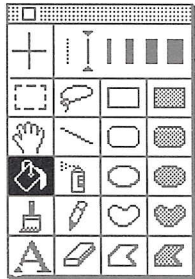
Figure 1-17
Selecting the waffle pattern
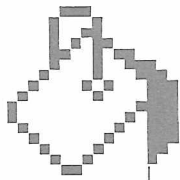
Tip of paint bucket

3. Position the tip of the paint dripping from the paint bucket within the polygon and click.

The polygon is filled with the pattern, as shown in Figure 1-18.
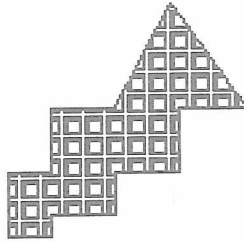
Figure 1-18
A filled polygon

Important	When you use the paint bucket, make sure no "leaks" (open white gaps) occur in the shape you're filing. A paint pattern can escape through the leak and fill more of the drawing than you intend. If you discover a leak, choose Undo to cancel the effect of the paint bucket, and close the leak by drawing across it with a drawing tool.

Choosing different line weights

As you draw lines and shapes in your documents, you'll probably want to vary the thickness of the lines. You can choose from five line weights (or thicknesses), and you can even specify that a shape be drawn with invisible lines (if you want a filled shape to appear with no line or border, for example).

The top part of the Tools menu lets you choose the weight of the lines drawn by the line and shape tools (although not with the pencil or painting tools.)

1. To draw in an empty document, choose New from the File menu.

A new empty document appears. Notice that it's called "Untitled-3" to differentiate this new document from the other untitled document that was covered up. You now have three drawings, or documents, open at once: Landscape, Untitled-2, and Untitled-3. You'll later learn how to quickly choose one document to work on from among several.

Next, you'll draw the oval and rectangles that appear in Figure 1-19.
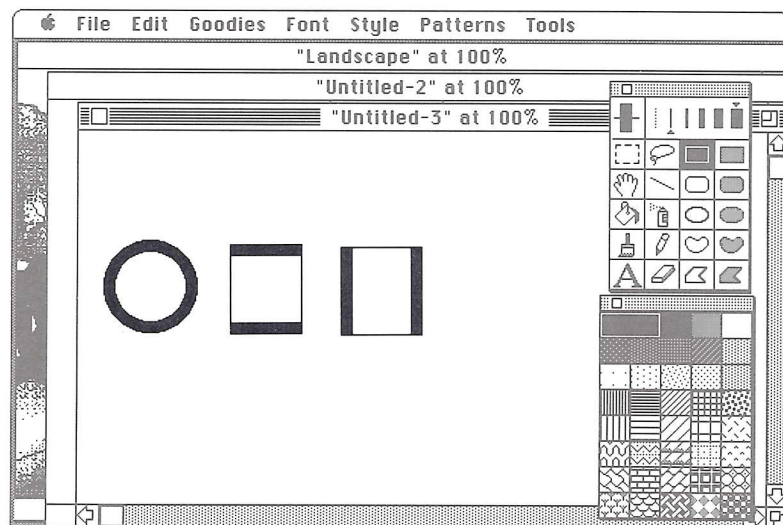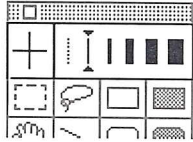
Figure 1-19
Shapes drawn with different line weights

Line weight indicator box
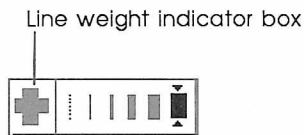
Figure 1-20
The thickest line weight
is selected

Figure 1-21
Selecting the thinnest
line weight
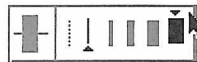
Figure 1-22
Combining the thinnest
line weight and the
thickest line weight
in one shape

2. Click the hollow oval tool in the Tools menu.

First you'll draw an oval with a thick border.

3. Position the pointer on the thickest line weight and click once to select it, as shown in Figure 1-20.

Arrows appear above and below the line weight you've selected. The line weight indicator box shows that this weight will be used for both horizontal and vertical lines.

4. Position the pointer over the drawing area and drag to draw an oval similar to the one in Figure 1-19.

Next, you'll draw a rectangle that has thick horizontal lines and thin vertical lines.

5. Position the pointer *above* the thinnest line weight (not on it) and click as shown in Figure 1-21. (Don't click on the dotted line weight, since that symbol selects an invisible line.)

The top arrow appears above the thinnest line weight, indicating that vertical lines will be drawn at this weight. An arrow also appears below the thick line weight previously chosen, showing that this weight remains selected for the horizontal line weight. The line weight indicator box in the upper-left corner of the Tools menu shows that you'll draw with thick horizontal lines and thin vertical lines.

6. Click the hollow rectangle tool.

7. Position the pointer and drag to draw a rectangle similar to the one in the center of Figure 1-19.

Last, draw a rectangle with thick vertical lines and thin horizontal lines.

8. Click *below* the thinnest line weight (not on it) and then click *above* the thickest line weight, as shown in Figure 1-22.

9. Position the pointer and drag to draw a rectangle similar to the one on the right in Figure 1-19.

You've seen how to change the thickness of the lines and borders in the shapes you draw.

❖ *Note:* If the vertical and horizontal lines weights aren't identical, any curves or diagonal lines you draw graduate from one weight to the other.

Using the selection tools

What if you want to copy an image, move part of a drawing to a new position, or enlarge or reduce an image? You can carry out all of these editing procedures, and many others, by using the selection tools. The selection tools allow you to select part of a drawing and drag the selection or choose a command to effect the change you want.

The two tools that let you select portions of your pictures are the selection rectangle tool and the lasso tool, shown in Figure 1-23.

Figure 1-23
The selection rectangle tool
and the lasso tool

You're going to move the oval you just drew to a new position. When you want to select an irregular shape, you use the lasso tool to select it.

1. **Click the lasso in the Tools menu.**

2. **Position the lasso pointer beside the oval.**

   To select an image, encircle it by dragging the lasso around it. The lasso trails a line from the tip of the lasso pointer.

3. **Drag the lasso in a complete circle around the oval to select it, as shown in Figure 1-24, and release the mouse button.**

The lasso trails a line from its tip
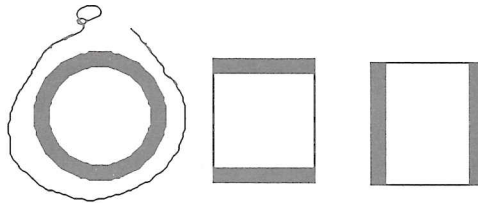
Figure 1-24
The oval encircled by the lasso tool

   When you release the mouse button, the lasso tightens to select the area enclosed by the black outline of the oval. The selected part of the picture shimmers.

4. **Position the pointer on the oval, hold down the mouse button, and drag the oval to the new position, as shown in Figure 1-25.**

Notice that the lasso becomes the arrow pointer when positioned on the selection, signalling that you can now drag the selection.
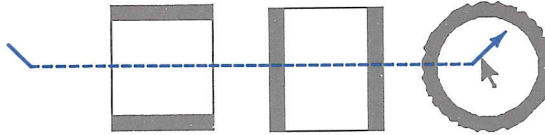
Figure 1-25
The oval dragged to a new position

Now you see how easy it is to rearrange the images you draw. When an image is selected, you can also choose a command to manipulate it.

5. **With the oval still selected, choose Copy from the Edit menu.**

6. **Click somewhere in the document to deselect the oval, and choose Paste from the Edit menu.**

A copy of the oval appears in the middle of the window.

7. **With the copy of the oval still selected, drag the oval to the position shown in Figure 1-26.**
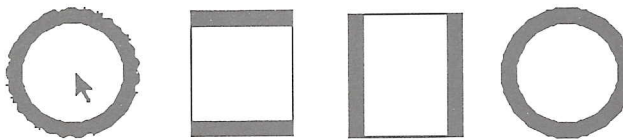
Figure 1-26
A duplicate oval moved to a different position

Another way to select part of a drawing is with the selection rectangle tool.

8. **Click the selection rectangle tool on the Tools menu.**

   To select images with the selection rectangle tool, drag to draw a rectangle around the images.

   Now reduce one of the rectangles you drew to half its size. Begin by selecting it with the selection rectangle tool.

9. **Position the pointer at one corner of the rectangle you want to select and then drag diagonally until the rectangle is totally encompassed by the selection rectangle, as shown in Figure 1-27. Release the mouse button.**

Figure 1-27
A rectangle selected with the selection rectangle tool

When you release the mouse button, a dashed rectangle shimmers around the selected image. Notice that the **selection box** does not shrink to fit the image and that it selects not only the area within the rectangle, but white space around the selected image as well.

A **selection box** is a box drawn with the selection rectangle. All images enclosed by the box are selected.

10. With the rectangle selected, choose Scale Selection from the Goodies menu.
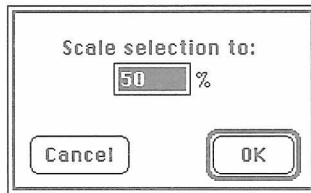
Figure 1-28
The Scale Selection dialog box

The dialog box shown in Figure 1-28 appears, asking you to type the percentage of enlargement or reduction you wish. For example, to enlarge a selection to twice its size, you type "200" (for 200-percent enlargement). To reduce the rectangle to half its size, you type "50" (for 50-percent reduction).

11. The dialog box is preset for 50-percent reduction, so click OK. (If a number other than 50 appears, type "50" in the dialog box and click OK.)

As Figure 1-29 shows, the lines making up the selected rectangle shrink to half their previous size.
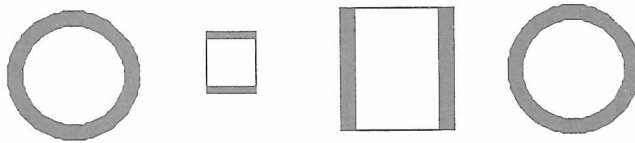
Figure 1-29
The selected rectangle has been reduced

In addition to enlarging and reducing parts of a drawing, you can use other MacPaint commands to make such changes as rotating or flipping a selection. After you finish this tutorial, refer to Chapter 3, "MacPaint Reference," for more information about MacPaint commands.

Adding text to a document

A picture can be worth a thousand words, but a diagram without words can be confusing. You can easily add words to a document with the text tool. Your text can appear in any number of fonts, fonts sizes, and font styles.

1. **Click the text tool on the Tools menu.**

   Now add a caption under the ovals and rectangles in the document.

2. **Position the I-beam pointer (shaped like the capital letter *I*) over the document under the ovals and rectangles and then click.**

3. **Type "Four MacPaint Images," as shown in Figure 1-30.**

Text insertion point
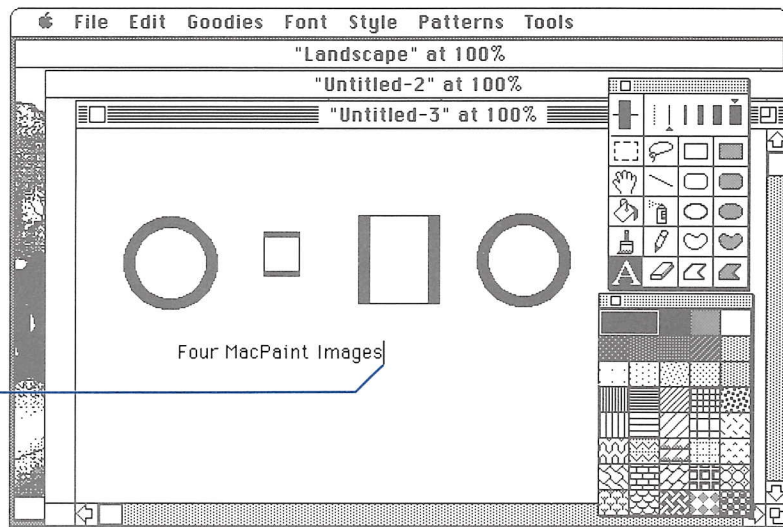
Figure 1-30
Typing a caption

Until you click the mouse button or choose another tool, you can backspace to make corrections; press Return to start a new line; and change the font, font size, font style, and alignment of the characters you've typed.

4. Choose New York from the Fonts menu.

Your text changes to a different font.

One **point** equals about 1/72 inch, so 18-point characters are about 1/4 inch high.

5. Choose 14-point size from the Style menu.

The text enlarges to 14-point size. Try experimenting with different fonts, font sizes, and font styles to familiarize yourself with adding text to your drawings.

Now that you've had an introduction to MacPaint's tools, you can get back on the road in the next exercise and complete the landscape you saw earlier.

Exercise 1: Drawing a tree

In this exercise, you'll draw a tree and complete the Landscape document so that it looks similar to the picture in Figure 1-31. You'll draw the tree in one document and then copy it into the Landscape document.

Figure 1-31
MacPaint landscape

1. **Choose New from the File menu.**

   A new document appears on screen.

2. **Click the paintbrush on the Tools menu.**

3. **Choose Brush Shape from the Goodies menu.**

4. **Choose the next-to-the-largest round brush shape by clicking it in the Brush Shape dialog box, shown in Figure 1-32.**

   When you click a brush shape, the dialog box disappears.
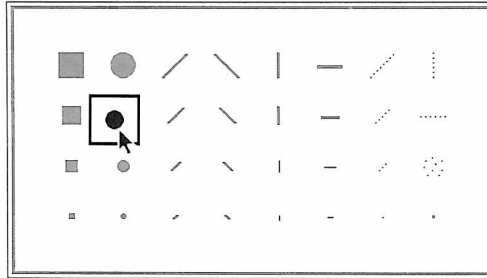
Figure 1-32
Brush shapes from the Brush Shape dialog box

Tree trunk

5. Near the middle of the window, paint a tree trunk with branches. Make it about the same size as in the figure.

Hint: Your tree will look best if each stroke begins in the trunk and ends with a branch.
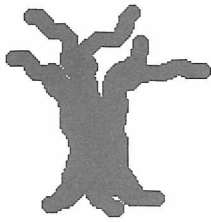
Adding branches

6. Choose Brush Shape from the Goodies menu. Choose the next-smallest paintbrush in the Brush Shape dialog box, and add smaller branches to the tree.
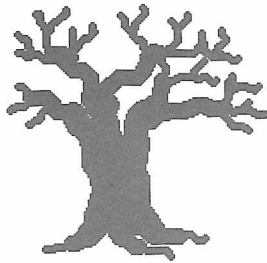
Tree with two sizes of branches

7. Choose Brush Shape from the Goodies menu, choose the smallest round paintbrush shown in the dialog box, and add smaller branches to the tree.

You might also add some roots around the base of the tree.
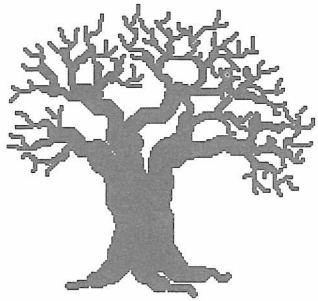
Tree with three sizes of branches

8. Again, choose Brush Shape from the Goodies menu. Choose the smallest paintbrush available, which is a single dot (in the bottom right of the Brush Shape dialog box). Then add smaller branches to the tree.

Now with the branches drawn, you can add some foliage. But before you do, take a snapshot of your tree so that you can erase or alter parts of your drawing and then use the magic eraser as you work.
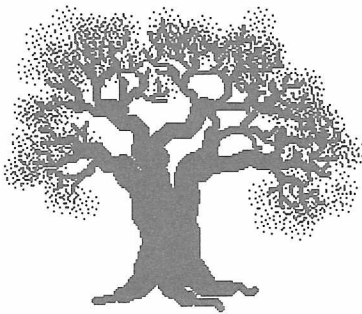
Tree with light foliage

9. Choose Take Snapshot from the File menu.

Now you can use the magic eraser any time you want to erase and redraw the tree as you add foliage to it.

10. Click the spray can tool on the Tools menu.

11. Point and click with the spray can to add spots of paint to the outer branches.
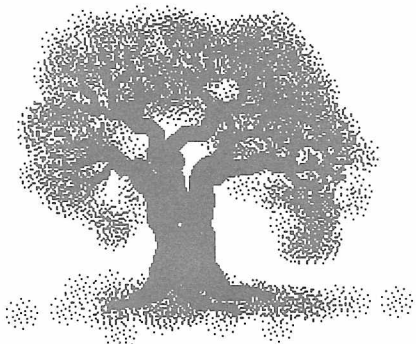
Tree with darker foliage

12. Drag the spray can in short strokes to darken foliage on the inner branches.

With the tree complete, it's time to select it and place it in the Landscape document.
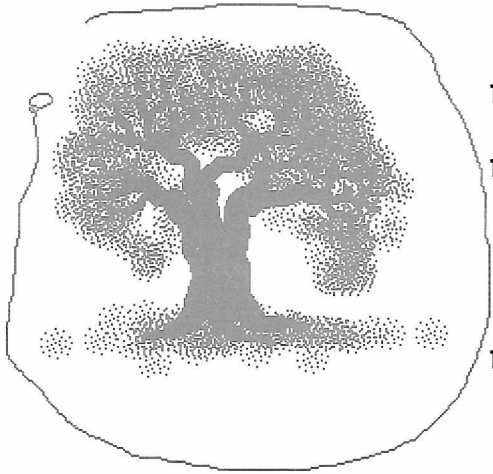
13. Choose the lasso from the Tools menu and use it to select the tree.

14. Choose Copy from the Edit menu.

The Copy command puts a copy of the selection onto the Clipboard, a part of memory that holds information being moved or copied from one place to another.

Now bring the Landscape document back into view.

15. Choose Landscape from the Goodies menu.

All the open documents are listed at the bottom of the Goodies menu. When you choose a document name, that document moves to the active window.

Important   If you have a 512K Macintosh, you cannot open more than one document at a time. Instead of choosing Landscape from the Goodies menu, you must close the current document, saving it on the disk, if you wish, and then open the Landscape document. Tear off the Tools and Patterns menu and position them on the screen as you did in the beginning of the tutorial.

Your screen should look like Figure 1-33. You'll place the tree on the right side of the road.

16. Click the close box on the Patterns menu to put the menu away.

The X, where you will place the tree, comes into view.
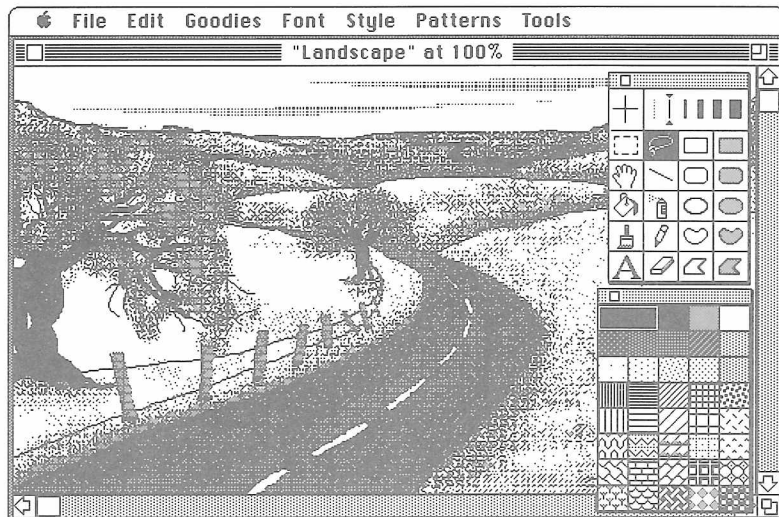
Figure 1-33
Landscape

17. Choose Paste from the Edit menu.

A shimmering copy of the tree appears in the center of the window.

18. Position the pointer on the tree and drag the tree to where the X is located on the right side of the landscape. Then click somewhere else in the document to deselect the tree.

Voilà! You've completed your first work of MacPaint art.

19. Save the document by choosing Save As from the File menu.

20. Type a name for the document and click Save.

Exercise 2: Creating a business logo

Getting down to business now, you'll create a logo for a pie company. You'll draw the company's apple pie emblem and complete the logo shown in Figure 1-34.
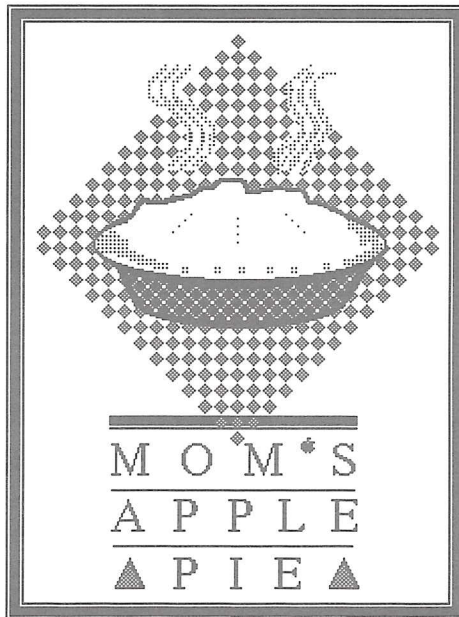
Figure 1-34
Completed business logo

1. **Close all the open documents.**

   To keep the screen from being too crowded, close the documents currently open. To close a document, you first activate the document by clicking in it or by selecting its name from the Goodies menu. Then choose Close from the File menu or click the close box on the left side of the title bar. You can save the documents if you wish, but it's not necessary for this exercise.

2. **Choose New from the File menu to open a new document.**

3. **Tear off the Tools and Patterns menus and position them on the screen where you wish.**

4. **Choose the light vertical and heavy horizontal line weights from the Tools menu.**

   You'll begin by drawing the top of the pie.
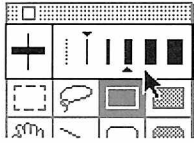
Choose these line weights
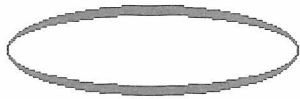
An oval as the top of the pie

5. Use the hollow oval tool ⬭ **to draw an oval of approximately the same size as shown here.**

Because pies aren't perfectly flat, you'll erase part of the oval and draw an irregular mounded top.

Erase part of the pie top

6. Click the eraser tool ▱ **and erase the top third of the pie.**

7. Choose Brush Shape from the Goodies menu and then click the small round brush shape.

Draw the pie top

8. Use the paintbrush tool ▱ **to draw the top of the pie as an irregular mound.**

Now, draw the bottom of the pie pan.
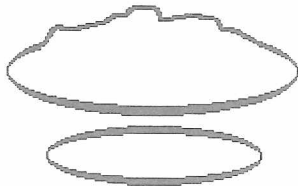
Draw the pan bottom

9. Click the hollow oval tool ⬭ **and draw another, slightly smaller oval under the top of the pie as the pan bottom.**

For ease of drawing, draw the pan bottom well below the top of the pie. You can then select and move the pie top into place.

10. Click the lasso tool, ⬭ **lasso the top of the pie to select it, and drag the pie top down over the pan bottom.**

Remember, the lasso tool is best for selecting the pie top, because the area you lasso shrinks to fit the image, allowing you to drag the pie top closely down over the pan bottom.

Draw sides of pie pan

11. Click the line tool ⬜ and draw the sides of the pie pan.

Paint out the unwanted lines

12. Click the paintbrush tool, 🖌 click the white pattern, and paint out the unwanted curved lines inside the pan.

Painting with white paint can have the same effect as erasing. You can choose different size paint brushes to paint out unwanted images in tight spots that the eraser might not fit within.
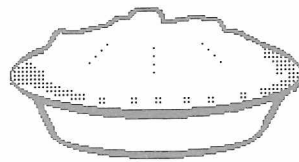
Shade the pie crust

13. Choose a gray pattern from the Patterns menu and add some shading to the pie crust with the paintbrush.

You can use shading to add contrast and heighten the interest of a drawing. Apply just enough paint to the pie top to create the sense of an irregular surface.
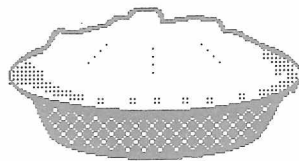
Shade the pie pan

14. Click the paint bucket tool, 🪣 click a dark pattern of your choosing, and click within the pie pan to fill it with the pattern.

Filling the pie pan with a dark color is easy with the paint bucket and provides contrast that makes the pie stand out.

If paint leaks through a break in the outline: Choose Undo from the Edit menu, repair the leak, and fill the pie pan again.

Now move the pie emblem into the background of the company logo, which has already been drawn for you and saved on disk.

15. **Click the lasso, drag around the pie to select it, and choose Copy from the Edit menu.**

   A copy of the pie emblem is now on the Clipboard ready to be pasted into another document.

16. **Choose Open from the File menu, click the document name Logo, and click Open.**

Important If you have a 512K Macintosh, you cannot open more than one document at a time. Close the current document, saving it on the disk, if you wish, and then open the Logo document. Tear off the Tools and Patterns menu and position them on the screen as you did in the beginning of the tutorial.

You're all set now to paste the pie into this document and complete the logo.

17. **Choose Paste from the Edit menu.**

18. **Drag the selected pie into position, as shown in Figure 1-35, and click somewhere else in the document to deselect the pie.**

Figure 1-35
Completed logo

The company logo is complete—thanks to you and MacPaint.

19. **If you want to keep the logo, choose Save As from the File menu, type a new name, and click Save.**

What next?

You've now completed the tutorial. From this point, you can

☐ go on to Chapter 2, "Using MacPaint," which provides step-by-step instructions and tips for performing common drawing tasks.

☐ go on to Chapter 3, "MacPaint Reference," which explains the commands found in menus and dialog boxes.

☐ put this book aside and explore MacPaint on your own.
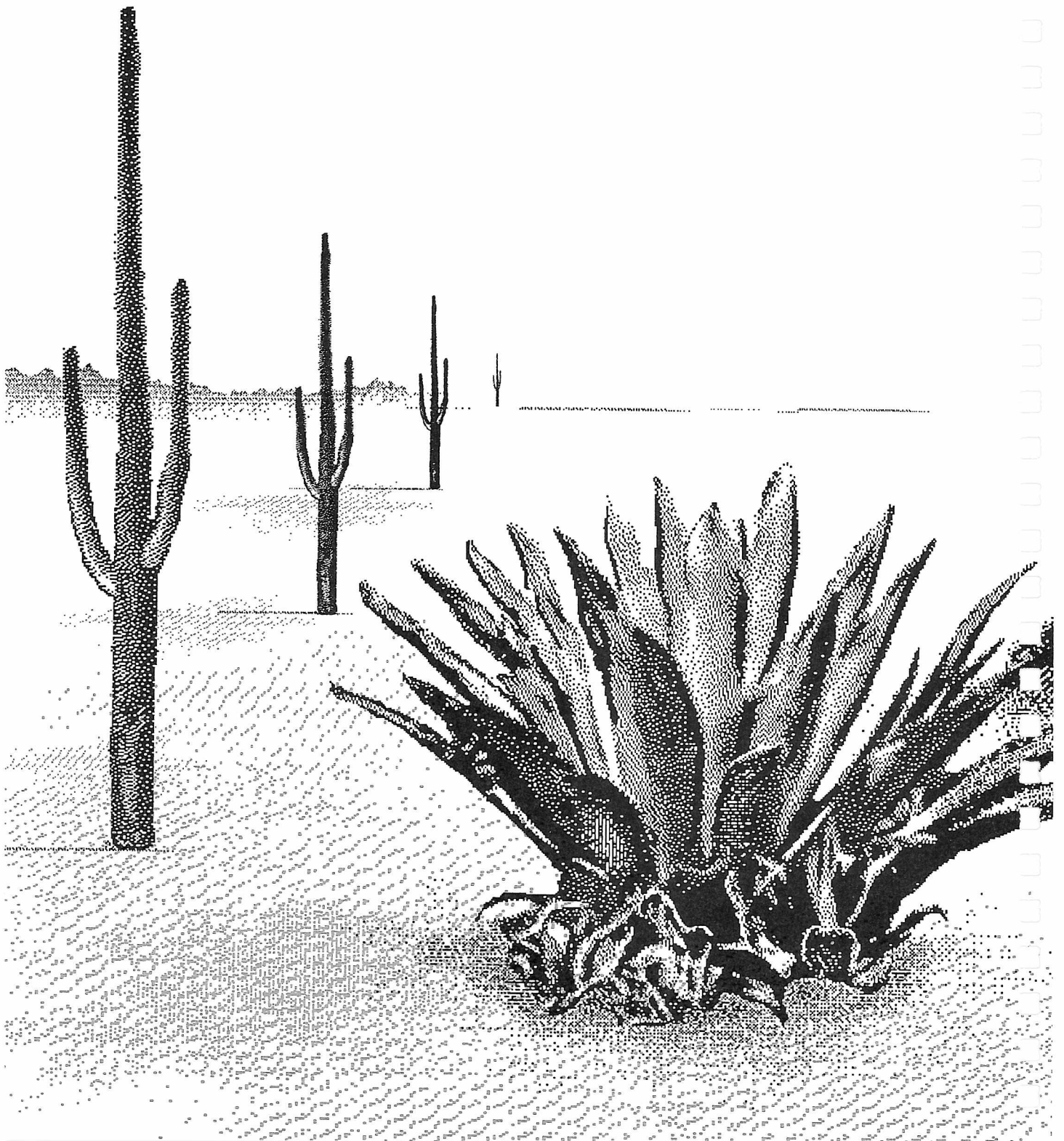
Chapter 2

Using MacPaint
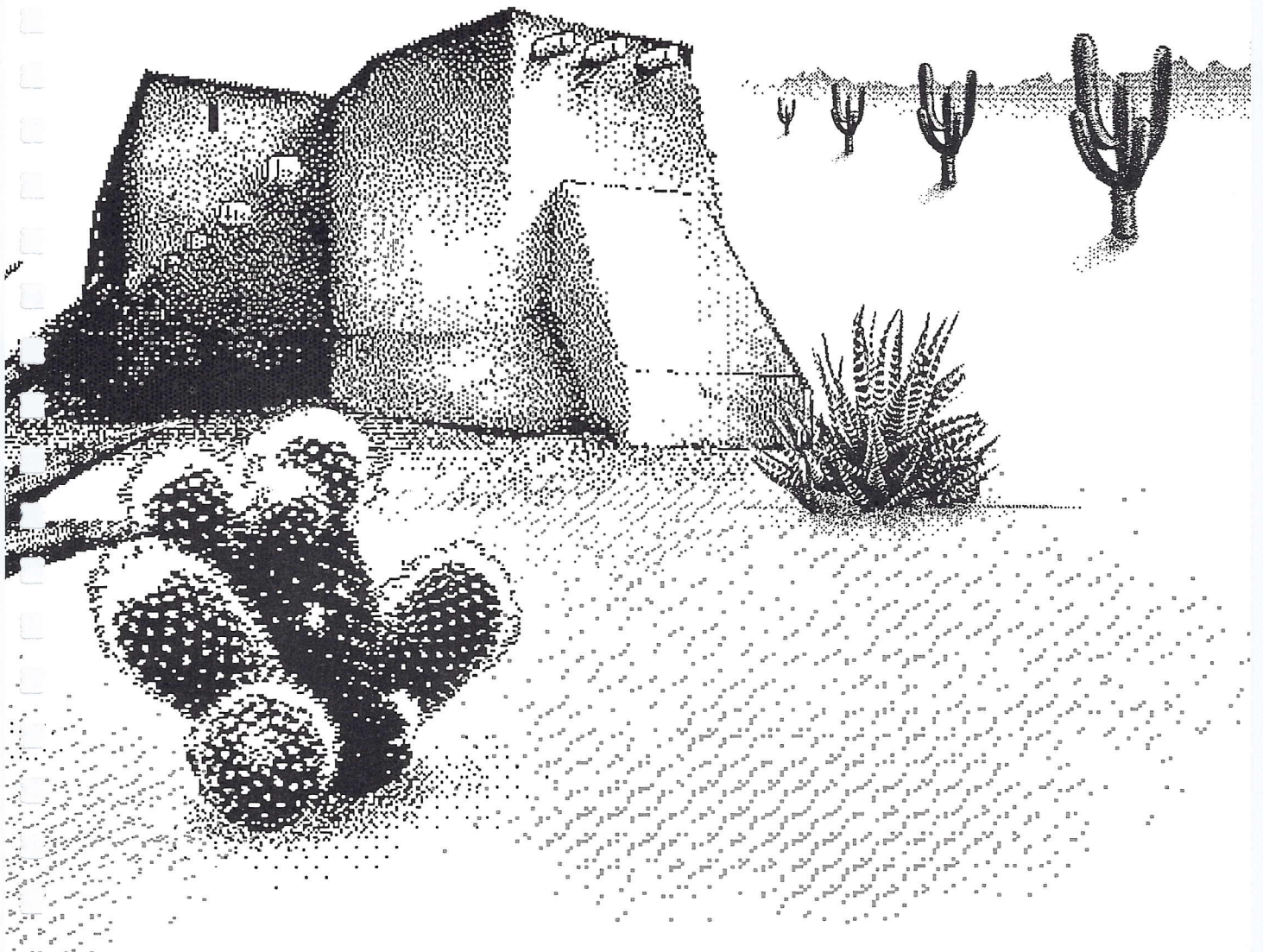
Chapter 2, "Using MacPaint," explains the basic procedures for using MacPaint. You don't have to read this chapter from beginning to end; each topic in this chapter is independent of the others. When you're not sure how to perform a specific task, such as printing part of a document, look up the procedure here and follow the step-by-step instructions.

If you want the essential steps only, without a lot of explanation, read the material in **boldface.** When steps are numbered, follow them in order. Bulleted text offers tips or alternative procedures that you may find useful.

Using the Tools and Patterns menus

You'll use the Tools and Patterns menus more often than the other MacPaint menus because they provide the tools and patterns used to create pictures. For efficient drawing, you can keep these menus on the screen while you work and you can move them around to convenient positions.

You can also pull down the Tools and Patterns menus and choose from them just as you do with other menus —what you choose is represented by a graphic image rather than a written command.

When you move the pointer over the document after choosing a tool, the pointer's shape indicates the tool you've chosen. For example, when you choose the paint bucket from the Tools menu, the pointer takes the shape of a paint bucket.

To keep the Tools or Patterns menu on the desktop

1. **Pull down the Tools or Patterns menu (don't release the mouse button).**

2. **Drag the pointer beyond the boundary of the menu.**

   A dotted outline of the menu follows the pointer.

3. **Release the mouse button when the outline is where you want the menu to be.**

   The menu snaps into place.

   You can now choose a tool or pattern by clicking it.

To move or put away the Tools or Patterns menu

■ **Position the pointer on the drag bar and drag to move the menu to a new position.**

You can also pull down a menu and tear it off again to relocate it on the screen.

■ **Click the close box on the left side of the drag bar to put away the menu.**

Click here to put the menu away   Drag here

Tools menu   Patterns menu
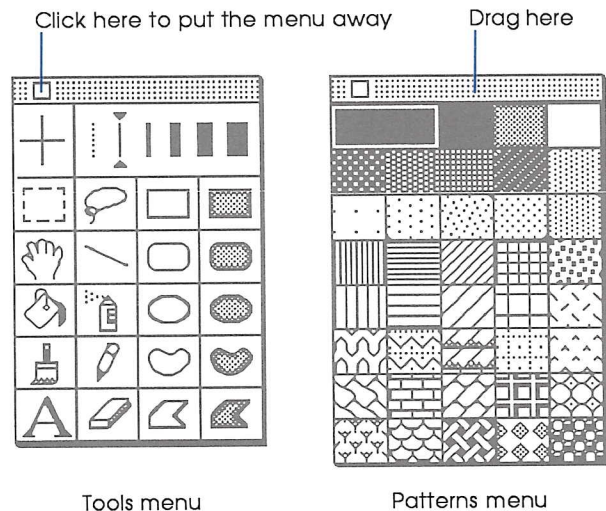
To constrain tools

You can limit, or *constrain*, the movement of several of the tools in the Tools menu so that they draw or select images in specific ways. If you hold down the Shift key while using one of these tools, it is constrained in the ways described here. Use Caps Lock to constrain tools continuously.

■ **Hold down the Shift key while using the paintbrush, spray can, pencil, or eraser to move vertically or horizontally only, but not diagonally.**

■ **Hold down the Shift key while using the line tool or polygon tool to move vertically, horizontally, or at a 45-degree angle only.**

■ **Hold down the Shift key while drawing with the oval tool or rectangle tool to draw circles or squares only.**

To brush on patterns

You can use the paintbrush or spray can with any of the patterns in the Patterns menu. You can change the shape of the brush and paint symmetrical forms. When you're painting, MacPaint patterns are preset to be opaque and cover whatever you paint over. However, you can make them **transparent** so they blend with whatever you paint over.

1. **Choose the paintbrush from the Tools menu.**

   If you desire, choose a different pattern from the Patterns menu.

2. **Position the paintbrush pointer in the document.**

3. **Drag to brush on the pattern and release the mouse button to end the stroke.**

- To paint with transparent patterns, hold down the Command key while dragging the paintbrush.

- Hold down the Shift key or press the Caps Lock key as you paint to make brush strokes that are vertical or horizontal only.
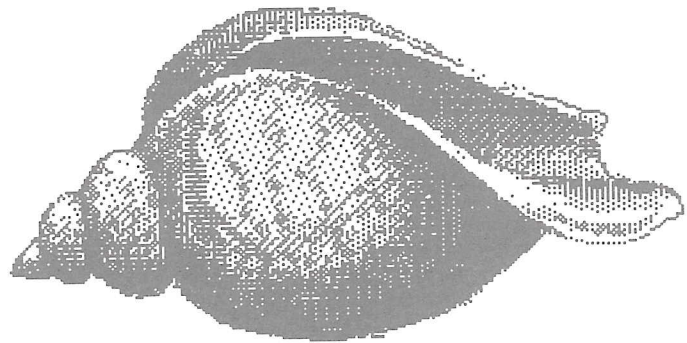
To change the brush shape

1. **Choose Brush Shape from the Goodies menu, or if the Tools menu is on the desktop, double-click the paintbrush tool.**

   A dialog box appears with brush shapes and a square around the current shape.

2. **Click a brush shape.**

   Clicking the selected shape closes the dialog box. The next time you use the paintbrush, it will paint with the new shape.
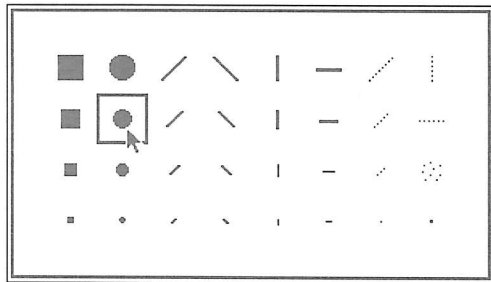
To spray paint

1. **Choose the spray can from the Tools menu.**

   If desired, choose a different pattern from the Patterns menu.

2. **Position the spray can pointer in the document and click to spot spray. Drag the pointer to spray continuously.**

   The spray can paints with the selected pattern—except that each pass of the spray can pointer paints only part of the pattern. If you keep dragging the pointer back and forth over the same area, the full pattern eventually appears.

- **Hold down the Shift key or press the Caps Lock key as you paint to spray strokes that are vertical or horizontal only.**

- **To spray paint with transparent patterns, hold down the Command key while dragging the spray can.**
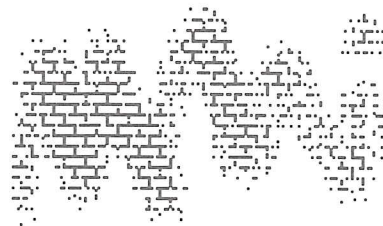
To paint mirror images

1. Choose Brush Mirrors from the Goodies menu.

A dialog box appears with lines that represent four axes of symmetry.

2. Click to select one to four of the axes lines in the box.

To deselect a selected axis, click it again.

3. Click OK.

Whenever you paint with the paintbrush, the brushstrokes on one side of the center of the window are duplicated as a mirror image on the other side along the selected axis. You can create up to four pairs of mirror images.

A check appears next to Brush Mirrors in the Goodies menu to indicate it's active.

You can use Brush Mirrors at the 100-percent and 50-percent zoom levels only.

■ **To turn off Brush Mirrors, choose Brush Mirrors from the Goodies menu and click None.**

Drawing lines and shapes
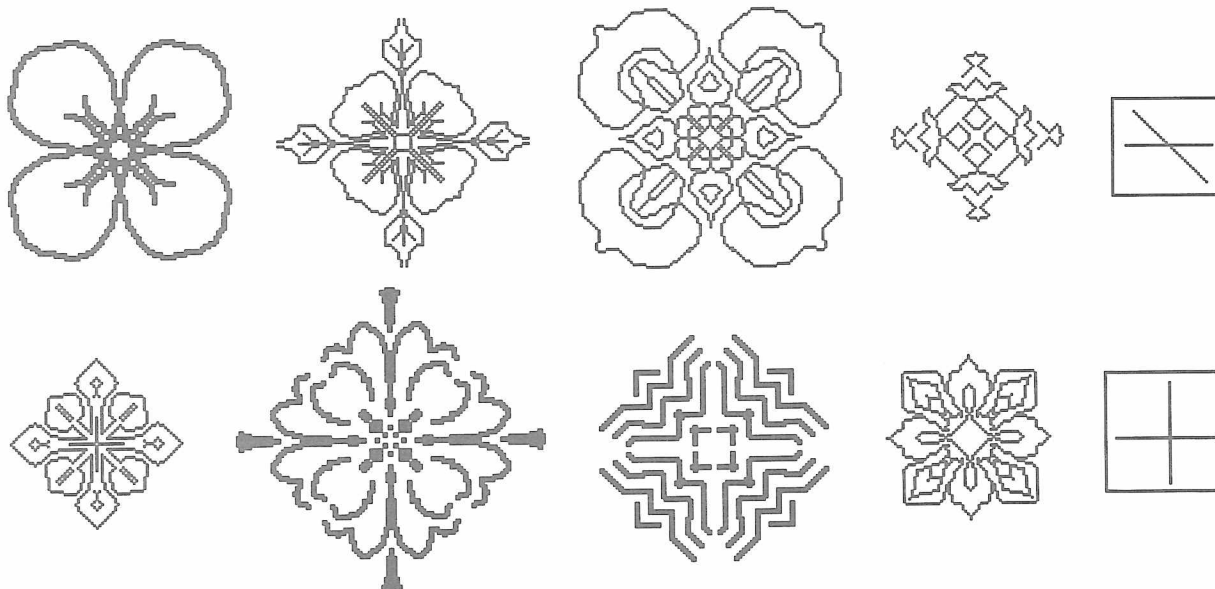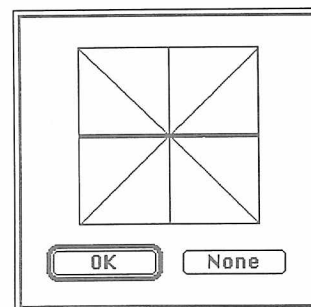
MacPaint lets you draw lines, rectangles, rounded rectangles, squares, ovals, circles, freehand shapes, and polygons.

A shape can be hollow (just an outline), or filled with a pattern, including black or white.

MacPaint is preset to draw shapes starting from a corner, but you can also draw shapes from the center out.

The pointer appears as crosshairs to allow accurate positioning. You use its center to mark the starting point for your line or shape.

While drawing, you can use the Shift or Caps Lock key to constrain lines and shapes—for example, you can limit the rectangle tool to drawing squares.

To learn about the special effects you can attain by overlapping filled shapes, see "Option-Command Pattern Effect" in Chapter 3.

Rectangle tool

Rounded rectangle tool

Oval tool

Freehand shape tool

Polygon tool
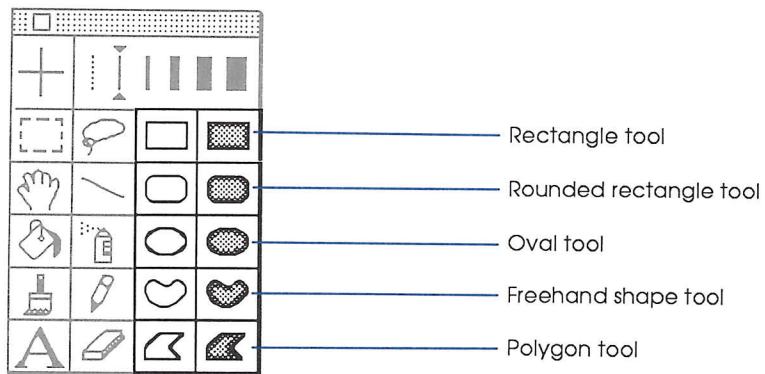
To draw straight lines

1. Choose the line tool from the Tools menu.

2. Position the pointer where you want the line to begin.

3. Drag the pointer to where you want the line to end.

   If no line appears, the dotted line instead of solid in the Tools menu may be selected for drawing borderless filled shapes. See "To Choose Line Weights" in this section.

   ■ Hold down the Shift key or press the Caps Lock key to draw lines that are all vertical, horizontal, or at a 45-degree angle only.
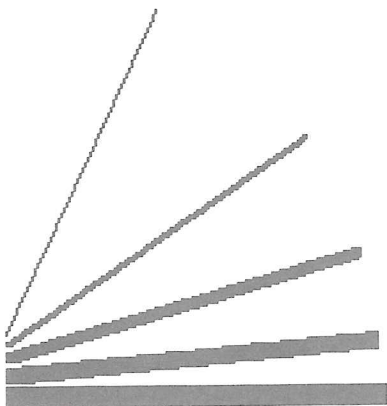
To draw a rectangle or square

1. Choose a rectangle tool from the Tools menu.
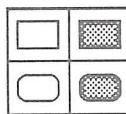
   Choose either the hollow or filled rectangle or rounded rectangle tool. If you desire, choose a different pattern from the Patterns menu when drawing with a filled tool.

2. Position the pointer where you want one corner of the rectangle to appear.

3. Drag the pointer diagonally.

4. Release the mouse button when the rectangle is the size and shape you want.

   ■ To draw a square or rounded square, hold down the Shift key or press the Caps Lock key while you use the rectangle tool.
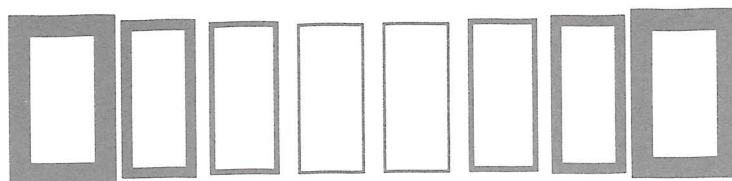
To draw an oval or circle

To draw a shape from the center out

1. **Choose an oval tool (either filled or hollow) from the Tools menu.**

   Choose either the hollow or filled oval tool. If you desire, choose a different pattern from the Patterns menu when drawing with the filled tool.

2. **Imagine that the oval is going to be enclosed by a rectangle, and position the pointer at one corner of that imaginary rectangle.**

3. **Drag the pointer diagonally.**

4. **Release the mouse button when the oval is the size and shape you want.**

   ■ **To draw a circle, hold down the Shift key or press the Caps Lock key while you use an oval tool.**

1. **Choose Draw From Center from the Goodies menu, and then choose the desired drawing tool.**

   If the Tools menu is on the desktop, you can instead double-click a rectangle or oval tool in the Tools menu.

   Crosshairs appear within each of the affected shape tools in the Tools menu. Any shapes drawn with these six tools will be drawn from the center outward.
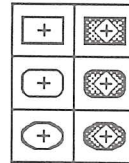
2. **Position the pointer where you want the center of the shape to be and drag to draw the shape.**

   ■ **To draw a square or circle from the center, hold down the Shift key or press the Caps Lock key as you drag the tool.**

   ■ **To turn off Draw From Center, choose Draw From Edge from the Goodies menu or double-click one of the affected tools in the Tools menu.**
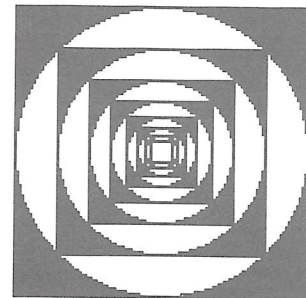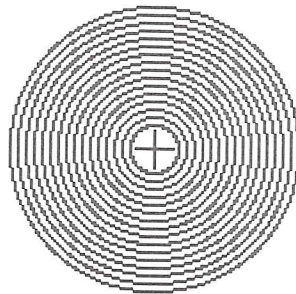
To draw a polygon

1. **Choose a polygon tool** from the Tools menu.

   Choose either the hollow or filled polygon tool.

2. **Position the pointer where you want to begin the polygon.**

3. **Click the mouse button.**

4. **Move the mouse to draw a line (do not hold the mouse button down).**

5. **Click when you wish to stop drawing the line and want to start drawing another line at a different angle.**

   A line follows behind the pointer and moves until you determine the end point for that line by clicking. Make any straight-sided shape you want. The lines can cross over each other.

6. **To complete the polygon, either click the original starting point or double-click anywhere else.**

■ **Hold down the Shift key or press the Caps Lock key to draw lines that are all vertical, horizontal, or at a 45-degree angle only.**

   If you don't close up a filled polygon, MacPaint closes it automatically with a straight line connecting the starting and ending points and fills the shape. Hollow polygons remain as drawn.

To draw a freehand shape

To choose line weights
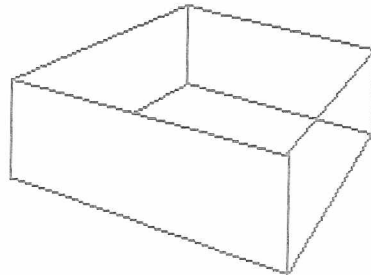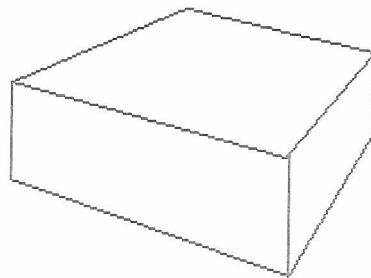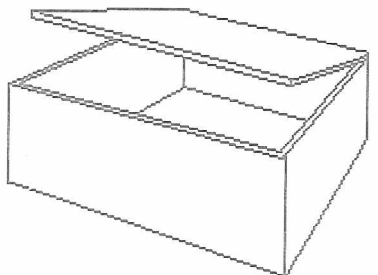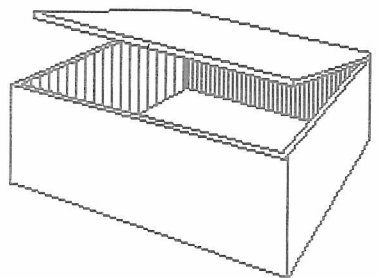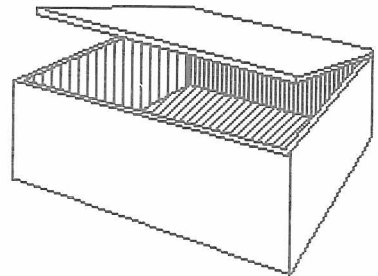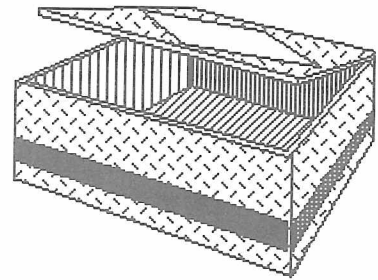
1. **Choose a freehand shape tool from the Tools menu.**

   Choose either the hollow or filled freehand shape tool.

2. **Position the pointer and drag to draw the line or shape.**

   Lines can cross over each other. It's not necessary to complete the shape where it began.

3. **Release the mouse button when the shape is the way you want it.**

- **If you don't close up a *filled* shape, MacPaint closes it automatically with a straight line connecting the starting and ending points. Hollow shapes remain as drawn.**
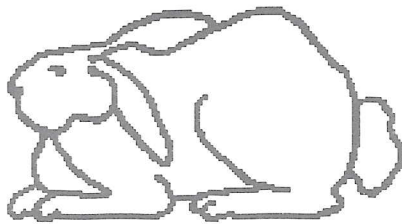
- **To choose a single line weight for both vertical and horizontal lines, click on one of the lines at the top of the Tools menu.**

   The dotted line represents an invisible line you can use for drawing borderless filled shapes.

- **To choose the weight of vertical lines, click just *above* one of the six lines at the top of the Tools menu.**

   A small triangle points down to the chosen vertical line weight.

- **To choose the weight of horizontal lines, click just *below* one of the six lines at the top of the Tools menu.**
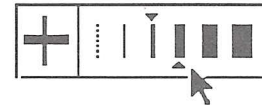
   A small triangle points up to the chosen horizontal line weight.

   If you've chosen different vertical and horizontal line weights, any curves or diagonal lines you draw change gradually from one weight to the other.
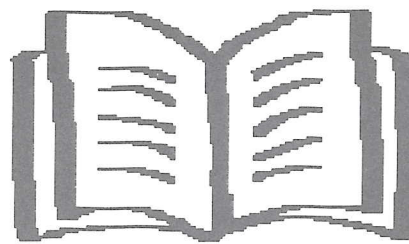
Working with patterns

You can add shading and contrast to drawings by applying patterns with the paintbrush, spray can, paint bucket, and filled shape tools. The Patterns menu provides a selection of patterns ready for use. You can also replace patterns on the menu with patterns of your own.

It's important to choose the appropriate drawing tool for the way you want to apply the pattern to your drawing.

You can use the paintbrush to "stroke" the pattern onto the drawing as if you were using a brush. You can use the spray can to create an effect similar to spraying a pattern onto the drawing. With the paint bucket, you can add a pattern to fill a shape.

You can also use the filled shape tools to draw shapes that automatically fill with a pattern of your choosing. You can even draw straight lines and shapes with borders that are patterned instead of black.
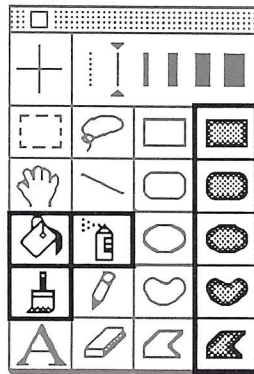
To choose a pattern

- **Pull down the Patterns menu, drag the pointer to the pattern you want, and release the mouse button.**

- **If the Patterns menu has been torn off, click one of the pattern squares.**

  The pattern you choose will appear in the rectangle in the top-left corner of the Patterns menu.

Your choice is shown here

Click here
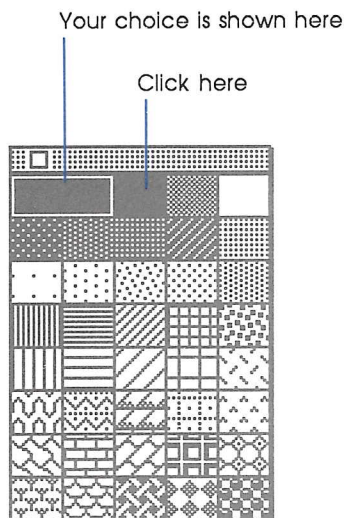
To fill an area with a pattern

1. **Choose a paint pattern from the Patterns menu.**

2. **Choose the paint bucket from the Tools menu.**

3. **Position the paint bucket so that the tip of the dripping paint is within the area you want to fill; then click.**

Tip of paint bucket
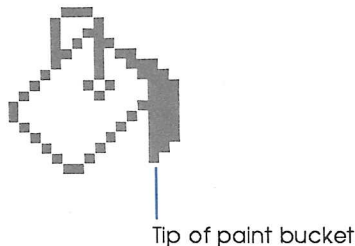
If the tip of the paint is on a white dot when you click, all adjoining white dots change to the chosen pattern. If the tip of the paint is on a black dot when you click, all adjoining black dots change to the chosen pattern.

- **To fill beyond the boundaries of the window, position the paint bucket, hold down the Shift key, and then click.**

- **To stop a pattern from "leaking" to an area beyond the area you want to fill, choose Undo from the Edit menu, find the gap in the border of the area you want to fill, and use the pencil tool or another tool to repair the gap. Then use the paint bucket again to fill the area.**

Paint leaking from an enclosing shape spreads until it is contained by another enclosing shape, or until it reaches the boundary of the window.

If you make a change after using the paint bucket, you will not be able to use Undo to cancel the effect of the paint bucket operation. Undo cancels only your last change.
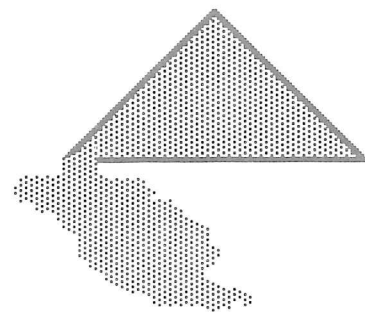
To draw patterned straight lines and borders

■ To draw lines that are made of the currently selected pattern instead of black, hold down the Command key while you use the line tool.

■ To draw shapes with borders that are made of the currently selected paint pattern rather than black, hold down the Command key while you draw the shape.
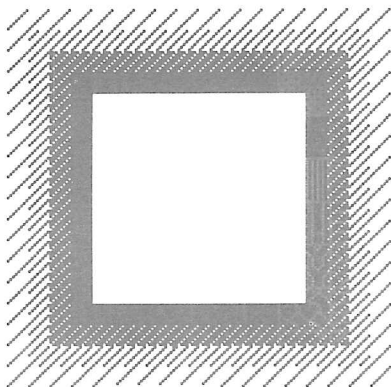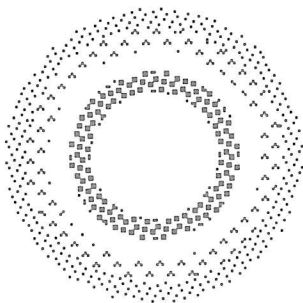
To change a pattern

1. **Choose the pattern you want to change.**

2. **Choose Edit Pattern from the Goodies menu.**

   Or, if the patterns menu is on the desktop, you can double-click the pattern you'd like to change.

   A pattern-editing dialog box appears. The left box displays a close-up view of the current pattern in a grid of 64 dots, each of which can be either black or white. The right box displays a normal view of the pattern created from this arrangement of the 64 dots.

3. **To change a dot from black to white or from white to black, click it in the left box.**

4. **Click OK to record the pattern in the Patterns menu or Cancel to stop editing the pattern and leave the Patterns menu unchanged.**

   The new pattern appears in the Patterns menu whenever the document is in the active window. When you save the current document, the new pattern is saved with it.
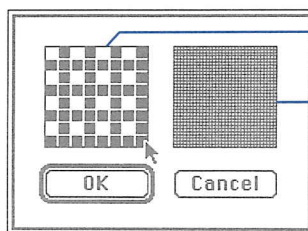
Click to change any dot from black to white or white to black

Changes reflected here

To capture a pattern from a picture

1. **Choose a pattern from the Patterns menu.**

   The pattern you capture will take the place of the selected pattern in the menu.

2. **Choose Edit Pattern from the Goodies menu.**

   You may first have to scroll the picture so that the dialog box doesn't cover the pattern you want to capture.

3. **Position the pointer on the pattern that you wish to capture; then click.**

   The pattern that you clicked fills the pattern-editing boxes.

   You can change your mind and click again, or you can click the dots in the left box to change the captured pattern.

4. **Click OK.**

   The new pattern appears in the Patterns menu whenever the document is in the active window. When you save the current document, the new pattern is saved with it.

Drawing with the pencil

You can use the pencil to draw dots, lines, and freehand shapes—but the pencil is most useful as a precision tool for changing pictures.

A MacPaint document is made up of tiny dots, or pixels. (**Pixel** is short for *picture element*.) At any moment, each dot is either black or white.

Use the pencil to change dots—from white to black and black to white. This tool is useful for putting the final touches on your work.

Because dots are small and can be difficult to change individually, you may find it useful to zoom in for a closer view of the picture and make changes. See "Zooming" in this chapter.

To change a dot

1. **Choose the pencil from the Tools menu.**

2. **Put the tip of the pencil where the dot is to appear and click.**

   If you click on a black dot, it changes to white and vice versa.
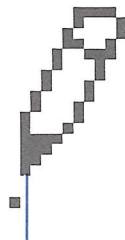
   Tip of pencil

To draw a line

1. **Choose the pencil from the Tools menu.**

2. **Put the tip of the pencil where you want the line to start and drag to draw a line.**

   If you begin the line on a white dot, the entire line will be black. If you begin the line on a black dot, the entire line will be white.

3. **Release the mouse button to end the line.**

   Pencil lines are one dot wide. For thicker lines, use the paintbrush, freehand shape tool, or line tool.

■ **To make a straight vertical or horizontal line, hold down the Shift key or press the Caps Lock key as you draw.**
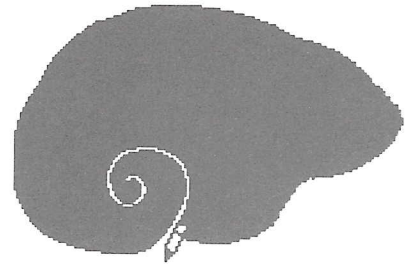
Zooming

MacPaint provides five levels of magnification. In addition to the normal 100-percent view, you can zoom in for 200-percent, 400-percent, and 800-percent magnified views or zoom out to a 50-percent reduced view. Each window title bar shows the current magnification of the document in that window.

The tools in the Tools menu and the commands in the Edit menu are available in all five views. The pencil is especially useful in the magnified views, because you can use it to change individual dots.

When you start MacPaint by opening a new or an existing document, the view is at 100 percent until you change it.

To zoom in

- **To zoom in one step at a time, choose Zoom In from the Goodies menu, or hold down the Command key and click with the pencil tool.**

- **To zoom directly to the 800-percent view, double-click the pencil tool in the torn-off Tools menu.**

Double-clicking the pencil tool in the Tools menu again returns the view to 100 percent.

To zoom in on a selection

1. **Use the lasso or the selection rectangle to select the area you want to zoom in on.**

   See "Selecting Part of a Picture" in this chapter.

2. **Choose Zoom In from the Goodies menu.**

   After you zoom in, MacPaint tries to keep the selection centered in the window—but you may need to scroll a little to keep it in view.

To zoom in on a dot

1. **Choose the pencil tool from the Tools menu.**

2. **Position the pointer on or near the dot you want to zoom in on.**

3. **Hold down the Command key and click.**

   Each time you click, MacPaint zooms in one level of magnification up to 800 percent. The specific dot you clicked on will be centered on the screen each time the picture zooms.

   ■ **To zoom in directly to 800 percent on the last place you clicked, double-click the pencil in the torn-off Tools menu.**

   Double-clicking the pencil tool in the Tools menu again returns the view to 100 percent.

   Click here to put away

   Drag here

To use the actual-size inset

In the 800-percent view, an inset appears that lets you see the normal 100-percent view of the window.

■ **To see the inset while in the 200-percent and 400-percent views, choose Show Actual Size from the Goodies menu.**

You can drag the inset by its drag bar to reposition it.

■ **To return to 100-percent magnification, click within the inset box.**

■ **To put away the inset, click its close box or choose Hide Actual Size from the Goodies menu.**

To zoom out

■ **To zoom out one step at a time, either choose Zoom Out from the Goodies menu or hold down the Command and Shift keys and click with the pencil tool.**

■ **To zoom directly from the 800-percent view to the 100-percent view, click in the actual size inset or double-click on the pencil tool in the torn-off Tools menu.**
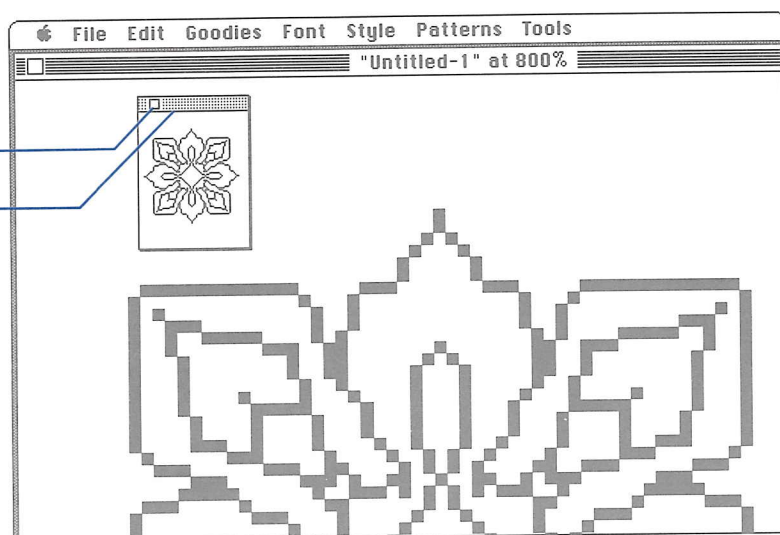
Selecting part of a picture

There are two ways to select part of a picture.

The selection rectangle selects every dot within a rectangular area. This method is quick, but unless the object you want to select is itself rectangular, some surrounding white space will be selected along with it.

You can use the lasso to encircle and select shapes that don't conform well with the rectangular selection method. With the lasso, the selection area you prescribe contracts and selects only the black shapes within it. White space is included in the selection only if it's enclosed by a black outline.

After selecting part of a picture, you can drag that selection to a different position, duplicate it, shrink it, expand it, stretch it, rotate it, invert it, trace its edges, fill it with a paint pattern, and flip it vertically or horizontally. You can also cut, copy, paste, or clear (erase) it.

To select a rectangular area

1. **Choose the selection rectangle from the Tools menu.**

2. **Position the pointer at one corner of the area you want to select.**

3. **Drag the pointer diagonally to the opposite corner.**

4. **Release the mouse button to complete the selection.**

   You can use the commands in the Edit menu and the Goodies menu to make changes to the selection.

■ **To cancel a selection, click outside the selection (but within the document window) or choose another tool from the Tools menu.**
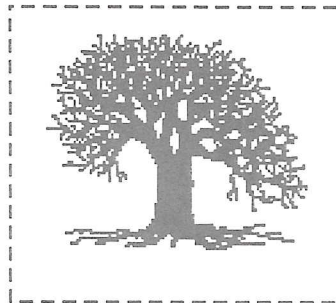
To shrink a rectangular selection to fit

■ **Hold down the Command key while making a rectangular selection.**

The rectangular selection "shrinks to fit"—the surrounding rectangle becomes as small as possible while still enclosing all black bits.
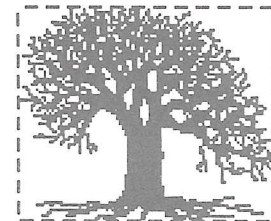
To select an irregularly shaped image

1. **Choose the lasso from the Tools menu.**

2. **Carefully drag the lasso around the part of the picture you want to select.**

   A line trails behind the tip of the lasso to show what you're selecting.

3. **Release the mouse button.**

Tip of lasso tool

The lasso makes selections that shrink around the black outline of an image without selecting any surrounding white areas (white background). The areas you select with the lasso can be irregular in shape.

If you don't fully close up the loop, it will automatically be closed with a straight line that joins your starting and ending points.

- **To cancel a selection, click outside the selection (but within the document window) or choose another tool from the Tools menu.**
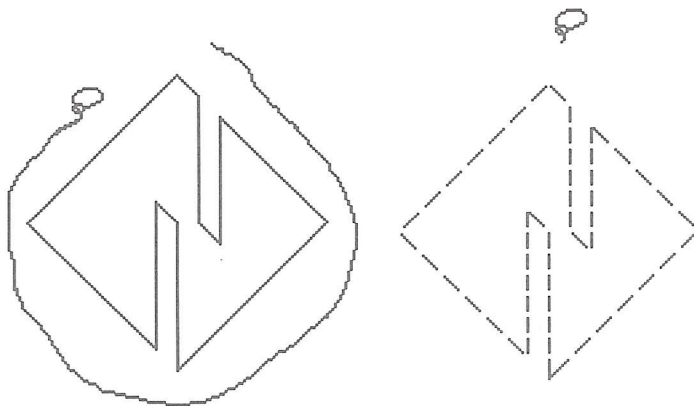
To select the entire window

1. **Tear off the Tools menu.**

2. **Double-click the selection rectangle or the lasso.**

   This makes a selection that extends as far as the borders of the window.

To select the entire document

1. Tear off the Tools menu.

2. While holding down the Shift key, double-click either the selection rectangle or the lasso.

   This makes a selection that extends as far as the borders of the document.

To move a selection

1. Make a selection with either the selection rectangle or the lasso.

2. Position the pointer inside the selection until the pointer changes into an arrow.

3. Drag the selection to a new location and release the mouse button.

■ To move the selection vertically or horizontally, hold down the Shift key or press the Caps Lock key as you drag.
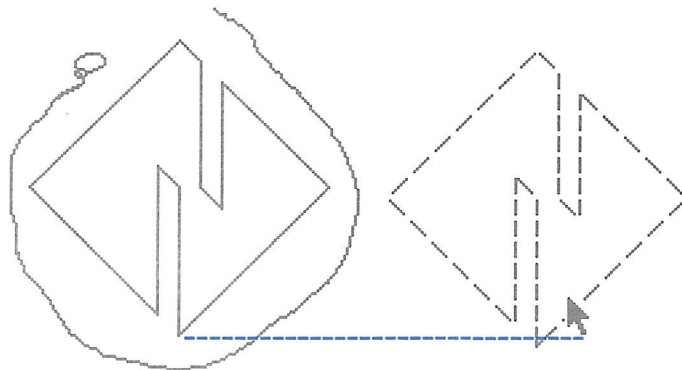
To duplicate a selection

1. Make a selection with either the selection rectangle or the lasso.

2. Position the pointer inside the selection until the pointer changes to an arrow.

3. While holding down the Option key, drag the selection to a new location and release the mouse button.

   A copy of the selection remains behind while you move the selection somewhere else.

- To make the copy line up (vertically or horizontally) with the original, hold down the Option and Shift keys and drag the selection.
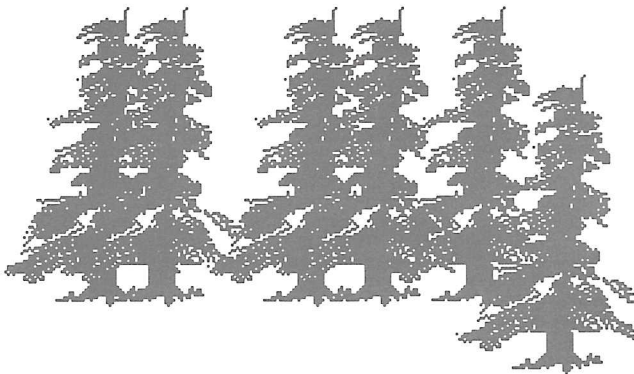
**To make multiple copies
of a selection**

1. Make a selection with either the selection rectangle or the lasso.

2. Position the pointer inside the selection until the pointer changes into an arrow.

3. Holding down both the Option and Command keys, drag the selection and release the mouse button.

   How fast you move the mouse and the current line weight selected determine the spacing between the copies.

   ■ **To make the copies line up (vertically or horizontally) with the original, hold down the Option, Command, and Shift keys and drag the selection.**
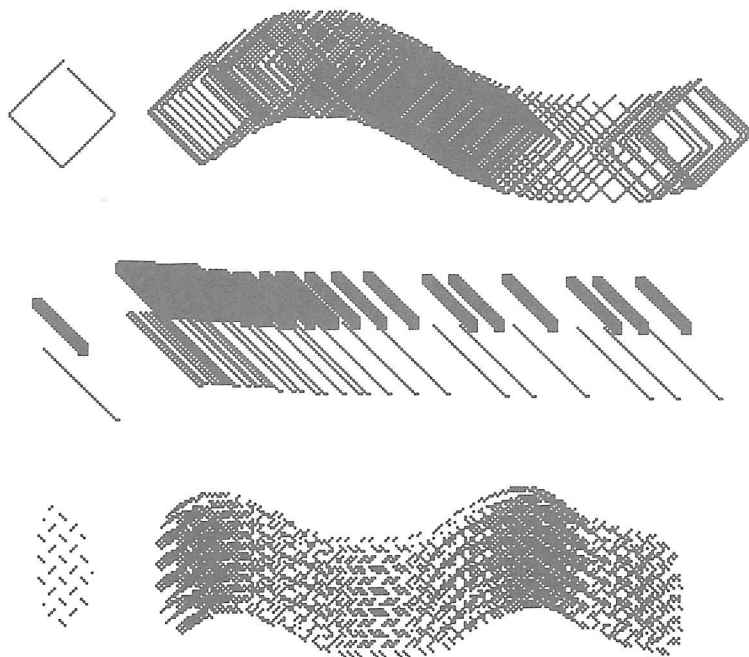
To cut a selection

1. **Make a selection with either the selection rectangle or the lasso.**

2. **Choose Cut from the Edit menu.**

   The Cut command deletes a selection from the picture and puts it in the Clipboard.

   To copy from the Clipboard, use the Paste command on the Edit menu.

To copy a selection

1. **Use either the selection rectangle or the lasso to select the area you want to copy.**

2. **Choose Copy from the Edit menu.**

   The Copy command copies a selection onto the Clipboard without deleting it from the picture.

   To copy from the Clipboard, use the Paste command on the Edit menu.

To paste from the Clipboard

1. Choose Paste from the Edit menu.

If the Paste command is dimmed in the Edit menu, the Clipboard is empty. To put a selection in the Clipboard, choose Cut or Copy.

2. When the selection appears in the center of the window, drag it to where you want it.

You can paste images and text placed on the Clipboard into a MacPaint document. You can also copy or cut all or part of a MacPaint document, and paste it into a document created with some other application, such as a word processing or page layout application.

While a rectangular selection remains active (while a rectangular marquee surrounds it), you can shrink or stretch it to alter the image being pasted into the document.

See "To Resize a Selection in Proportion" and "To Resize a Selection Changing Its Proportions" in this chapter.

To fit a selection into a specific size and shape area

1. **Use either the selection rectangle or the lasso to make a selection.**

2. **Choose either Cut or Copy from the Edit menu.**

3. **Use the selection rectangle again (or select an existing image with the lasso tool)—this time to specify the location, size, and shape the contents of the Clipboard should take when pasted into the document.**

   You can think of this second selection area as a target into which the contents of the Clipboard are placed. Whatever is on the Clipboard will be forced to conform to the placement and size of the target selection.

When you paste into an area selected by the lasso, the Clipboard contents take on the size and shape of a rectangle roughly bounding the selection. The actual shape of the selection does not determine the shape of the pasted image.

4. **Choose Paste from the Edit menu.**

   Because selections made with the lasso shrink to enclose images outlined in black, the lasso may not work effectively to create a target selection if the area is mostly white.

To clear a selection

1. **Use either the selection rectangle or the lasso to select the area you want to clear.**

2. **Choose Clear from the Edit menu or press the Backspace or Delete key.**

   The selection is deleted. To restore it, immediately choose Undo from the Edit menu.

   The Clear command deletes a selection without copying it to the Clipboard.

   Because a cleared selection is not copied to the Clipboard, it can't be pasted into the document again.

To resize a selection in proportion

1. **Use the selection rectangle to make a selection.**

   To minimize surrounding white space, hold down the Command key while you select.

2. **Choose Scale Selection from the Goodies menu.**

   The Scale Selection dialog box appears.

```
┌─────────────────────────┐
│ Scale selection to:     │
│   [50  ] %              │
│                         │
│ [ Cancel ]   ( OK )    │
└─────────────────────────┘
```
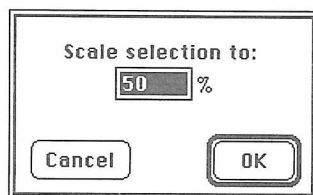
3. **To reduce the selection to 50 percent of its original size, click OK. To choose some other scale, type a number representing the percentage of enlargement or reduction you wish and click OK.**

   If you choose 50 percent, the selection is reduced by half. If you choose 200 percent, the selection is doubled in size.

Any request that would make the selection larger than the document is ignored. A warning box appears if you try to enlarge a selection so much that it would be bigger than a MacPaint document.

You can also resize a selection gradually; see "To Resize a Selection Changing Its Proportions" in this chapter.
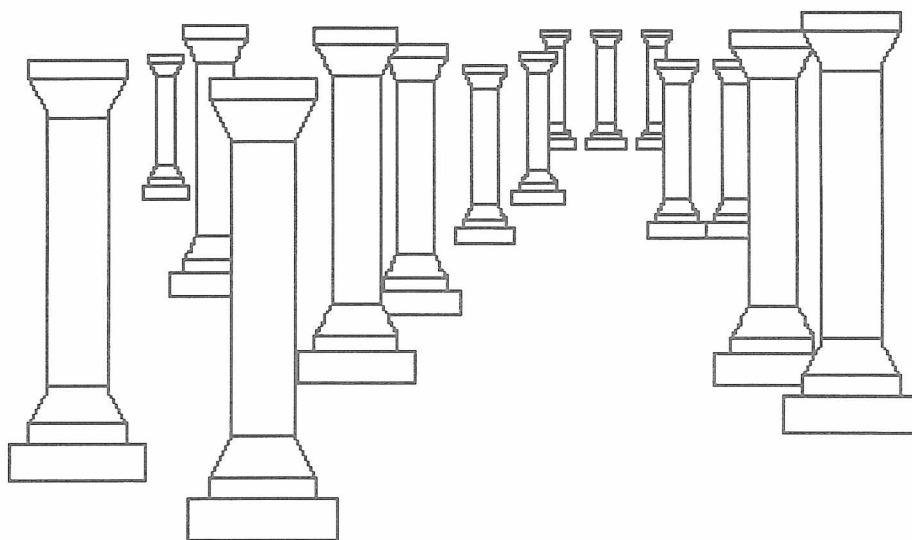
To resize a selection changing its proportions

1. Use the selection rectangle to make a selection.

2. Position the pointer on any side or corner of the selection until the pointer changes into an arrow.

3. While holding down the Command key, drag the pointer to resize the selection and then release the mouse button.

Dragging the pointer toward (or even past) the center of the selection shrinks the selection.

Dragging the pointer away from the center of the selection in any direction stretches the selection in that direction.

■ Hold down both the Shift key and Command while dragging to maintain the selection's original proportions.
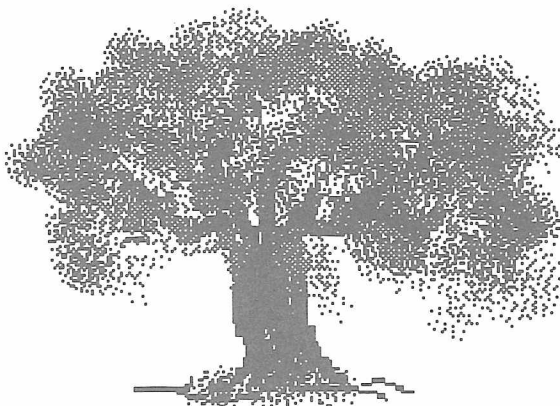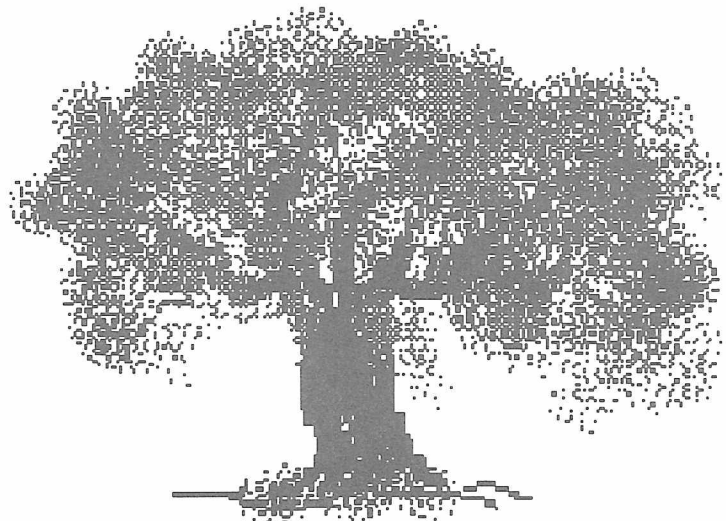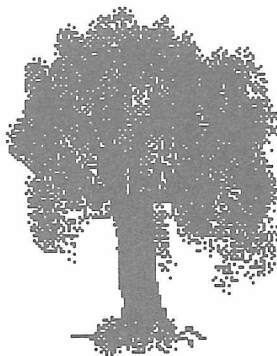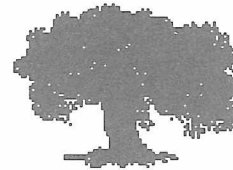
Original tree

To invert a selection

1. Use the selection rectangle or the lasso to make a selection.

2. Choose Invert from the Edit menu.

   Inverting a selection means changing all black dots to white and all white dots to black.

   To return the selection to the way it was originally, either choose Invert again or choose Undo from the Edit menu.
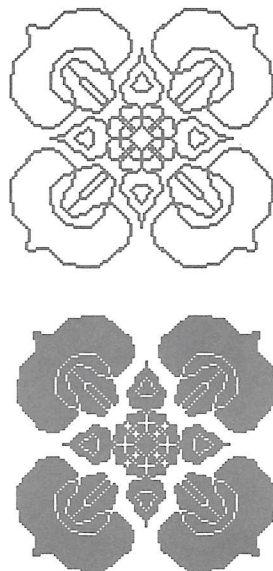
To trace the edges of a selection

1. Make a selection with the selection rectangle.

2. Choose Trace Edges from the Edit menu.

   You can trace the same selection repeatedly for interesting effects.

■ **If you hold down the Shift key while you trace the edges of a selection, the outline will also be shadowed on the bottom and right, producing a drop-shadow effect.**
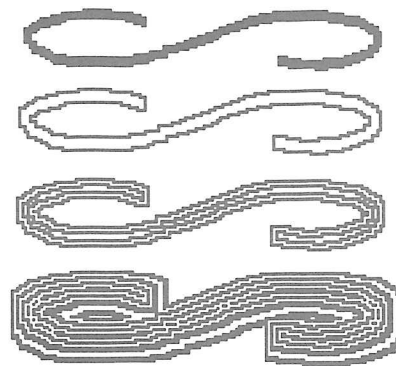
To flip a selection

1. **Make a selection with the selection rectangle.**

2. **Choose Flip Horizontal or Flip Vertical from the Edit menu.**

   The Flip Vertical and Flip Horizontal commands respectively flip a selection upside down and sideways.
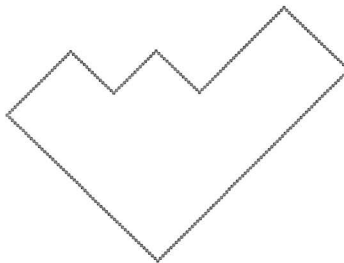
To rotate a selection 90 degrees

1. **Make a selection with the selection rectangle.**

2. **Choose Rotate from the Edit menu.**

   The selection rotates 90 degrees counterclockwise. Repeat to rotate the selection another 90 degrees.
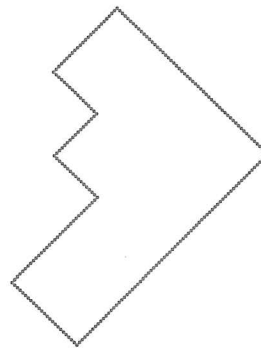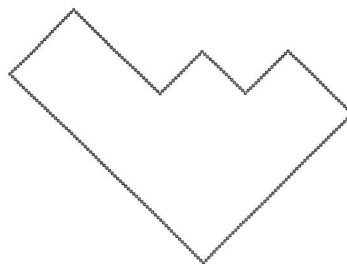
To fill a selection with a pattern

1. **Choose a pattern from the Patterns menu.**

2. **Make a selection with the selection rectangle.**

3. **Choose Fill from the Edit menu.**

Flip Vertical

Flip Horizontal

Rotate
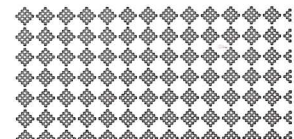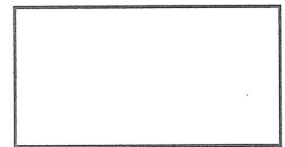
Aligning a picture to a grid

To use the grid

Autogrid covers a document with an invisible grid and allows you to draw and locate images you draw with precision. When Autogrid is on, you can draw only lines and shapes that conform to the grid intervals (similar to a drawing made on grid paper.) Your lines and shapes automatically align on the grid, allowing easy and accurate sizing and placement.

Text also aligns on the grid. Autogrid also affects selecting, dragging, and duplicating with the selection rectangle as well as dragging and duplicating with the lasso.

Autogrid doesn't affect the paintbrush, pencil or the spray can.

1. **Choose Turn Grid On from the Goodies menu.**

   If Turn Grid Off appears in the Goodies menu, Autogrid is already on.

2. **To specify the distance between grid lines, choose Preferences from the Goodies menu, choose an Autogrid spacing, and click OK.**

   Your choices of Autogrid spacing are 2, 4, 8, 16, or 32 pixels (dots).

■ **To turn Autogrid off, choose Turn Grid Off from the Goodies menu.**

   For more details, see "Autogrid Spacing (Pixels)" in Chapter 3.
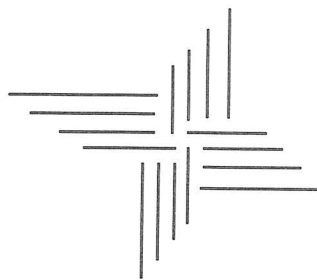
Without Autogrid
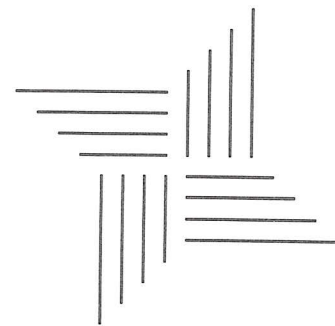
With Autogrid

Tracking mouse movements

To use the mouse position inset

The **mouse position inset** lets you see exactly where the pointer is in relation to the upper-left corner of the document and exactly how far it moves each time you drag the pointer. This makes it easy to draw lines and shapes to precise dimensions.

- **Choose Show Mouse Position from the Goodies menu.**

  To hide the mouse position window, choose Hide Mouse Position from the Goodies menu or click the close box on the inset.

  You can drag the inset by its drag bar to reposition it.

- **To change the unit of measure—pixels (dots), inches, or centimeters, choose Preferences from the Goodies menu, click the desired measuring unit, and click OK.**

  For more details, see "Autogrid Spacing (Pixels)" in Chapter 3.

Click here to close ─────────

Drag here ─────────────

Current unit of measure ─────

+073.00

+268.00

+000.00

+000.00

+000.00

pixels

Vertical distance from uppper-left corner of document

Horizontal distance from upper-left corner of document

Vertical and horizontal distance from starting point of line or shape

Actual distance from starting point
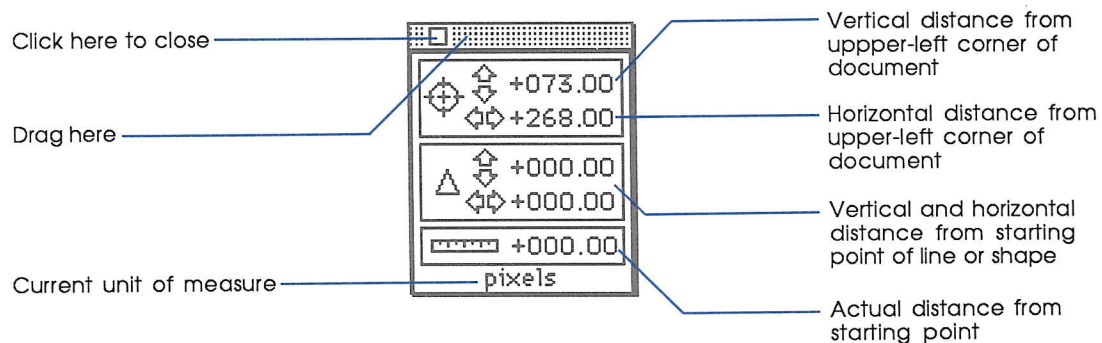
Adding text

To type text

You can add text to your pictures, choosing from a number of fonts and from various styles and sizes of characters.

Some fonts (Cairo and Mobile, for example) consist of small pictures rather than letters and numbers. Use the **Key Caps** desk accessory to see these and other fonts.

Cairo font

1. **Choose the text tool from the Tools menu.**

2. **Position the pointer (it now looks like an I-beam) where you want to start typing text and click the mouse button.**

   A blinking insertion point appears.

3. **Begin typing.**

Until you click the mouse button or choose another tool, you can backspace to make corrections, press Return to start a new line, and change the font, style, size and alignment of the characters you've typed.

Once you click the mouse button or choose a tool other than the text tool, the text you've typed is no longer active (the insertion point is gone). The text becomes part of the picture; you can no longer edit it as text. You can select and use commands to manipulate text just as you can with other MacPaint images.

To change the text font

- To change the font of active text, choose a font from the Font menu.

  The Font menu lists all the fonts available in your System file.

- To change the font of future text without affecting text you've already typed, press Enter before choosing a new font or click somewhere else in the document.

To change the text style, size, or alignment

- To change the size of active text, choose a size from the Style menu.

- To change the style of active text, choose one or more styles from the Style menu.

- To change the alignment of active text, choose an alignment (left, middle, or right) from the Style menu.

- To change the style, size, or alignment of future text without affecting text you've already typed, press Enter before choosing a new attribute or click somewhere else in the document.

Change the
size of the text,
change the style,
change the font,

change
the
alignment.

Text can be
Plain,
Bold,
Italic,
Underline,
Outline,
Shadow,

To change line spacing (leading)

- **To space lines of active text closer together, hold down the Command and Option keys and press the < key.**

- **To space the lines farther apart, hold down the Command and Option keys and press the > key.**

Change the line spacing last, after you are satisfied with the text's font, style, size, and alignment. Changing the font, style, size, or alignment automatically changes text to a preset line spacing.

To change the text mode

1. **Choose Preferences from the Goodies menu.**

2. **Click Normal, Overlay, or Inverted in the Preferences dialog box and click OK.**

If you choose Normal, any text you type over a dark background appears within a white band.

If you choose Overlay, there's no white band around the text you type.

If you choose Inverted, the text you type appears in black over any white background and inverts to white over any black background.

Text mode is:

Sample ⦿ Normal

Sample ◯ Overlay

Sample ◯ Inverted   OK
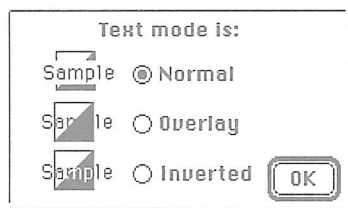
**To create text in the
Note Pad**

1. **Open the Note Pad desk accessory.**

2. **Compose your text.**

3. **Select the text that you want to paste into your MacPaint document.**

4. **Choose Cut or Copy from the Edit menu.**

5. **Close the Note Pad.**

6. **Choose Paste from the Edit menu.**

Use the Note Pad desk accessory as a simple word processor. You can insert, delete, backspace, cut and paste, and change the insertion point. You can't change the font, size, or style—but you can do these things after pasting the text into the MacPaint document.

The pasted text is active until you click. While it remains active, you can change its alignment, font, size, and style. You can even change the size and shape of the block of text by holding down the Command key while you drag a corner of the selection.

```
The Note Pad
is great for
quick text
editing jobs.
```

```
The Note Pad is great
for quick text editing
jobs.
```

Undoing

MacPaint lets you change your mind, undo mistakes, or try out several ideas until you find the one that's just right.

If you take an action that you instantly regret, MacPaint provides several alternatives for restoring your picture to its original appearance. First, you can choose the Undo command, which cancels the effect of the last (and *only* the last) action you took. You can also erase an image, a window, or even an entire document and start over.

To avoid starting over, however, you can take snapshots of your picture as you create it. You can then use a snapshot to change part or all of the document back to the original. Finally, if you've previously saved a document, you can choose the Revert to Saved command from the File menu to start over with the document as it was last saved on disk.

To undo a single change

■ **Choose Undo from the Edit menu.**

With the Edit menu's Undo command you can reverse the effect of any command used to change the document or any drawing task that you perform, including Undo itself.

Remember that Undo works only on the last change you made. If, for example, you erase something and then make any other change (no matter how small), choosing Undo won't restore what you erased.

To erase part of a picture

1. **Choose the eraser from the Tools menu.**

2. **Hold down the mouse button while you move the eraser pointer over the area you want to erase.**

■ **Hold down the Shift key or press the Caps Lock key to make erasures that are vertical or horizontal only.**
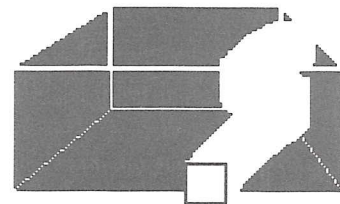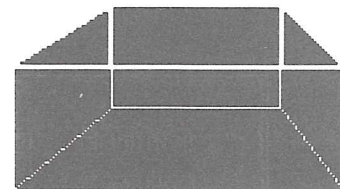
To erase an entire window or document

■ **To erase the entire window, double-click the eraser tool in the torn-off Tools menu.**

■ **To erase the entire document, hold down the Shift key while double-clicking the eraser tool.**

This procedure has no effect on any documents saved on disk.

To make your own eraser

■ **Paint over an area with the plain white pattern.**

You have a choice of brush shapes.

■ **Select an area and choose Clear from the Edit menu or press Backspace.**

■ **Use a borderless filled shape tool together with the white pattern to erase an area of a particular shape.**
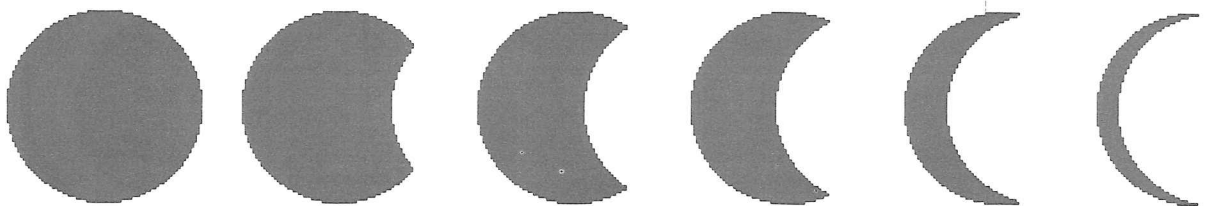
To take a snapshot

- **Choose Take Snapshot from the File menu.**

  When you first open a document, MacPaint automatically saves a "snapshot" of it in memory. After you've made changes to the document, you can revert all or part of the picture to the snapshot.

  When you open a new document, the snapshot is blank until you add to the document and take a new snapshot.

  If you have a 512K Macintosh, you won't be able to take a snapshot if you have two windows open at once because of memory limitations.

You can take a new snapshot at any time. Take a snapshot just before trying an effect you might later want to undo. When you're experimenting with different approaches to your drawing, take snapshots often.

You can have only one snapshot at a time per picture, so the new snapshot replaces the old one.

- **To delete the snapshot of the active picture, choose Throw Away Snapshot from the File menu.**

  Throwing away a snapshot saves 52K of memory, which may allow you to open more documents at the same time, for example.

To undo all changes in a selected area

1. **Make a selection with the selection rectangle or the lasso.**

2. **Choose Revert To Snapshot from the Edit menu.**

   You can return a selected area of a document to the way it was the last time you took a snapshot by choosing Revert to Snapshot from the Edit menu.

   Revert to Snapshot is dimmed if you threw away the most recent snapshot.

To undo changes with the magic eraser

1. **Select the eraser tool on the Tools menu.**

2. **Hold down the Command key and drag the magic eraser over a part of the picture that has been changed since the last snapshot was taken.**

   As you hold the Command key down, you see the eraser pointer become animated with sparking lines within it, indicating that you are using the magic eraser.

   The magic eraser is handy for restoring a part of a picture to the way it appears in the current snapshot.

   ■ **To change an entire document back to the way it appears in the most recent snapshot, hold down the Command and Shift keys, and double-click the eraser tool in the torn-off Tools menu.**

To undo all changes

1. **Choose Revert To Saved from the File menu.**

   A dialog box appears. At this point you can click Cancel to cancel the procedure, if you wish.

2. **Click OK.**

   After a few moments, the changed version of the document is replaced by the last version saved on a disk.

   When you use the Revert to Saved command, a new snapshot is taken at the same time.

Working with windows

You can open as many as nine windows at a time, depending on how much memory is available in your Macintosh. You use commands in the File menu to open a window for a new or existing document, to close windows, and to save documents.

If you want, you can open a window to use as a scratch pad while your main document is in another window.

To open a new document window

■ **Choose New from the File menu.**

A new window opens up. It is automatically named Untitled-1, Untitled-2, and so on up to Untitled-9, depending on how many windows are already open. When you save a document, you can give it a more descriptive name.

The number of windows you can have open at one time depends on the amount of available memory. If you have a 512K Macintosh, you cannot open more than two documents at a time.

If you have nine documents open, New becomes dimmed and you have to close a window before you can open a new window.

To switch from one window to another

■ **Choose a document name from the Goodies menu. (The names of all open documents appear in the Goodies menu.)**

The chosen document window moves to the active window. You can also make a window active to other ways.

■ **Hold down the Command key and type a number from 1 to 9 corresponding to the desired window.**

■ **Click in any visible part of the window you want to activate.**

Goodies	
Turn Grid On	
Draw From Center	
Show Mouse Position	⌘K
Zoom In	⌘M
Zoom Out	⌘L
Show Actual Size	⌘F
Shortcuts...	⌘H
Preferences...	
Edit Pattern...	
Brush Shape...	
Brush Mirrors...	
Scale Selection...	
Flowers	⌘1
Untitled-2	⌘2
Animals	⌘3

Command key shortcuts

Names of open documents

To scroll in increments

- To scroll in small increments, click a scroll arrow.

- To scroll in larger increments, click in the gray area of one of the scroll bars.

- To scroll to a specific part of the document, drag one of the scroll boxes.

To scroll continuously

- Place the pointer in a scroll arrow and hold down the mouse button.

- For faster continuous scrolling, place the pointer in the gray area of one of the scroll bars and hold down the mouse button.

While you are using any drawing or selection tool, the window scrolls automatically if you reach the edge of the window without reaching the edge of the picture.

Scroll arrow

Gray area

Scroll arrow
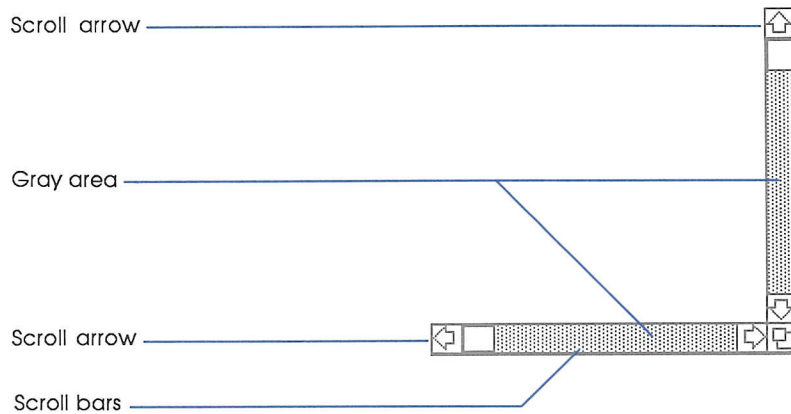
Scroll bars

To scroll without using scroll bars

1. **Choose the grabber from the Tools menu.**

2. **While holding down the mouse button, drag in the direction you want the document to scroll.**

■ **Hold down the Shift key or press the Caps Lock key to constrain scrolling to horizontal or vertical movement only.**

   You can temporarily change any tool except the text tool to the grabber by holding down the Option key.

   Also remember that when you drag the pointer to the edge of the window, the document scrolls automatically.

To close a window

1. **If the window you want to close isn't active, click in it to make it active or choose the document name from the Goodies menu.**

   You can click anywhere in that window, or you can choose the document name from the Goodies menu.

2. **Choose Close from the File menu or click in the window's close box.**

   If the document has not yet been saved to a disk or if it has changed since it was last saved, a dialog box asks whether you want to save the document.

Opening and saving documents

After working on a document, you will usually save it so that you have a copy safely stored on a disk. Later, if you want to edit or change the document, you can open it again and begin work where you left off. You can have several documents open at one time. (The number of documents that you can have open at one time depends on the amount of memory available. If enough memory is available, you can open up to nine documents at once. If you have a Macintosh 512K enhanced, you may be able to open one or two documents only.) You can also save different versions of the same document by saving each new version with a different name.

To open an existing document

1. **Choose Open from the File menu.**

   If Open is dimmed, you'll have to close a window before you can open another.

2. **When the dialog box appears, use it to choose the MacPaint document you want to open.**

   ■ **To open a MacPaint document from the Finder, either select the document's icon and then choose Open from the File menu, or double-click the document's icon.**

   MacPaint starts and the document opens.

■ **To save a document under the name already showing in its title bar, choose Save from the File menu.**

If the document has been saved before, it's saved again under the same name. The new version replaces the older version on the disk.

If the document is untitled or has not been saved before, a dialog box appears allowing you to specify a name for the document. Type a name for the document and click Save.

■ **To save a new copy of the active document under a different name, choose Save As from the File menu. When the Save As dialog box appears, type a different name for the document and click Save.**

Choosing the Save As command and giving a previously saved document a new name lets you keep both the old and new versions of a document on the disk.

```
┌─────────────────────────────────────────────────────┐
│              ┌─────────────────┐                      │
│              │ 🖫·Untitled │                      │
│         ┌──────────────────────┐  🖫 Untitled         │
│         │ ☐ Sketches        ⬆ │                      │
│         │ ☐ Final Art          │  ┌────────┐          │
│         │ ☐ House Plan         │  │ Eject  │          │
│         │                      │  └────────┘          │
│         │                      │  ┌────────┐          │
│         │                   ⬇ │  │ Drive  │          │
│         └──────────────────────┘  └────────┘          │
│         Save Paint document as:    ┌────────┐          │
│         ┌──────────────────────┐   │  Save  │          │
│         │                      │   └────────┘          │
│         └──────────────────────┘   ┌────────┐          │
│                                    │ Cancel │          │
│                   Document format: └────────┘          │
│         ◉ MacPaint    ○ Stationery   ○ Startup screen  │
└─────────────────────────────────────────────────────┘
```
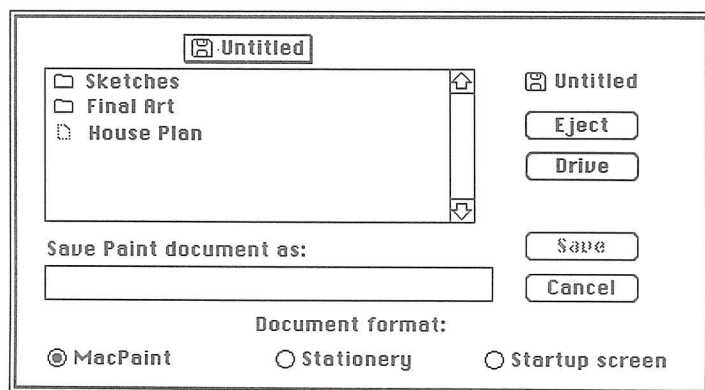
To save a document as stationery

1. **Create a MacPaint document, adding graphics and text and setting up the menu positions, patterns, and options available in the Preferences dialog box and the Page Setup dialog box as you want them.**

2. **Choose Save As from the File menu.**

3. **When the Save As dialog box appears, type a name for the stationery document.**

4. **Click the Stationery option and click Save.**

MacPaint saves the document, recording the options you've chosen. When you open the stationery document later, it appears untitled and set up just as it was when you saved it. You can begin drawing with the routine elements of a picture already present and with MacPaint's menus and options ready for use the way you like them.

In the Finder display, stationery documents have icons that appear with a heavy outline, or drop shadow, to distinguish them from other MacPaint documents.

Stationery document icon

```
┌─────────────────────────────────────────────────┐
│            ┌──────────────┐                       │
│            │ 🖫 Untitled  │                       │
│     ┌──────────────────────┬─┐                    │
│     │ 🗀 Sketches          │⬆│   🖫 Untitled      │
│     │ 🗀 Final Art         │ │  ┌──────────┐      │
│     │ 🗋 House Plan        │ │  │  Eject   │      │
│     │                      │ │  └──────────┘      │
│     │                      │ │  ┌──────────┐      │
│     │                      │⬇│  │  Drive   │      │
│     └──────────────────────┴─┘  └──────────┘      │
│   Save Paint document as:       ┌──────────┐      │
│   ┌──────────────────────────┐  │   Save   │      │
│   │                          │  └──────────┘      │
│   └──────────────────────────┘  ┌──────────┐      │
│              Document format:   │  Cancel  │      │
│   ○ MacPaint   ◉ Stationery   ○ Startup screen    │
└─────────────────────────────────────────────────┘
```
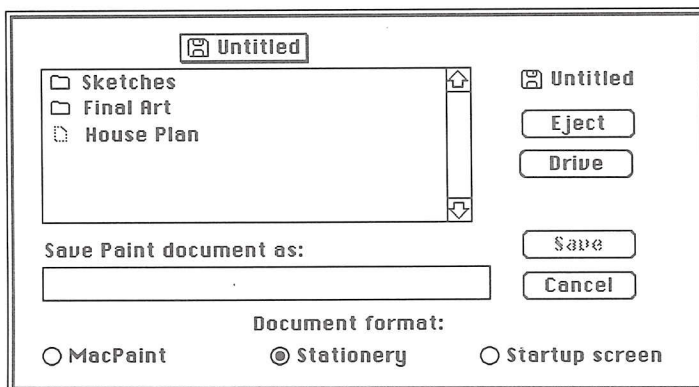
To save a document as a startup screen

1. **Create a MacPaint document.**

2. **Choose Save As from the File menu.**

3. **Click the Startup screen option and click Save.**

   Clicking the Startup screen option automatically names the document "startupscreen." A startup screen must have this name to work (spelled as one word with no spaces—capitalization of the letters makes no difference when spelling the name).

   MacPaint saves the document as a startup screen that will appear each time you start the Macintosh.

4. **Close the document by clicking the close box or choosing Close from the File menu.**

5. **Choose Quit from the File menu to leave MacPaint.**

6. **In the Finder display, place the document in the System Folder.**

   You can also place the Startup screen document directly into the System folder when you save it.

When you save a MacPaint document as a startup screen, only a part of the document is saved. The part saved starts at the upper-left corner of the document and includes a rectangular area 512 dots (horizontal) by 342 dots (vertical).

You can create several startup screens with different names. The Macintosh uses only the startup screen named "startupscreen" found in the System Folder, however. To use a different startup screen, you rename the desired document as "startupscreen" and move it into the System Folder.

```
                    ┌─────────────┐
                    │ 🖫 Untitled  │
          ┌─────────────────────────────┐        🖫 Untitled
          │ 🗀 Sketches              △ │
          │ 🗀 Final Art             │       ┌──────────┐
          │ 🗋 House Plan            │       │  Eject   │
          │                          │       └──────────┘
          │                          │       ┌──────────┐
          │                          │       │  Drive   │
          │                       ▽ │       └──────────┘
          └─────────────────────────────┘
          Save Paint document as:               ┌──────────┐
          ┌─────────────────────────────┐       │  Save    │
          │ StartupScreen               │       └──────────┘
          └─────────────────────────────┘       ┌──────────┐
                                                 │  Cancel  │
                      Document format:           └──────────┘
          ○ MacPaint      ○ Stationery    ◉ Startup screen
```
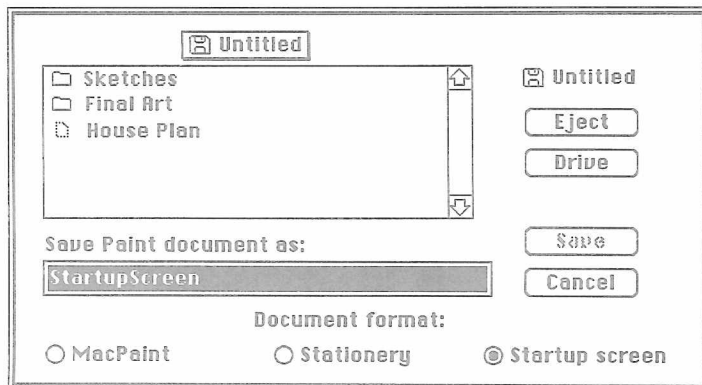
Printing MacPaint documents

To adjust the page setup

If you have a printer connected to your Macintosh, you can print all or part of any MacPaint document. You can print MacPaint documents on several kinds of printers such as the Apple ImageWriter or LaserWriter.

If you have more than one printer available for printing, you may have to use the Chooser desk accessory to specify which printer to use.

You specify how a document is to be printed by choosing options in the Page Setup and the Print dialog boxes. The options available in the Page Setup and Print dialog boxes vary according to the capabilities of the printer type being used. For information about the specific printing options available with your printer, refer to your Macintosh owner's guide or printer manual.

1. **Choose Page Setup from the File menu.**

2. **Click buttons and boxes in the Page Setup dialog box to indicate how you want the document to be printed.**

   The exact content of the dialog box depends on the printer you're using. Refer to your Macintosh owner's guide or printer manual for more information about the specific printing options available with your printer.

3. **Click OK.**

   The Page Setup command lets you control how a document is printed. When you save a document on a disk, the page setup options you choose are saved as well.

   All MacPaint documents have one orientation (vertical) and size (8 by 10 inches).

```
ImageWriter                                    v2.6        OK

Paper:    ● US Letter         ○ A4 Letter
          ○ US Legal          ○ International Fanfold    Cancel
          ○ Computer Paper

Orientation    Special Effects:   □ Tall Adjusted
                                  □ 50 % Reduction
  [🖼] [🖼]                       □ No Gaps Between Pages
```
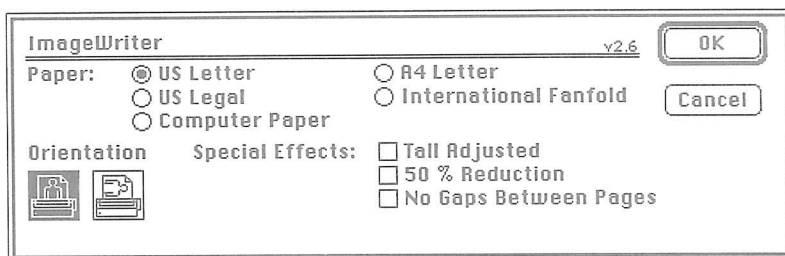
To print an entire document

1. **Choose Print from the File menu.**

   The Print dialog box tells you which printer will be used and lets you specify printing options. The exact content of the dialog depends on the printer you're using. Refer to your Macintosh owner's guide or printer manual.

2. **Click OK.**

   After a few moments, printing begins, and an information box appears.

   ■ **To stop printing, hold down the Command key and press period (.).**

To print part of a document

1. **Use the selection rectangle or the lasso to make a selection.**

2. **Choose Print Selection from the File menu.**

   The Print dialog box appears, letting you specify how the selection is to be printed. The exact content of the dialog box depends on the printer being used. Refer to your Macintosh owner's guide or printer manual.

3. **Click the desired options in the Print dialog box and then click OK.**

   After a few moments, printing begins and an information box appears.

   The selection occupies the same position on the paper as it does in the document—as if the whole document had been printed with everything but the selection masked. If you want to control where the selection appears on the page, copy it and paste it into a new document.

   ■ **To stop printing, hold down the Command key and press period (.).**

```
┌────────────────────────────────────────────────────┐
│ ImageWriter                        v2.6  ╔════════╗ │
│                                          ║   OK   ║ │
│ Quality:      ○ Best    ◉ Faster  ○ Draft╚════════╝ │
│ Page Range:   ◉ All     ○ From: [    ] To: [   ]     │
│ Copies:       [1    ]                    ( Cancel ) │
│ Paper Feed:   ◉ Automatic  ○ Hand Feed              │
└────────────────────────────────────────────────────┘
```
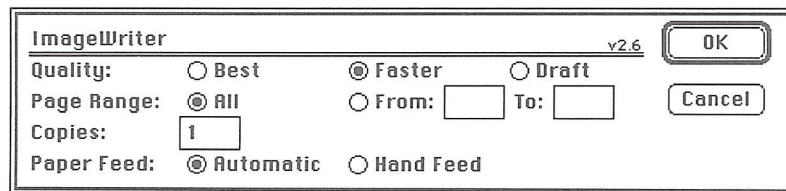
To print several documents

Getting help

1. **In the Finder display, select the icons of the MacPaint documents you want to print.**

   To select more than one icon, hold down the Shift key while clicking one icon after another.

2. **Choose Print from the File menu.**

   MacPaint opens and printing begins.

■ **To stop printing, hold down the Command key and press period (.).**

■ **Choose Shortcuts from the Goodies menu.**

Choosing Shortcuts from the Goodies menu brings up a screen of helpful MacPaint hints, reminders, and shortcuts. You'll find information about how to use key combinations to do such tasks as changing fonts, font size, and line spacing; how to zoom in and out with the pencil tool; and how to copy selections in various ways. You'll also see a diagram showing the functions of keys on the keyboard and a list of tool icons that can be double-clicked on the torn-off Tools menu to perform specific operations such as selecting an entire window or zooming in on a document.
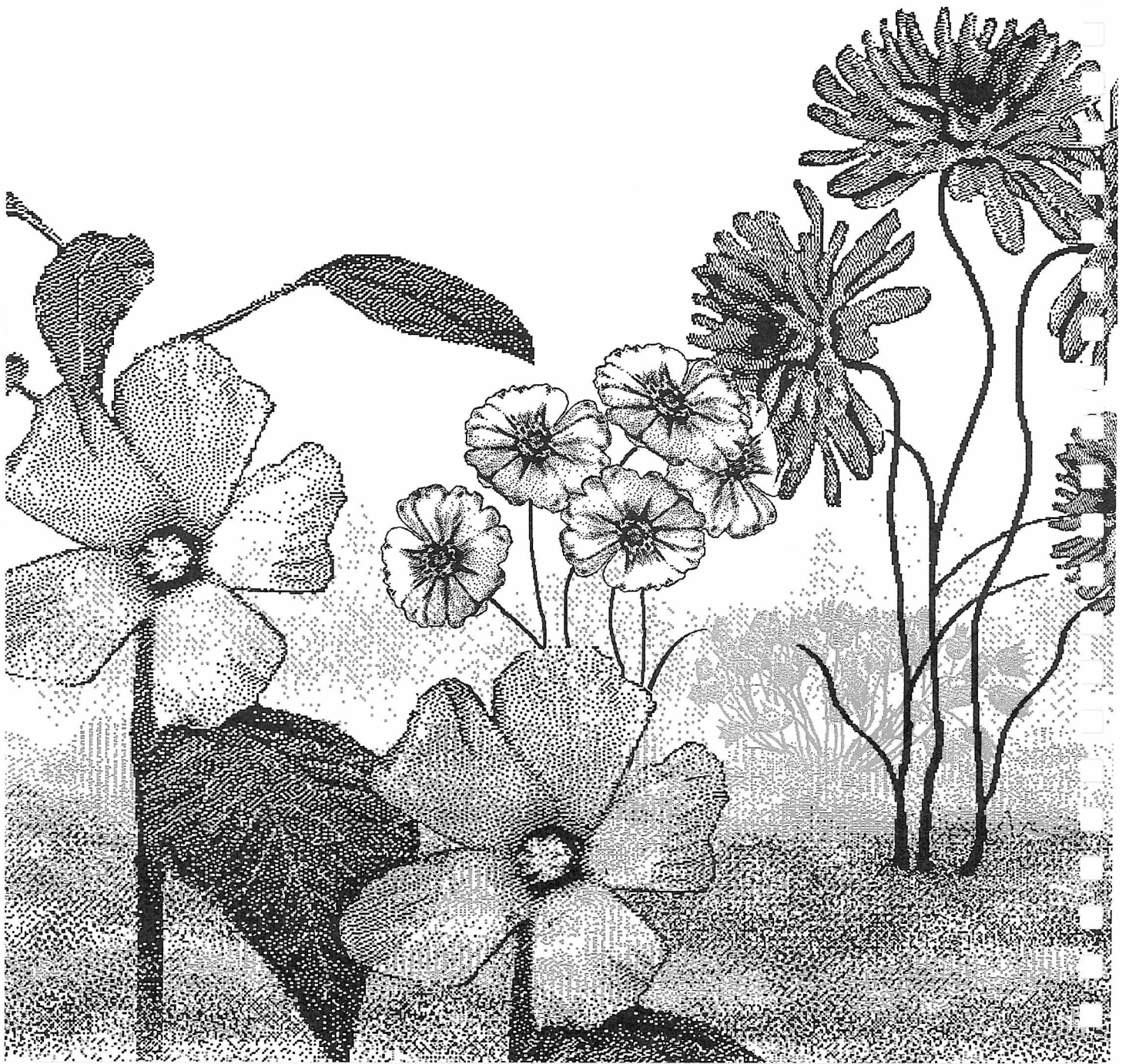
Chapter 3

MacPaint Reference

This chapter provides an overview of MacPaint features and commands and a summary of keyboard tricks and shortcuts.

For a hands-on introduction to using MacPaint, see Chapter 1, "Learning MacPaint."

For step-by-step instructions for performing specific tasks with MacPaint, see Chapter 2, "Using MacPaint."

The MacPaint desktop

The **desktop** is the MacPaint working environment.

The MacPaint **desktop** provides the drawing space, tools and commands needed to create drawings (see Figure 3-1).

Menu bar
Close box
Title bar
Zoom box

Tools menu

Patterns menu

Scroll bars

Size box
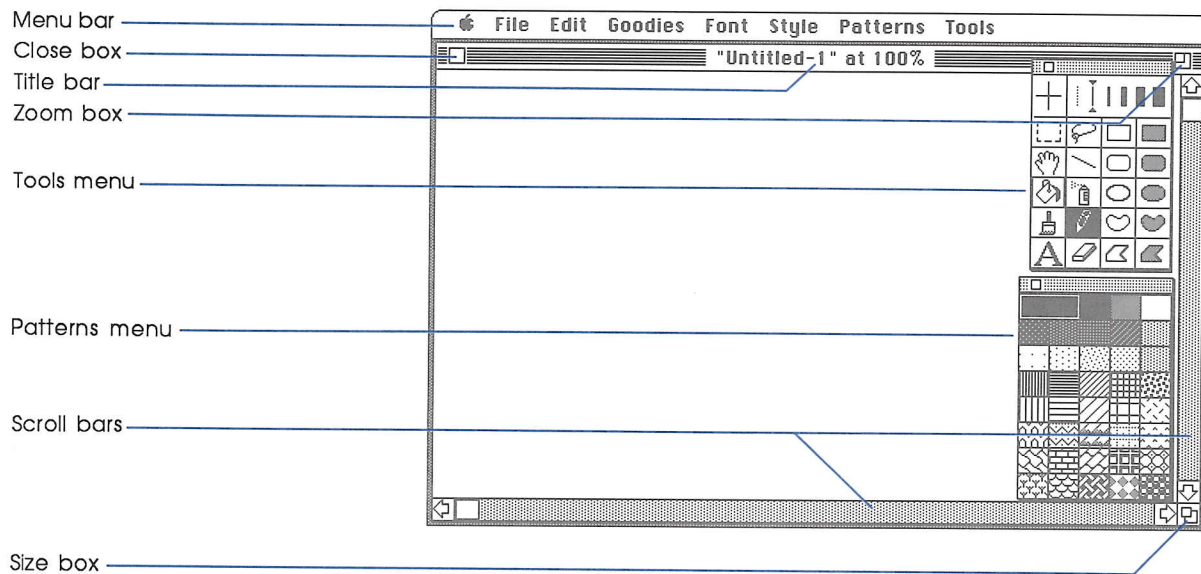
Figure 3-1
The MacPaint desktop

You draw in the central area of the window. Your documents can be as large as 8 by 10 inches, larger than your screen can display without scrolling unless you have a large-screen monitor. MacPaint provides ways to view documents, to enlarge them many times to work on fine details, and to scale them down to provide overviews of documents on the screen.

File	
New	⌘N
Open...	⌘O
Close	⌘W
Save	**⌘S**
Save As...	
Revert To Saved	
Take Snapshot	⌘Y
Throw Away Snapshot	
Page Setup...	
Print...	
Print Selection...	
Quit	⌘Q
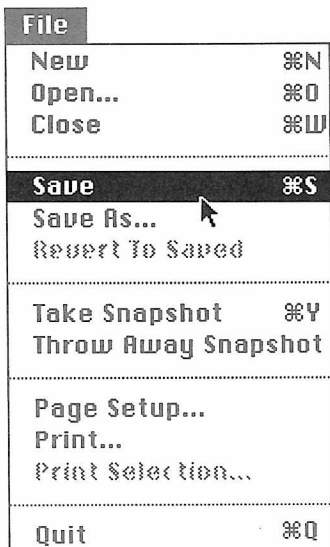
Figure 3-2
The File menu and
the Save command

Across the top of the screen, you see the menu bar that contains all MacPaint's pull-down menus.

The pull-down menus provide easy access to the MacPaint commands. Once a document is complete, for example, you can save it on a disk with the Save command from the File menu (see Figure 3-2).

Just under the menu bar, a title bar shows the name of your document. With a new document, the title bar shows "Untitled-1 at 100%." New documents do not have names, and so "Untitled" appears in the bar. After you save and name a document, the document's name appears in place of "Untitled."

The title bar also shows the current zoom level of a document. MacPaint lets you use enlarged or reduced views of a document, and the zoom level shown next to the document name tells by what percentage the document has been enlarged or reduced. New documents are displayed at 100 percent—in other words, at their original size. Refer to "Zoom In" and "Zoom Out" in this chapter for more information about changing the zoom level.

Also appearing on the MacPaint desktop are the close, size, and zoom boxes and the scroll bars. The close box appears on the left side of the title bar. By clicking the close box, you close, or put away, a MacPaint document when you no longer need it. If you haven't saved your work on a disk, MacPaint asks if you want to do so before closing the document.

You use the size box to change the window size. Each MacPaint document appears in its own window. You can move and resize individual windows to better see them on the screen. The size box is in the bottom-right corner of the desktop. You drag the size box to change a window to any size, large or small, that fits the Macintosh screen.

The zoom box appears on the right side of the title bar. You use it to quickly change the size of the window. If you want to enlarge a window, you click the zoom box; MacPaint enlarges the window to the largest size that fits the screen. Clicking the zoom box again reduces the window to its former size.

At the bottom and at the right side of the window are scroll bars that allow you to position your view of a drawing. Refer to "Working With Windows" in Chapter 2, and to your Macintosh owner's manual for an explanation of how to use the scroll bars to move through a document.

Figure 3-3
The Tools menu

Two new features of MacPaint 2.0 are the Tools and Patterns menus that you can move to convenient locations on the screen or put away to provide more drawing room. MacPaint 2.0 is preset not to display the Tools and Patterns menus, but you can tear them off the menu bar by pulling them down and reposition them on the screen, if you wish.

The Tools menu provides a choice of tools to use (see Figure 3-3).

On the MacPaint Tools menu you see

☐ six choices of **line weights** (including an invisible line) for drawing lines and shapes

☐ the **selection rectangle** and the **lasso** for selecting shapes or text and changing or repositioning them

☐ the **grabber** for scrolling a document in a window

☐ the **paint bucket** for filling shapes with patterns

☐ the **paintbrush** for applying patterns to documents in a manner similar to stroking on paint

☐ the **text tool** for typing text such as labels, captions, or paragraphs in documents

☐ the **line tool** for drawing straight lines vertically, horizontally, or at any angle diagonally

☐ the **spray can** for applying patterns to documents in a manner similar to spraying on paint

☐ the **pencil** for drawing lines freehand as you might with a pencil on paper

☐ the **eraser** for erasing parts of a picture

☐ the **rectangle tools** for drawing rectangles and squares

☐ the **rounded rectangle tools** for drawing rectangles and squares with rounded corners

☐ the **oval tools** for drawing ovals and circles

☐ the **freehand shape tools** for drawing lines to form irregular or curving shapes

☐ the **polygon tools** for drawing angular shapes composed of angles and straight lines such as triangles, quadrilaterals, and other polygons
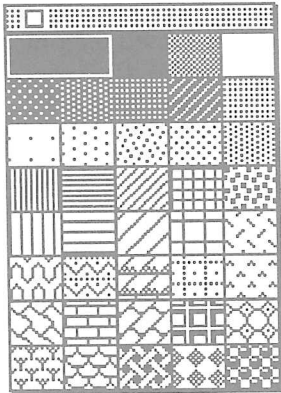
Figure 3-4
The Patterns menu

You use these MacPaint tools for all your drawing, from the simplest diagram to the most complex graphics. You click a tool once to use it. The tool you click becomes highlighted in black to show that it is selected. Refer to "The Tools Menu" in this chapter for more information about using the Tools menu.

You use the **Patterns menu** to shade drawings, applying the patterns like paint with the paint tools (see Figure 3-4).

The Patterns menu has 38 preset patterns ready for your immediate use. You can also change the patterns on the menu. Refer to "The Patterns Menu" in this chapter for more information about using patterns in a document.

Creating and saving documents

When you work with MacPaint, you follow a routine of opening a document, working on it, and saving it on a disk.

To start MacPaint and create a new document, you select the program icon and choose Open from the File menu, or double-click the MacPaint program icon to start MacPaint and automatically create a new window. If MacPaint is already running, you choose New from the File menu to make a new window appear.

At the Finder, you can open a document already on a disk by clicking the document icon to select it and choosing Open from the File menu. You can also double-click the document icon to open the document. If MacPaint is already running, you choose Open from the File menu and specify the document you wish to open; the document appears in a new window.

MacPaint has settings, called **preset options,** that it uses when creating a new document. For example, a new document always appears without the Tools and Patterns menus on the screen. You can change the MacPaint settings as you like when you work on a document.

Instead of changing the preset options each time you create a document, you can create **stationery** documents with settings that match your preferences. You can then open stationery documents and complete them.

Once a document is open, you use the MacPaint drawing tools and commands to draw and create pictures.

Remember, as you work on a MacPaint document, it temporarily resides in the Macintosh memory. If the computer is turned off and you haven't saved your document on a disk, you lose the document. To keep a copy of your work, you must save the document on a disk.

You should also save your document periodically as you work on it. That way you keep an up-to-date version on a disk, and won't lose all your work if a power outage occurs.

When a document is finished, you save the final version on a disk for later use (unless you wish to abandon your work and not keep a copy). Once a document is saved on a disk, you have a permanent copy that is ready whenever you need it. You can view or change a document whenever you wish.

It's also a good idea to make copies of your documents on other disks. These backup copies ensure that if a disk is accidentally harmed in some way, you won't lose documents, because you have more than one copy.
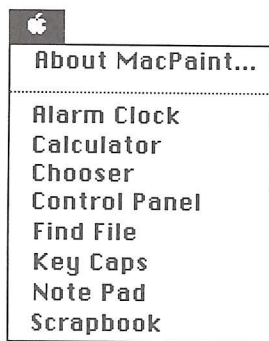
The Apple menu

Most of the content of the Apple menu (see Figure 3-5) depends on the desk accessories installed in your system.

About MacPaint...

Choosing About MacPaint opens a window of information about the MacPaint program. To dismiss it, click anywhere on the screen.

Desk accessories

The Apple menu lists all **desk accessories,** such as the Alarm Clock and the Calculator, installed in the System file of your startup disk. Your Macintosh owner's guide shows how to use the **Font/DA Mover** (Font and Desk Accessory Mover) on the *System Tools* disk to add or delete desk accessories.

Figure 3-5
The Apple menu

File	
New	⌘N
Open...	⌘O
Close	⌘W
Save	⌘S
Save As...	
Revert To Saved	
Take Snapshot	⌘Y
Throw Away Snapshot	
Page Setup...	
Print...	
Print Selection...	
Quit	⌘Q

Figure 3-6
The File menu

The File menu

The File menu (see Figure 3-6) contains the commands for opening, saving, and printing documents, and for ending a work session. Another command, Take a Snapshot, lets you make a copy of the document, which you can use to restore all or part of a document to the way it appeared at the time of the snapshot. When the copy, or "snapshot," is no longer useful you can use another command to throw it away to conserve memory. You can also throw away all your recent changes to a document by choosing the Revert to Saved command, which reopens the document as it was last saved on a disk, canceling any changes that haven't been saved since that time.

New

Choosing New opens a new MacPaint document on the desktop. You can use the New command even if a document is already open on the screen. A new document appears on top of existing ones without replacing them.

You can have up to nine documents open at one time if sufficient memory is available. (If you have a 512K Macintosh, you cannot open more than two windows at a time.) As each new document is created, it is named "Untitled" and given a number corresponding to the number of documents currently open. New documents are named "Untitled-1," "Untitled-2," and so on through "Untitled-9," depending on how many windows are already open. If New is dimmed, you can't open a new window until you close a window.

A new document is set up according to MacPaint's preset options. If a new document's preset options don't match the settings you routinely use, you can create stationery that allows you to open documents with the settings you need. Instead of choosing New, you choose Open to open a stationery document. For more information about creating and using stationery, refer to "Save As" in this chapter.

❖ *Keyboard equivalent:* Command-N

Open...

Choosing Open opens a MacPaint document that has been saved on a disk. A dialog box appears that allows you to specify the document you want to open. If there are already nine document windows open, Open is dimmed to show that you can't open any more windows until you close a window.

When you choose Open, you see the dialog box shown in Figure 3-7.
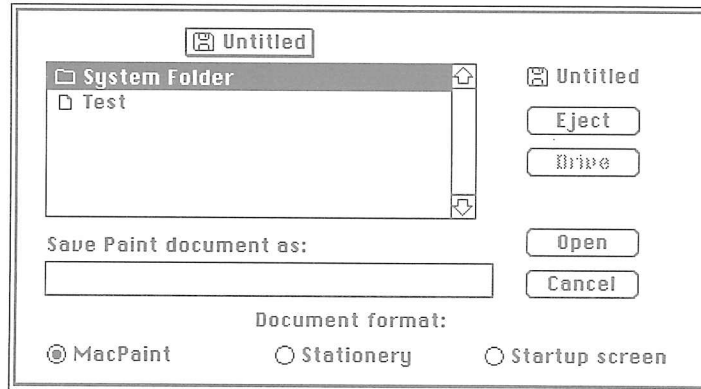
Figure 3-7
The Open command dialog box

The name of the disk you are using is shown on the right side of the dialog box above the Eject button.

You select the document you want from the list in the dialog box. The list contains the names of the MacPaint documents and folders on the current disk. If more documents are on the disk than fit in the list box, you can use the scroll bars to find the document name or folder you want.

To open a document, click the name to select it. Then click Open. Alternatively, you can double-click the name to open the document in one step.

If your document is within a folder, double-click the folder name. The folder opens and the names of documents and folders within it appear in the list box. You can then open a document or another folder. To close the current folder, click the disk name that appears over the Open button.

To see a list of the currently open folders, position the pointer on the folder name displayed over the list box and hold down the mouse button. A list of the open folders and the disk name appears.

You can also open a folder from the list of folder names. Drag to select the folder name on the list and release the mouse button. A list of the folder contents appears.

To open a document on a disk not inserted in a drive, insert the disk in an empty drive or click Eject to eject the current disk so you can insert the disk holding your document. The names of documents and folders on the inserted disk automatically appear in the list box. You then select and open your document from the list.

To open a document on a disk in a different disk drive, click Drive until the name of the desired disk appears. The documents and folders on the disk appear in the list box, ready for you to open.

If you decide not to open a document, you can click Cancel and return to using MacPaint where you left off.

Opening stationery

You also use Open to open stationery. A stationery document contains settings, text, and drawings that you frequently use. You save the document as stationery, similar to a pad of preprinted forms.

When you begin a new document, you can open a stationery document and immediately start working on it. You don't have to change settings or add the basic text or design elements that always appear in documents you create.

When you open stationery, the title bar in the document name is "Untitled" as if you were starting a new document. After completing the document, you name and save it on a disk.

For information about creating stationery documents, refer to "Save As" in this chapter.

❖ *Keyboard equivalent:* Command-O

Close

Choosing Close closes the active window. Other windows on the screen are not affected. To close a window that is not active, click the window to activate it and then choose Close or click the close box.

If you have made changes to a document since the last time you saved it, a message asks if you want to save the document before closing it (see Figure 3-8).

```
Save changes to "Untitled-1"
before closing?

[    Yes    ]

[    No    ]          [ Cancel ]
```
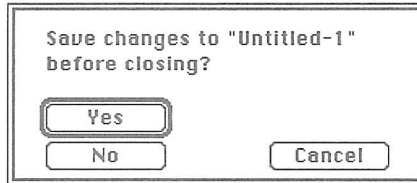
Figure 3-8
The Close command message

❖ *Keyboard equivalent:* Command-W

Save

Choosing Save saves the document in the active window to a disk. The window remains open. If several windows are open, you must activate the window holding the document you wish to save before choosing the command.

If the document hasn't been saved previously, a dialog box appears asking where you want it saved and under what name (see Figure 3-9).
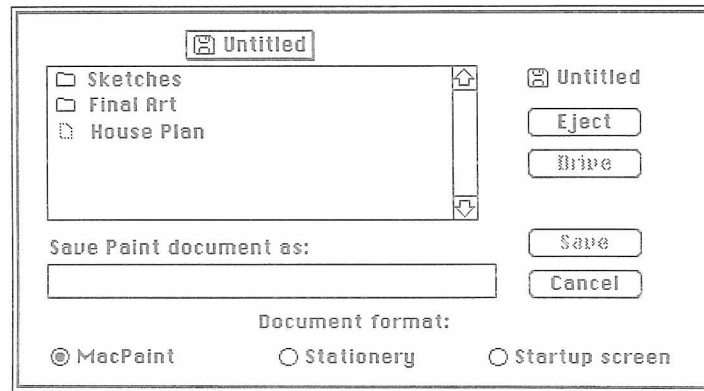
Figure 3-9
The Save dialog box appears when you save untitled documents

You type a name and click the Save button or press Return. (See "Save As" in this chapter for more information about this dialog box.) If not enough room exists on the current disk to hold the document, you see a message asking you to save the document on another disk.

If the document has been saved before, you see no dialog box or message. The Save command updates the document by replacing the version on the disk with the version on the screen.

Use Save when you want to update a document on a disk with the most recent changes. Use Save As when you want to save a copy of a document without affecting a version of the document already on a disk.

For information about saving a document as stationery or as a startup screen, refer to "Save As" in this chapter.

❖ *Keyboard equivalent:* Command-S

Save As...

Choosing Save As saves a copy of the document in the active window to a disk. A dialog box appears asking where you want the document saved and under what name (see Figure 3-10).

```
                    [💾 Untitled]
  ┌─────────────────────────────┐      💾 Untitled
  │ 📁 Sketches              ⬆  │
  │ 📁 Final Art               │      ┌─────────┐
  │ 📄 House Plan              │      │  Eject  │
  │                            │      └─────────┘
  │                            │      ┌─────────┐
  │                            │      │  Drive  │
  │                         ⬇  │      └─────────┘
  └─────────────────────────────┘
  Save Paint document as:              ┌─────────┐
                                       │  Save   │
  ┌─────────────────────────────┐      └─────────┘
  │                            │      ┌─────────┐
  └─────────────────────────────┘      │ Cancel  │
                                       └─────────┘
              Document format:
   ⦿ MacPaint        ○ Stationery        ○ Startup screen
```
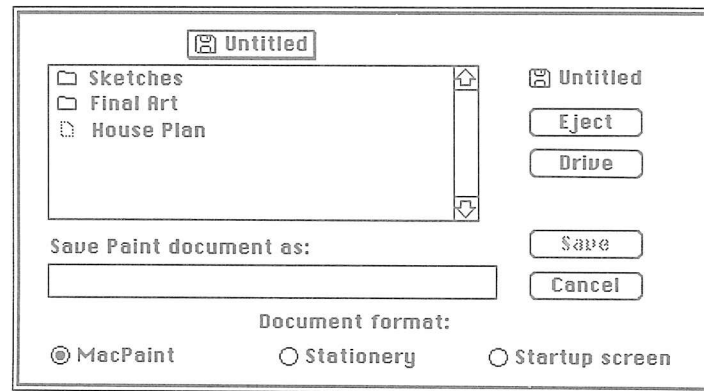
Figure 3-10
The Save As dialog box

You can use this command to save a copy or a different version of a document under a different name. The window remains open after the document is saved.

Three options for saving a document appear at the bottom of the Save As dialog box: MacPaint, Stationery, and Startup screen. MacPaint is preset to save a document as a MacPaint picture.

You can also save a document as **stationery,** which saves the MacPaint document and records the page setup, menu positions, and other options that you've chosen with the Preferences command. When you open a stationery document, it opens as an untitled document set up according to your preferences.

Using stationery documents can save you the steps it takes to set up a new document with the graphics, text, and working preferences that you routinely use. Stationery documents appear with a different icon on the desktop to distinguish them from other MacPaint documents.

Each time the Macintosh is turned on, it is preset to briefly display a **startup screen** that welcomes you to the Macintosh. You can change this screen to display a MacPaint document of your own. You must place the graphics and text you wish displayed in the upper portion of a MacPaint document. Only information within a rectangular area 512 dots (pixels) wide by 342 dots long, starting from the upper-left corner of the document, is saved as the startup screen.

When you save the document, you choose the Startup screen option. The document must also be named "startupscreen," with no spaces in the name (it makes no difference whether you capitalize letters). After saving the document, you must place it in the System Folder containing the System and Finder icons. Once the new startup screen document is in the folder, your Macintosh will display it each time it is turned on.

Revert To Saved

Choosing Revert To Saved removes all changes made to a document since the last time you saved it. The command reopens the last saved version of the document from the disk you saved it on.

If you discover that the changes you make to a document are not appropriate and that correcting them will be time-consuming, you can use Revert To Saved to start over.

After you choose Revert To Saved, a message asks if you want to return the document to the last version saved. Click Yes to revert or No to cancel the command, leaving the current document with all its changes.

You cannot cancel the Revert To Saved command by choosing Undo.

Take Snapshot

Choosing Take Snapshot saves in memory (not on disk) a copy of the document in the active window. Taking a snapshot of your document provides you with a handy backup version of a picture. If you becomes dissatisfied with the results of a drawing procedure and it's too late to use the Undo command, you can always use the snapshot to restore all or part of a document to the way it appeared in the snapshot.

Whenever you open a document, MacPaint automatically takes a snapshot of it. As you work, it's a good idea to routinely take a snapshot at each stage of your work. Then if you misjudge or draw or change the document inappropriately, you can rely on the most recent snapshot to restore the document and avoid starting over.

To restore a document, you can choose Revert To Snapshot from the Edit menu or use the magic eraser to restore parts of a document. Refer to "Revert To Snapshot" and "Eraser" in this chapter for more information about restoring a document with a snapshot.

Important If you have a 512K Macintosh and you open two documents at the same time, you cannot use the Take Snapshot command because of memory limitations.

❖ *Keyboard equivalent:* Command-Y

Throw Away Snapshot

Choosing Throw Away Snapshot discards the snapshot of the document in the active window. You'll need to use this command only when memory is in short supply. Discarding the current snapshot frees about 52K of memory. Discarding a document snapshot, for example, may allow you to open additional documents.

Page Setup...

Choosing Page Setup brings up a dialog box that lets you specify how you want documents printed. The dialog box varies according to your printer and system software. Refer to your Macintosh owner's guide or to your printer manual for information about the printing options available with your printer.

❖ *LaserWriter users:* For the best quality printing of documents with the LaserWriter, deselect the Faster Bitmap Printing option on the Page Setup dialog box. Click the Options button and select the two options, Precision Bitmap Alignment and Larger Print Area from the Options dialog box.

Print...

Choosing Print prints a copy of the document in the active window. A dialog box (which one you see depends on the printer you're using) lets you specify how you want the selection to be printed. The dialog box varies according to your printer and system software. Refer to your Macintosh owner's guide or to your printer manual for information about the printing options available with your printer.

Once printing begins, you can press Command-period to stop printing.

❖ *LaserWriter users:* If you print MacPaint text on a LaserWriter —even if you use laser fonts—you won't get the quality of text you'd get from a word processor printing to a LaserWriter. This is because MacPaint converts all text to bit maps: The text becomes part of the picture, and the LaserWriter doesn't even know it's printing text.

❖ *Screen images:* If you want your printed documents to look as much as possible like screen images, make sure the Smoothing option is not selected in the LaserWriter Page Setup dialog box or choose Draft in the ImageWriter Print dialog box.

Print Selection...

Choosing Print Selection prints a copy of the selected portion of the document in the active window. This command is useful if you wish to print a specific part of a document. You make a selection with the selection rectangle or the lasso and then choose Print Selection from the Edit menu. A dialog box lets you specify how you want the document to be printed.

The selection occupies the same position on the paper as it does in the document—as if the whole document had been printed with everything but the selection masked out. If you want to reposition the selection on the page, copy and paste it into a new document at the position where you want it.

Once printing begins, you can press Command-period to stop printing.

Quit

Choosing Quit exits MacPaint. You use the Quit command when you finish working on a document and want to leave MacPaint.

If you have changed any open documents, the message "Save changes before quitting?" appears. To save the changes, click Yes. If several windows are open on the screen, you are asked to save each one individually. A message appears naming each open document and asks if you want to save it. If a document is untitled, the Save As dialog box appears to let you name the document before you save it.

❖ *Keyboard equivalent:* Command-Q

```
┌─ Edit ──────────────┐
│ Undo            ⌘Z  │
├─────────────────────┤
│ Cut             ⌘H  │
│ Copy            ⌘C  │
│ Paste           ⌘U  │
│ Clear               │
├─────────────────────┤
│ Invert              │
│ Fill                │
│ Trace Edges     ⌘E  │
│ Flip Horizontal     │
│ Flip Vertical       │
│ Rotate          ⌘T  │
├─────────────────────┤
│ Revert To Snapshot ⌘R │
└─────────────────────┘
```

Figure 3-11
The Edit menu

The Edit menu

Most of the commands in the Edit menu (see Figure 3-11) operate only on parts of the active document selected with the selection rectangle or lasso. To use these commands, you must first make a selection and then choose a command to change the selection. If you haven't made a selection with either the selection rectangle or the lasso, the commands remain dimmed to show they can't be chosen.

Undo

Choosing Undo cancels the last change you made to a document. For example, if you draw a line by mistake, you can choose Undo to remove the line from the document. Undo works for the last action only, however. Once another action changes the document, the preceding action cannot be undone.

You can cancel any action you took, such as cutting or pasting, duplicating, resizing, changing patterns, or changing position and location, with the Undo command. You can undo a deletion made by choosing the Clear command or by pressing Backspace.

Actions that don't change the contents of the document, such as scrolling, changing a dialog box, selecting a drawing tool, or resizing a window, cannot be undone.

The Undo command itself can also be canceled by choosing Undo again.

❖ *Keyboard equivalent:* Command-Z, Tilde key, or Escape key

Cut

Choosing Cut cuts a selection from a document and puts it on the Clipboard. When you use Cut, you replace anything already on the Clipboard with the selection you cut.

You must select part of a drawing before it can be cut. You use Cut to delete a selection or to move it to a new position in a document. To move a selection, you cut it and send it to the Clipboard, select a new insertion point in the document, and choose the Paste command to place a copy of the Clipboard contents in the document.

You can use Cut to move a selection to another part of a document, to another MacPaint document, or to another document of a different application.

Immediately after cutting a selection, you can cancel the deletion by choosing Undo from the Edit menu. You can also use Paste to recall a selection as long as it remains on the Clipboard.

❖ *Keyboard equivalent:* Command-X

Copy

Choosing Copy makes a copy of the selection and puts it on the Clipboard. Copy replaces anything already on the Clipboard with a copy of the selection. You use Copy when you want to duplicate a selection in the same or in another document.

You must make a selection before you choose Copy. After you choose the Copy command, the selected part of the document remains selected.

After copying a selection onto the Clipboard, you can paste the Clipboard contents into another part of the document, into a different document, or into a document of another application.

❖ *Keyboard equivalent:* Command-C

Paste

Choosing Paste places the Clipboard contents into the center of the active window. Because the Clipboard contents remains on the Clipboard, you can use Paste repeatedly to make multiple copies of whatever is on the Clipboard.

Before choosing Paste, you can make another selection with the selection rectangle or lasso in your document; choosing Paste will then place the Clipboard contents into the selected area. (When you paste into a selection made with the lasso, the Clipboard contents is pasted into a rectangular area that bounds the selection.) Whatever is on the Clipboard will take on the size and shape of the selected area in the document. Pasting into a selection is a handy way to specify a new size or shape for images or text.

As long as the pasted selection remains active (as long as it shimmers or is surrounded by a rectangular marquee), it can be dragged, inverted, and so on. If you made the selection with the selection rectangle, you can also resize and stretch the selection. If the Clipboard is empty, the Paste command is dimmed.

You can paste text or graphics from the Scrapbook desk accessory or from an application other than MacPaint. You can also paste text from the Calculator, Note Pad, or Key Caps desk accessories.

❖ *Keyboard equivalent:* Command-V

Clear

Choosing Clear deletes a selection from the document without putting it on the Clipboard. Clear is useful for permanently deleting a selection from a document. If you want to remove a selection from the document, but you do not want to alter the Clipboard contents, you can use Clear to remove the selection without changing the Clipboard.

You can use Undo to cancel a deletion you make with Clear.

❖ *Keyboard equivalent:* Backspace/Delete

Invert

Choosing Invert inverts the pattern of black and white dots in a selection. That is, it changes white dots to black and black dots to white. The Invert command is useful for producing special effects, such as making a drawing look like a "photographic negative." You can also use it to invert black text appearing on a white background so that it appears as white text on a black background, for example.

Fill

Choosing Fill fills a selection made with the selection rectangle tool with the current pattern. After making a selection, you can choose any of the patterns on the Patterns menu and fill the selection with that pattern. The Fill command is useful for adding background patterns to a document before you begin drawing or typing text, for example.

The Fill command lets you select areas not enclosed by a black border (or shape) and fill them, without letting the pattern leak beyond the selected area. You can use the Fill command when the paint bucket tool will not work successfully for lack of an enclosing shape. After filling a rectangular area in this way, you can use the eraser (or other tools) to reshape and change the filled area to your liking.

Trace Edges

Choosing Trace Edges traces the edges of a selection made with the selection rectangle. A thick black line or border, for example, will appear hollow with thin lines tracing the outline of the line or border. You can use the command repeatedly on the same selection to build up a pattern of outlines.

If the Shift key is held down when Trace Edges is chosen, a drop shadow is added to the image. *Drop shadow* means that the edges on the right and bottom appear heavier than those on the left and top.

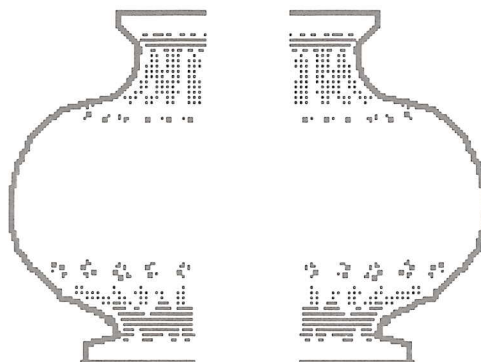❖ *Keyboard equivalent:* Command-E (Trace Edges), Shift-Command-E (Trace Edges with drop shadow)

| Before
Trace Edges | Trace
Edges | Multiple
Trace Edges | Trace Edges
with drop shadow |
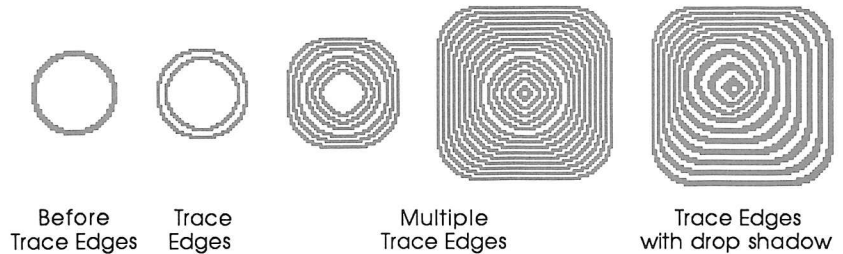
Flip Horizontal

Choosing Flip Horizontal flips a marquee selection horizontally around a vertical line through its center (see Figure 3-12).

Figure 3-12
An image flipped horizontally

Flip Horizontal is useful for creating objects that should be symmetrical along a vertical axis. You can draw a freehand shape, copy it, and reposition and flip the copy to produce two freehand lines with symmetrical curves. For example, you can create interesting border patterns, such as the one in Figure 3-13.
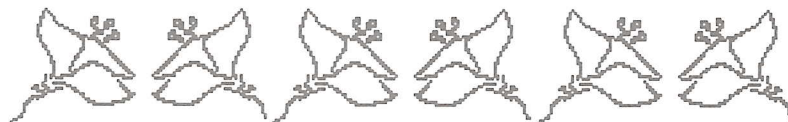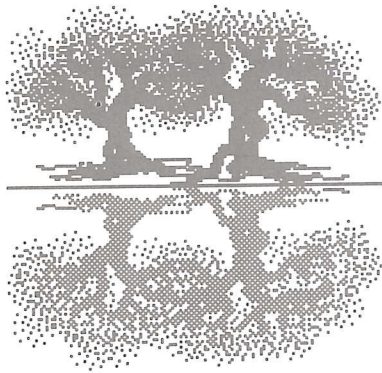
Figure 3-13
Border pattern created with the Flip Horizontal command

Flip Vertical

Choosing Flip Vertical flips a marquee selection upside down. Flip Vertical is useful for creating objects that should be symmetrical along a horizontal axis. You can draw a freehand shape, copy it, and reposition and flip the copy to produce two freehand lines with symmetrical curves. For example, you can create interesting mirror images, such as the one in Figure 3-14.

Figure 3-14
Mirror image created with the Flip Vertical command

Rotate

Choosing Rotate rotates a selection 90 degrees counterclockwise. You must first select an image with the selection rectangle before you can rotate it. After making a selection, you can choose the command several times in a row to rotate the selection in 90-degree increments.

If you start with a selection that is taller than a document is wide (8.5 inches), it will be truncated (chopped off) at both ends after it rotates.

❖ *Keyboard equivalent:* Command-T

Revert To Snapshot

Choosing Revert To Snapshot reverts the selected area of the document to the way it appeared in the most recent snapshot. Revert To Snapshot is useful for eliminating changes that you are dissatisfied with. You can change any area of a document (or even the whole document) back to the way it appeared when you made the most recent snapshot. Using Revert to Snapshot, you don't have to erase large portions of a document and start over drawing them from the beginning. Instead, you can quickly use a snapshot to restore your drawing.

You first select the part of the drawing you wish to change with the selection rectangle or the lasso. You can change a rectangular area of any size if you make a selection with the selection rectangle. You can select irregularly shaped areas or specific portions of a document with the lasso. After making a selection, you choose Revert to Snapshot, and MacPaint reproduces the corresponding portion of the snapshot within the selected area. Everything within the selected area will revert to its snapshot appearance.

Goodies	
Turn Grid On	⌘G
Draw From Center	
Show Mouse Position	⌘K
Zoom In	⌘M
Zoom Out	⌘L
Show Actual Size	⌘F
Shortcuts...	⌘H
Preferences...	
Edit Pattern...	
Brush Shape...	
Brush Mirrors...	
Scale Selection...	
Untitled-1	⌘1
Untitled-2	⌘2
Untitled-3	⌘3

Figure 3-15
The Goodies menu

The Goodies menu

The Goodies menu (see Figure 3-15) lets you turn on and off a number of special MacPaint features, zoom in and out to different magnifications, see a list of shortcuts, set your preferences for the way MacPaint works, and switch from one document to another.

Turn Grid On, Turn Grid Off

Autogrid imposes an invisible grid on the active document. Using Autogrid is similar to using grid paper, except that MacPaint makes sure that you start and end the lines and shapes you draw in the right spot. It's useful for making sure images are drawn and located consistently in relation to one another and that text lines up correctly in relation to images. When Autogrid is on, all lines and shapes you draw with the line and shape tools automatically begin and end where these grid lines intersect.

The spacing of the grid depends on your selection in the Preferences dialog box. Grid spacing can be in 2, 4, 8, 16, or 32 dots (pixels). When Autogrid is off, you can create irregular shapes and position images and text freely, without relation to the grid.

When the Autogrid is on, this command reads Turn Grid Off. When the Autogrid is off, this command reads Turn Grid On.

❖ *Keyboard equivalent:* Command-G

Draw From Edge, Draw From Center

You can draw rectangles, rounded rectangles, and ovals in either of two ways: from the edge (or corner) or from the center outward. MacPaint is preset to draw shapes from the edge outward. This means that you begin drawing a rectangle, for example, by dragging from one corner to the opposite corner.

You can also draw shapes from the center outward, however, by choosing Draw From Center. You can draw a circle, for example, by dragging from the center of the circle outward to where its perimeter should appear. Choosing Draw From Center can make drawing shapes in specific locations easier.

When Draw From Center is in effect, small crosshairs appear inside the affected tools in the Tools menu (see Figure 3-16). You can choose Draw From Center or Draw From Edge from the Goodies menu or by double-clicking the desired tool in the torn-off Tools menu.
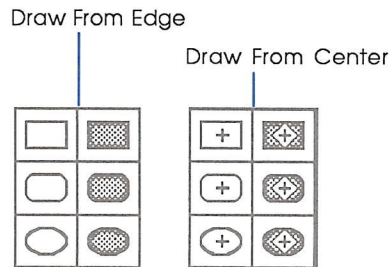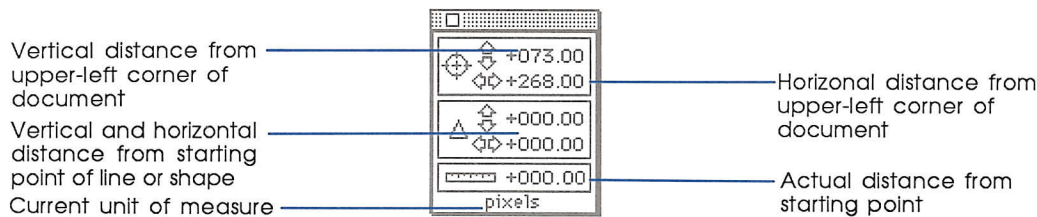

Figure 3-16
Shapes that can be drawn from the center

Show Mouse Position, Hide Mouse Position

You can display a window that shows the pointer's location and the distance that it moves. The mouse position inset (see Figure 3-17) displays coordinates that tell you exactly where the pointer is on the screen and exactly how far it moves each time you drag. This feature is useful in drawing images to precise sizes and in exact locations.

Figure 3-17
The mouse position inset

If the mouse position inset is not on the screen and you want to see it, choose Show Mouse Position. If it is on the screen and you want to hide it, choose Hide Mouse Position or click the close box in the drag bar. You can move the mouse position inset around the screen for convenient viewing by positioning the pointer on the drag bar at the top of the inset and dragging.

The top two numbers in the inset indicate the pointer's vertical and horizontal distance from the upper-left corner of the document—in other words, the x and y coordinates relative to the upper-left corner. These numbers are updated constantly as the pointer moves.

The second pair of numbers in the inset shows the vertical and horizontal distance the pointer moves when dragging. For example, if you draw a rectangle, these numbers indicate the vertical length and horizontal width of the rectangle.

The bottom number in the inset indicates the *absolute* distance the pointer moves when dragging. For example, if you draw a diagonal line, this number indicates the length of the line.

The unit of measure currently in effect appears at the bottom of the inset. Units can be in pixels, inches, or centimeters. Choose Preferences from the Goodies menu to change the unit of measure.

❖ *Keyboard equivalent:* Command-K

Zoom In, Zoom Out

You can change the zoom level (or magnification) of the document as displayed in the active window. MacPaint offers five levels of magnification: the 100-percent, or normal, view; 200-percent, 400-percent, and 800-percent magnified views; and a 50-percent reduced view. You choose Zoom In to enlarge your view of the document by one zoom level and Zoom Out to reduce the document by one zoom level.

Once the document is enlarged or reduced you can continue working on it with any of the tools and commands in the menus. For example, you can zoom in to the 800-percent view and add fine detail to a drawing, or you can zoom out to the 50-percent reduced view and draw or move images with an overview of the how the document looks. Note that drawing in the reduced view produces images that are scaled up in the larger views. When scaled up, these images may not appear as well formed as they might have been if drawn at another zoom level.

You can also use the pencil to zoom in and out on a document instead of choosing the zoom commands. To zoom in on a specific point, choose the pencil from the Tools menu, place the pointer on that spot, and click while holding down the Command key.
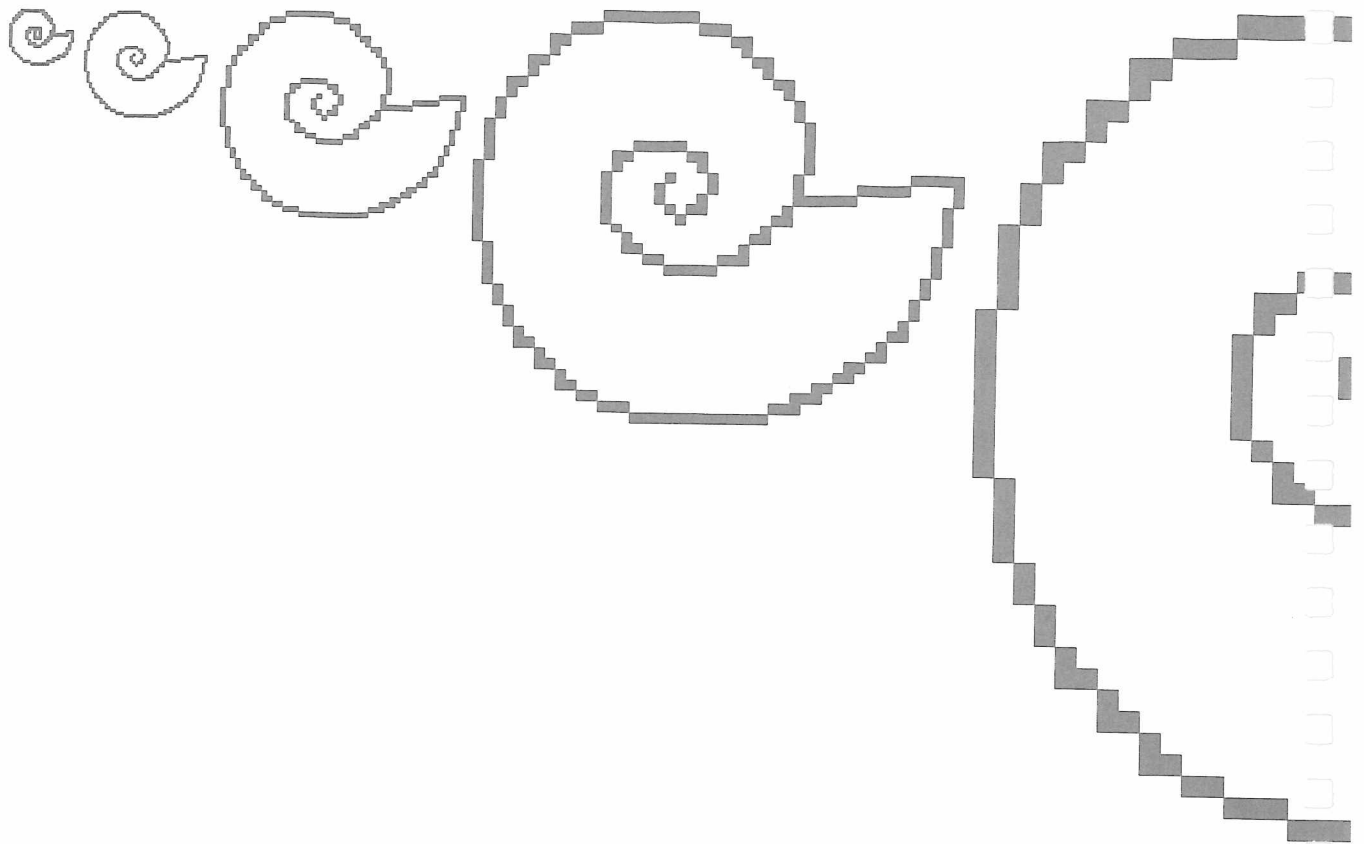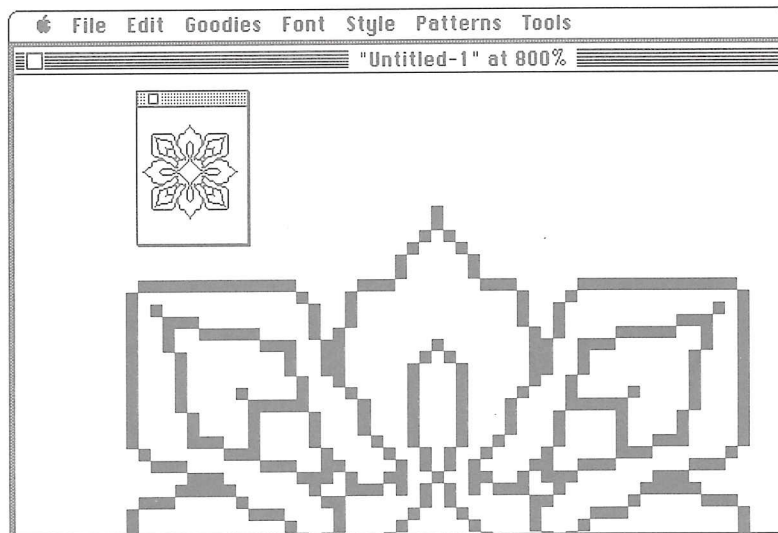
Figure 3-18
The same figure at 50, 100, 200, 400, and 800 percent

Double-click on the pencil in the torn-off Tools menu to zoom directly to the 800-percent view from any other view. Double-clicking the pencil tool in the torn-off menu when the document is at 800 percent returns the document to normal view again.

At the 800-percent zoom level, an inset appears that shows a small portion of the magnified area at the 100-percent size (see Figure 3-19). As you draw or change the enlarged view, this inset displays your changes as well and lets you judge the effect of the changes you make. The actual-size inset is preset to appear in the 800-percent view. To display it in 200-percent or 400-percent views or to hide it in the 800-percent view, press Command-F.

Figure 3-19
An 800-percent view with actual-size inset

❖ *Keyboard equivalent:* Command-M (Zoom in),
   Command-L (Zoom out)


Show Actual Size, Hide Actual Size

Choosing Show Actual Size displays the actual-size inset. This inset
shows the normal (100 percent) view of the window when the
document itself is at some other zoom level. It's useful for judging
the changes you make in a document as you work in a different zoom
level. Each change that you make in a document immediately
appears in the actual size inset so you can see the result of your work
in its actual size and location. Clicking in the actual-size inset
returns the entire document to the normal (100-percent) view.

After you choose the Show Actual Size command, this command
becomes Hide Actual Size. You choose Hide Actual Size when you
no longer want the inset to appear on the screen.

❖ *Keyboard equivalent:* Command-F

Shortcuts...

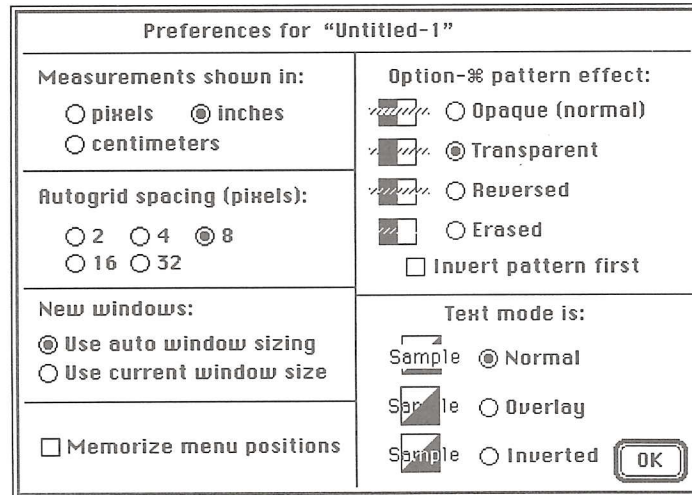Choosing Shortcuts displays a screen of helpful MacPaint hints, reminders, and shortcuts (see Figure 3-20).
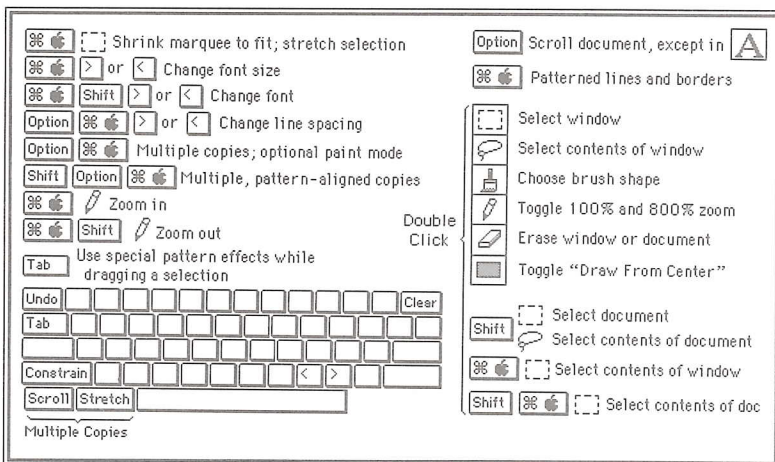
Figure 3-20
The Shortcuts screen

To dismiss the Shortcuts screen, click anywhere.

❖ *Keyboard equivalent:* Command-H

Preferences...

Choosing Preferences displays a dialog box that lets you change some of the preset options in MacPaint (see Figure 3-21).

Figure 3-21
Preferences dialog box with standard settings

When the preferences are set to your liking, click OK. Your preferences are saved on the disk with the document. To permanently record your preferences (or a set of them for a special purpose) for use with other documents, you can save a document as stationery. The next time you open the stationery document, the preferences will be just as you set them, and you can change them again whenever you like. Refer to "Save As" in this chapter for more information about saving documents as stationery.

Measurements

To choose the unit in which the mouse position is measured, click the button next to pixels, inches, or centimeters. MacPaint is preset to measure in inches. The actual-size inset will display pointer positions and distances in the unit of measure chosen here.

Autogrid spacing (pixels)

To set the spacing of the Autogrid, click the button next to 2, 4, 8, 16, or 32 pixels (screen dots). A pixel is about 1/72 inch. MacPaint is preset to use 8 pixels.

New windows

You can specify that all new document windows have the same size as the currently active window, or you can let MacPaint make them the standard size for your screen. Click Use Auto Window Sizing to have MacPaint make windows the standard size or Use Current Window Size to have MacPaint make all windows the same size as the current window.

Memorize menu positions

You can record how you like to use the Tools and Patterns menus. You first set up the menus as you like them (tearing them off and placing them at specific locations, if you wish) and then choose the Preferences command. Then you click the Memorize Menu Positions box. The torn-off Tools and Patterns menus will appear automatically at their current positions on the screen whenever you open a document.
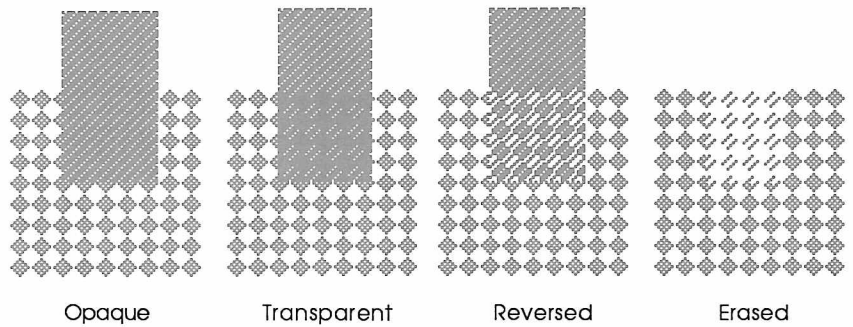
Option-Command pattern effect

You can see how patterns will interact when they are overlapped. You can have one pattern completely block out another (Opaque). You can have one pattern appear transparently through another (Transparent). You can have one pattern invert the dot pattern of the pattern beneath it (Reversed). You can have a pattern erase parts of another pattern that it overlaps as if you were erasing with a patterned eraser (Erased).

After choosing one of the four paint modes, you can call it into effect by holding down the Option and Command keys together as you draw with any filled shape tool. To choose a paint mode, click the button next to one of the options. To invert the second pattern where it crosses the first, also click the Invert Pattern First box. Inverting the selected pattern changes the black dots to white and white dots to black, allowing you to paint with the opposite pattern than the one selected on the Patterns menu.

Each of the examples in Figures 3-22 and 3-23 was made the same way: A borderless rectangle (filled with a checkerboard pattern) was drawn. Then Option and Command were held down while another rectangle (filled with a diagonal pattern) was drawn over the first rectangle. The differences result from the pattern effect chosen from the Preferences dialog box. Figure 3-22 shows the effect of the four paint modes. Figure 3-23 shows the effect of first inverting the second pattern and then applying it in the four paint modes.

Opaque   Transparent   Reversed   Erased
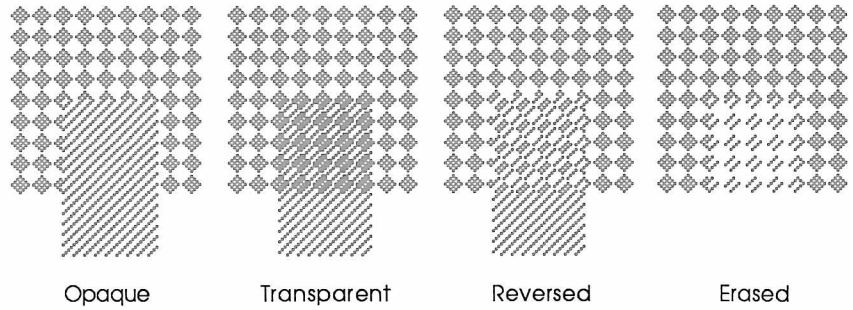
Figure 3-22
Option-Command pattern effects

Opaque   Transparent   Reversed   Erased

Figure 3-23
Option-Command pattern effects, inverted first

❖ *By the way:* You can take advantage of these effects when you drag a selection over another part of a picture: Simply hold down the Tab key while you drag. If Erased is the chosen effect, using this feature is like having a patterned eraser. If Transparent is the chosen effect, using this feature is like sliding transparent overlays over one another.

Text mode

You can determine how text will appear against a background pattern. When you choose Normal, text appears with a white background as you type (blocking out the background pattern behind it). Choosing Overlay produces text surrounded by the background pattern. When you select Inverted, text appears reversed in relation to the background; for example, text will appear white on a black background and black on a white background. The Preferences dialog box illustrates the three text modes (see Figure 3-24). Click the button next to Normal, Overlay, or Inverted.
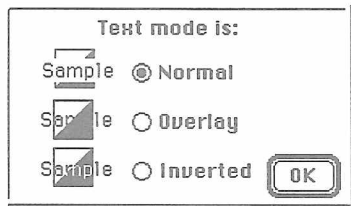
Figure 3-24
The Normal, Overlay, and Inverted text modes from the Preferences dialog box

Edit Pattern...

Choosing Edit Pattern displays a dialog box that lets you edit the current pattern (see Figure 3-25). You can create patterns of your own or capture patterns that appear in your document and store them on the Patterns menu. When you save the document, your new patterns and edited patterns are saved as well.

You first click a pattern on the Patterns menu that you wish to replace. After you choose Edit Pattern from the Goodies menu, a dialog box appears. Both a magnified view of the selected pattern and the pattern as it appears normally appear within the box. By clicking in the magnified view, you can change the pattern of black and white dots. (You can also click directly on a pattern in the document to "capture" it.) The changes in the magnified view immediately appear in the normal view. When you are satisfied with the pattern, you click OK to add it to the Patterns menu. Clicking Cancel cancels your changes and leaves the Patterns menu unchanged.

Click to change any dot from black to white or white to black

Changes reflected here
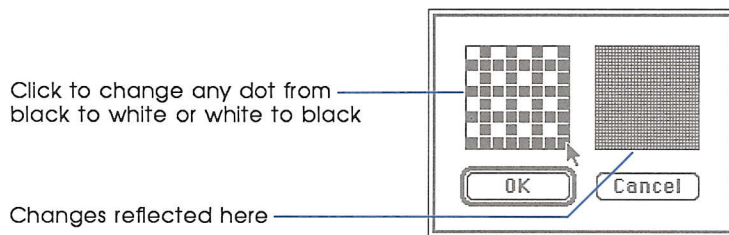
Figure 3-25
The Edit Pattern box

Note that double-clicking a pattern in the torn-off Patterns menu chooses that pattern and also displays the Edit Pattern dialog box for editing.

Brush Shape...

Choosing Brush Shape displays a dialog box that lets you choose one of 32 paintbrush shapes (see Figure 3-26). The currently selected brush shape appears within a black square. Click the brush shape you wish to choose and dismiss the dialog box.
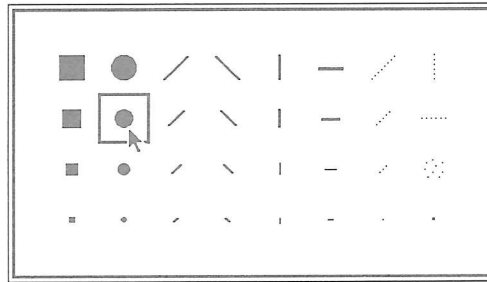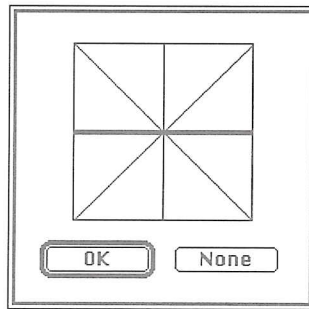

Figure 3-26
The Brush Shape dialog box

Note that double-clicking the paintbrush in the torn-off Tools menu also displays the Brush Shape dialog box.

Brush Mirrors...

Choosing Brush Mirrors displays a dialog box that lets you select up to four "mirrors" (axes of symmetry) for painting symmetrical figures with the paintbrush (see Figure 3-27). Brush Mirrors is useful for creating interesting patterns, such as snowflakes, or creating kaleidoscopic effects. You can use Brush Mirrors at the 100-percent and 50-percent zoom levels only. If you select the vertical and horizontal axis, for example, you see four brushes mirroring the action of the pointer as you drag it. Each axis passes through the center of the window, but not necessarily through the center of the document. You can use one, several, or all of the mirrors at the same time. Choose None to use no brush mirrors.

Figure 3-27
The Brush Mirrors dialog box

To select an axis for painting, click the desired line. Selected mirrors appear as lines wider than the others. To deselect a selected mirror, click the line.

Scale Selection...

Choosing Scale Selection displays a dialog box that lets you reduce or enlarge a selection made with the selection rectangle (see Figure 3-28). Scale Selection is useful if you need to change the size of an image to better fit a picture. You can scale the image up or down until it's the appropriate size. When the dialog box appears, you specify the percentage of enlargement or reduction. To reduce a selection, type a number less than 100; to enlarge the selection, type a number greater than 100. Click OK to see how the selection changes. After you choose Scale Selection, the image (or text) remains selected, and you can choose the command again to rescale the selection to a different size.

Scale selection to:

`50` %

Cancel   OK
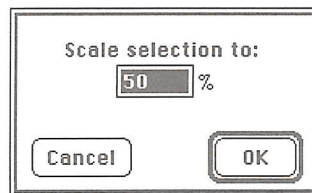
Figure 3-28
The Scale Selection dialog box

A warning box appears if you try to enlarge a selection so much that it would be bigger than a MacPaint document.

Windows 1 through 9

Flowers	⌘1
Untitled-2	⌘2
Animals	⌘3

Figure 3-29
Portion of the Goodies menu that displays names of currently opened documents

The Goodies menu (see Figure 3-29) lists the titles of the currently open documents. When you choose a document name from the Goodies menu, that document comes to the front and becomes the active window. When several documents are open at the same time, the Goodies menu may become so long that all the document names cannot be seen on the screen. An arrow appears at the bottom of the menu indicating that more documents are available on the menu. You can scroll the menu to bring document names into view by dragging past the bottom of the menu.

❖ *Keyboard equivalent:* Command-1...Command-9

The Font menu

The Font menu lists all fonts installed in your startup disk System file. When typing text with the text tool, you can change text fonts at any time by choosing a font name from the menu. If you want to use different fonts in the same text, you can press Enter and choose the font that should next appear. (You can't edit previously typed text if you do this, however.) You can add and remove fonts from the Fonts menu. Because fonts are stored in the Macintosh system, you must use the Font/DA Mover program to add or delete fonts.

You can change the currently selected font to the one that appears above or below it on the Font menu by holding down the Command and the Shift keys and pressing the > or < keys.

The Style menu

The Style menu lists three sets of attributes that MacPaint text can have: Size, Style, and Alignment.

Size

The available font sizes for your text appear at the top of the menu. You may see font sizes listed in black or outlined numbers. Black font numbers indicate that the Macintosh will have to scale (enlarge or reduce mathematically) the font to match that particular font size. Outlined font numbers indicate that a font in exactly that size is available. The font sizes with outlined numbers will look best on the screen because they are already stored in your system and therefore don't have to be scaled by the computer.

One point equals about 1/72 inch, so 18-point characters are about 1/4 inch high.

To reduce the size of active text by one increment, press Command-<. To increase it by one increment, press Command->.

To increase the leading (spacing between lines) of active text, press Option-Command->. To decrease leading, press Option-Command-<.

Style

```
✓Plain      ⌘P
 Bold       ⌘B
 Italic     ⌘I
 Underline  ⌘U
 Outline
 Shadow
```
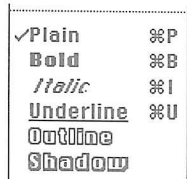
Figure 3-30
The text styles portion of the Style menu

You can type text that is boldfaced, italicized, underlined, outlined, or shadowed, or that has a combination of these attributes, in addition to creating standard (plain) text. The style names in the Style menu (see Figure 3-30) are examples of these attributes. Choosing one of these styles changes the text you are currently typing in your document. Check marks appear beside the styles that have been chosen. By choosing a style name again, you can cancel that text style. For example, if your text is bold and underlined, you choose Underline from the menu if you want the text bold but not underlined.

Choosing Plain cancels all the text styles.

❖ *Keyboard equivalents:* Command-P (Plain), Command-B (Bold), Command-I (Italic), Command-U (Underline)

Alignment

```
✓Align Left
 Align Middle
 Align Right
```

Figure 3-31
The text alignments portion of the Style menu

You can choose from among three types of alignment for your text: Align Left, Align Middle, and Align Right (see Figure 3-31).

If you choose Align Left, individual lines of text line up with the insertion point as their left margin.

If you choose Align Middle, lines of text center horizontally on the original insertion point.

If you choose Align Right, individual lines of text line up with the insertion point as their right margin.

Click here to put away

Current pattern

Drag here
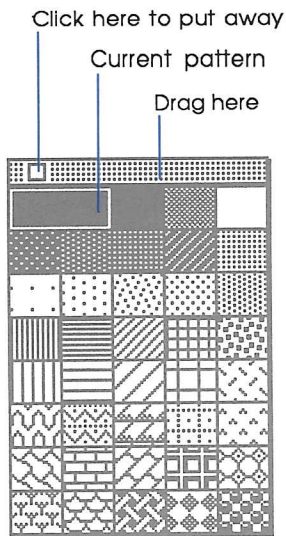
Figure 3-32
The Patterns menu

The Patterns menu

The Patterns menu (see Figure 3-32) provides a choice of 38 patterns for shading a document. The Patterns menu lets you choose the pattern used by the paintbrush, the paint bucket, the spray can, and the five filled shape tools. You also use the Patterns menu to choose patterns for patterned borders or lines. You can choose patterns by pulling down the menu or you can tear the menu off the menu bar and move it around the screen to convenient locations.

To choose a pattern from the menu bar, pull down the Patterns menu, drag to the pattern you want to choose, and release the mouse button. The pattern will blink momentarily to show that it has been selected, and then the menu will disappear. If you pull the menu down again, you'll see that the selected pattern appears in the pattern box at the top of the menu.

To tear off the Patterns menu, pull it down from the menu bar. Without releasing the mouse button, drag the pointer beyond the menu boundary. A dotted outline of the menu follows the pointer. Release the mouse button when the outline is where you want the menu to be. You can reposition the menu by positioning the pointer on the menu's drag bar and dragging. (You can also tear it off again.) If the Patterns menu has been torn off, you can click the desired pattern to select it.

You can change the patterns that appear on the Patterns menu. Refer to "Edit Pattern" in this chapter for more information about editing patterns. Double-click any pattern in the torn-off Patterns menu to choose a pattern and display the Edit Pattern dialog box.

The Tools menu

The Tools menu (see Figure 3-33) lets you choose among 6 line weights and 20 tools for use in your documents. Like the Patterns menu, the Tools menu can be torn off the menu bar and moved around the screen. All tools can be chosen either from the menu bar or from the torn-off menu, but shortcuts that require double-clicking are available only when the Tools menu is torn off. Tearing the Tools menu off the menu bar is just like tearing off the Patterns menu. Refer to "The Patterns Menu" in this chapter for information about tearing off menus.

Click here to put away
Vertical line weight
Line weight sample
Selection rectangle
Lasso tool
Grabber
Line tool
Paint bucket tool
Spray can tool
Paintbrush tool
Pencil
Text tool
Eraser

Drag here
Horizontal line weight
Rectangle tool
Rounded rectangle tool
Oval tool
Freehand shape tool
Polygon tool
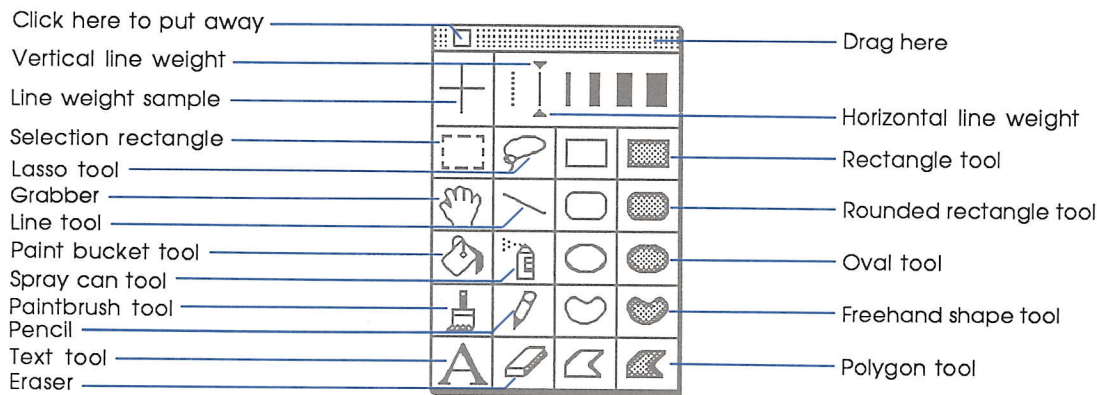
Figure 3-33
The Tools menu

To choose a tool, pull down the Tools menu, drag to the tool you want to choose, and release the mouse button. If the Tools menu has been torn off, just click a tool.

The pointer takes a shape appropriate to the chosen tool. Generally, to use a tool you hold down the mouse button while moving the pointer in the drawing window. For conciseness, this section calls that action *dragging a tool*.

Holding down the Option key while you use any tool (except the text tool) temporarily changes the tool to the grabber.

If you reach the edge of the window (as opposed to the edge of the document) while dragging a tool, the window scrolls automatically.

Sample intersection
Vertical line weight
Horizontal line weight
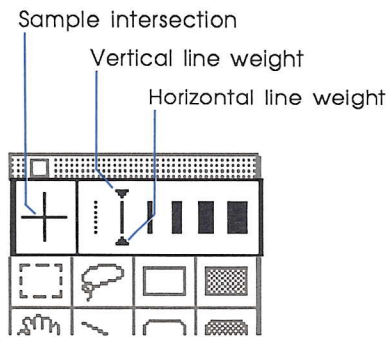
Figure 3-34
Line-weight indicator box

Line weights

You can draw lines and shapes with thick or thin lines depending on the line weight you choose from the top of the Tools menu (see Figure 3-34). You have a choice of five line weights plus an invisible line weight, shown as a dotted line, which can be used to draw borderless shapes. You can draw shapes with one line weight or give the shape different vertical and horizontal line weights. The line-weight indicator box to the left of the line weights shows which vertical and horizontal line weights have been chosen.

□ To choose the same line weight for both vertical and horizontal lines, click on the appropriate line in the Tools menu.

□ To choose a vertical line weight, click just above the appropriate line in the Tools menu.

□ To choose a horizontal line weight, click just below the appropriate line in the Tools menu.

When the horizontal and vertical line weights differ, any curves or diagonal lines graduate from one weight to the other. You can select an invisible line weight for either the horizontal or vertical weight and draw with the rectangle tool to draw two parallel lines automatically.
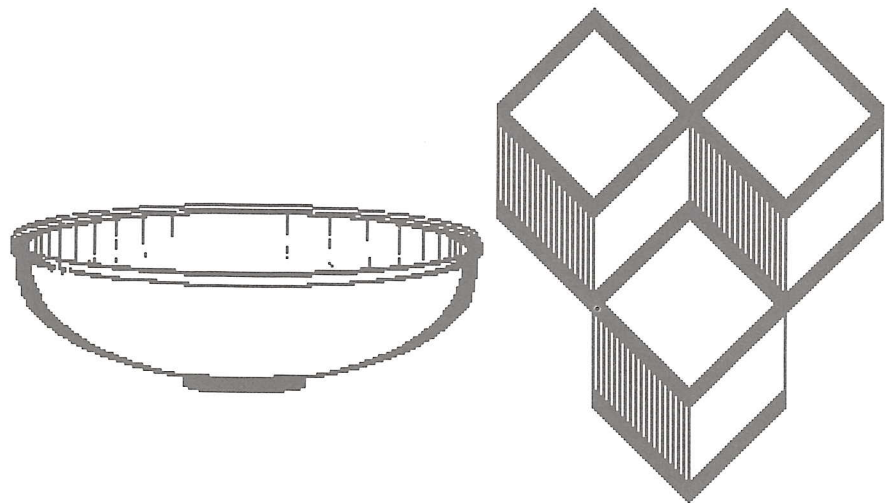
Figure 3-35
Figures drawn with various line weights

Selection rectangle

Use the selection rectangle to select a rectangular portion of a picture. After selecting an image or text, you can move it by dragging or use a command to change it in some way.

To make a selection, choose the selection tool and position the pointer beside the image you wish to select. You drag as if drawing a rectangle to encompass the image you want to select, so position the pointer as if it were at one corner of the proposed rectangle. Drag to draw a selection rectangle that completely encloses the image. Release the mouse button and the area circumscribed by the rectangle is selected. If you hold down the Command key while dragging the tool, the selection rectangle shrinks as small as possible to enclose the outline of the image.

Once an image is selected, move the pointer close to the selection until the pointer becomes an arrow. You can then drag to move the selection, hold down the Option key while dragging to duplicate the selection, or hold down both the Command and Option keys while dragging to make multiple copies.

You can use the commands in the Edit menu (Cut, Copy, Paste, Invert, Fill, and so on) to manipulate selections made with the selection rectangle. You can also stretch or shrink such a selection by holding down the Command key while dragging a corner of the selection. To resize a selection without changing its proportions, hold down both the Command and Shift keys while dragging a corner of the selection.

Double-click the selection rectangle in the torn-off Tools menu to select the entire window. Hold down the Shift key while double-clicking the selection rectangle to select the entire document.

Use Tab while dragging a selection to use the Option-Command pattern effects (as set in the Preferences dialog box) to specify how overlapping patterns interact.

Lasso

Use the lasso to select an irregularly shaped portion of a picture. After selecting an image or text, you can move it by dragging or use a command to change it in some way.

To make a selection, choose the lasso and position the pointer beside the image you wish to select. Drag as if drawing a loop around the image you want to select. The loop will automatically close with a straight line from the beginning to the ending points if you do not close it. A line trails from the lasso tip showing the size of the selection. Release the mouse button and the loop shrinks as small as possible to enclose the outline of the image. The selected image begins to shimmer.

Once an image is selected, move the pointer close to the selection until the pointer becomes an arrow. You can then drag to move the selection, hold down the Option key while dragging to duplicate the selection, or hold down both the Command and Option keys while dragging to make multiple copies. You can also Invert or Fill a lassoed selection.

Double-click the lasso in the torn-off Tools menu to select the entire window. Hold down the Shift key while you double-click on the lasso to select the entire document.

Use Tab while dragging a selection to use the Option-Command pattern effects (as set in the Preferences dialog box) to specify how overlapping patterns interact.

Grabber

Use the grabber to scroll the document within the window. The grabber allows you to scroll vertically, horizontally, and diagonally within the window, whereas scrolling with the scroll bars allows you to scroll in only one direction, vertically or horizontally, at a time.

Choose the grabber from the Tools menu and position the pointer over the document. Drag in the direction you want the document to scroll; release the mouse button to stop scrolling. All the tools on the Tools menu (except the text tool) can be changed to the grabber by holding down the Option key.

Line tool

Use the line tool to draw straight lines. You can draw vertical, horizontal, and diagonal lines in any of the line weights available on the Tools menu. Click the line tool, position the pointer where the line is to begin, and drag to draw the line. As long as the mouse button is pressed, you can lengthen, shorten, or change the angle of the line. Release the mouse button when the line is as you want it.

If you hold down the Shift key while using the line tool, you can draw only lines that are horizontal, vertical, or at a 45-degree angle.

Hold down the Command Key while using the line tool to draw lines made of the current pattern rather than black.

Paint bucket

The paint bucket tool is used to fill enclosed areas with a pattern. It's useful for filling shapes such as triangles or ovals, or any closed shape. A closed shape is one that has an unbroken outline or perimeter of black dots (without gaps of white dots), such as a circle or rectangle. After selecting the paint bucket and a pattern, move the paint bucket pointer over an enclosed area of the drawing and click to fill that area with the current pattern.
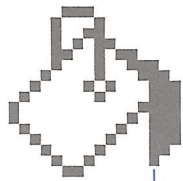
The tip of the pouring paint must be inside the area you want to fill. You must be careful to position the tip of the paint bucket within the enclosed area. If it is not within the enclosed area, you may fill a much larger area of the drawing than you anticipated.

Tip of paint bucket

If the shape you fill has an opening, or gap, even the size of one dot (pixel), the pattern will spread through it onto the rest of the document. If you discover that the pattern has leaked from a shape, choose Undo to cancel the results of choosing Fill. Then use the pencil tool or another tool to stop up the leak in the image by drawing across the gap. You may want to zoom in to discover leaks. Once a leak has been patched, you can use the paint bucket to fill the shape.

To fill beyond the boundaries of the document window, hold down the Shift key while using the paint bucket.

Spray can

Use the spray can to spray the current paint pattern. Select the pattern you wish to apply, choose the spray can tool, and position the pointer over the document. You can apply spots of paint by clicking, or you can drag the pointer to spray the paint on continuously. You can apply the paint pattern in light strokes or go over the same area several times to darken the pattern. The more you drag over a given area, the more apparent the pattern becomes.

Hold down the Shift key while using the spray can to limit this tool to horizontal and vertical movement only.

Paintbrush

Use the paintbrush to paint strokes with the current paint pattern. Select the pattern you wish to apply and choose the paint brush tool. To determine the brush shape, choose Brush Shape from the Goodies menu. Position the pointer over the document and drag to apply the paint pattern.

Hold down the Command key while using the paintbrush to paint with transparent paint.

Hold down the Shift key while using the paintbrush to limit brush strokes to horizontal and vertical only.

Pencil

Use the pencil tool to draw lines and to perform fine editing of the dots that make up an image. After choosing the pencil tool, position the pointer on the document. Click to put a dot on the document or drag to draw a line. If the tip of the pencil is on a white dot, the pencil tool will draw a black dot or line. If the pencil tip is on a black dot, the tool will draw a white dot or line. As long as you hold the mouse button down, the pencil will continue to draw in black or white.

You can use the pencil tool as a very fine eraser, erasing black or white dots by clicking on them. For example, if you click on a black dot to erase it, you can continue holding down the mouse button and erase other black dots—any you touch with the pencil tip. You may find zooming in on a document and editing images with the pencil a useful method for working in fine detail.

Hold down the Shift key while using the pencil to limit lines to horizontal and vertical only. Hold down the Command key and double-click with the pencil tool to zoom in on a document. Hold down the Shift and Command keys and double click to zoom out on the document.

Double-click the pencil in the torn-off Tools menu to zoom directly to the 800-percent view from any other view. In the 800-percent view, double-click on the pencil in the torn-off Tools menu to return to the 100-percent view.

Text tool

Use the text tool to add text to documents. The text tool is useful for adding captions or labels to documents, for example. After choosing this tool, the pointer becomes shaped like an I-beam. Position the pointer where you want text to appear and click. You then begin typing. Press Return when you want to end a line and start typing on the line below. You can use Backspace/Delete to erase errors. You can change the font, font size, style, and alignment at any time as you type text. After choosing another tool or clicking elsewhere in the document to add additional text, you cannot edit or change your text.

Use the Font and Style menus to change the font, size, style, and alignment (left, right, middle) of active text. To change the font, size, or style within a single passage of text, press Enter and choose different text choices from the menu.

To space lines of active text closer together, press Command-Option-<. To space lines of active text farther apart, press Command-Option->. Changing the text font, style, size, or alignment automatically changes the line spacing, so change line spacing after you have made your final choices about how text should appear.

Eraser

Use the eraser to erase portions of the document. You can use the eraser to erase mistakes or clean up images such as by erasing the ends of lines that were drawn too long. After choosing the eraser, position the pointer over the image you wish to erase. You can click to erase only the dots below the pointer or drag the eraser over an area you want to erase.

You can also use the eraser as a magic eraser that restores images to the document. If you hold down the Command key as you drag with the eraser tool, MacPaint uses the current snapshot to restore the document. By alternating between the eraser and magic eraser, you can erase only those images you want to remove without risking losing part of your document by mistake.

Refer to "Take Snapshot" in this chapter for more information about using snapshots with MacPaint.

Hold down the Shift key while using the eraser to limit its movement to horizontal and vertical only.

Double-click the eraser in the torn-off Tools menu to erase the entire window. Hold down the Shift key while double-clicking the eraser to erase the entire document.

Hold down the Command key and double-click the eraser on the Tools menu to revert the images in the current window to the snapshot. Hold down the Command and the Shift keys and double-click the eraser tool on the Tools menu to revert the entire document to the snapshot.

Rectangles: Hollow and filled
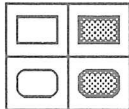
Use the rectangle tools to draw rectangles or rounded rectangles. You can draw rectangles that are hollow or filled automatically with a pattern. Click the gray rectangle tools to draw filled shapes.

To draw a rectangle, click the desired tool and position the pointer over the document where a corner of the rectangle should appear. Drag diagonally to where the opposite corner of the rectangle should appear. As long as you hold down the mouse, you can change the size of the rectangle. Release the mouse button to stop drawing the rectangle.

If you prefer, you can draw rectangles from the center out by double-clicking the desired tool from the torn-off menu or by choosing Draw From Center from the Goodies menu. Refer to "Draw From Edge, Draw From Center" in this chapter for more information about changing how rectangles are drawn.

Filled rectangles are filled with the current paint pattern. The current line weights determine the thickness of a shape's borders.

To produce squares or rounded squares, hold down the Shift key while drawing a rectangle.

To draw a rectangle with borders made of the current pattern rather than black, hold down the Command key while drawing a shape. To draw a filled rectangle with no border, choose invisible (dotted) line weights from the Tools menu before drawing the rectangle.

To use the special pattern effects chosen in the Preferences menu, hold down both the Command and Option keys while drawing a rectangle.

Ovals: Hollow and filled

Use the oval tools to draw ovals and circles. You can draw ovals that are hollow or filled automatically with a pattern. Click the gray oval tool to draw filled shapes.

To draw an oval, click the desired tool and imagine a rectangle that encloses the oval. Position the pointer over the document where a corner of the imaginary rectangle should appear. Drag diagonally to where the opposite corner of the rectangle should appear. As long as you hold down the mouse, you can change the size of the oval. Release the mouse button to stop drawing the oval.

If you prefer, you can draw ovals from the center out by double-clicking the desired tool from the torn-off menu or by choosing Draw From Center from the Goodies menu. Refer to "Draw From Edge, Draw From Center" in this chapter for more information about changing how rectangles are drawn.

Filled ovals are filled with the current paint pattern. The current line weights determine the thickness of a shape's borders.

To produce a circle, hold down the Shift key while drawing an oval.

To draw an oval with a border made of the current pattern rather than black, hold down the Command key while drawing the oval. To draw a filled oval with no border, choose the invisible (dotted) line weights in the Tools menu before drawing the oval.

To use the special pattern effects chosen in the Preferences menu, hold down both the Command and Option keys while drawing an oval.

Freehand shapes: Hollow and filled

Use the freehand shape tools to draw freehand shapes. You can draw freehand shapes that are hollow or that fill automatically with a pattern. To draw a freehand shape, choose the desired tool and position the pointer over the document. Drag to draw the desired shape and release the mouse button to stop drawing. Your lines can cross, and you can draw in any direction desired. If you are drawing a filled shape, MacPaint will automatically connect the beginning and the ending points and fill the shape if you don't connect the points yourself.

Filled shapes are filled with the current paint pattern. The current line weights determine the thickness of a shape's borders.

To draw a shape with a border made of the current pattern rather than black, hold down the Command key while drawing the shape. To draw a filled shape with no border, choose the invisible (dotted) line weights in the Tools menu before drawing the shape.

To use the special pattern effects chosen in the Preferences menu, hold down both the Command and Option keys while drawing a shape.

Polygons: Hollow and filled

Use the polygon tools to draw shapes made up of angles and straight lines. The polygon tool is useful for drawing shapes such as triangles, pentagons, and so on.

To draw a polygon, first click where you wish to begin drawing the polygon. With the mouse button released, move the mouse to draw a line (do not hold the mouse button down.) Click the mouse to tack down the line when you wish to draw at a different angle. To stop drawing, double-click when the pointer is at the ending point of the polygon, or position the point on the starting point of the polygon and click once.

If the polygon's ending point and starting point differ, hollow shapes remain incomplete, but MacPaint automatically completes filled shapes by connecting the ending point to the starting point. Filled polygons are filled with the current paint pattern. The current line weights determine the thickness of a shape's borders.

To limit lines to horizontal, vertical, and 45 degrees, hold down the Shift key while using the tool.

To draw a polygon with a border made of the current pattern rather than black, hold down the Command key while drawing the polygon. To draw a filled polygon with no border, choose the invisible (dotted) line weights in the Tools menu before drawing the polygon.

To use the special pattern effects chosen in the Preferences menu, hold down both the Command and Option keys while drawing a polygon.

Double-clicking and using modifier keys

When the Patterns and Tools menus are torn off, there are several shortcuts you can take by double-clicking or Shift–double-clicking tools or patterns in those menus.

You can also use the Shift, Option, Command, and Tab keys to modify some of the tools and perform menu commands from the keyboard.

Patterns menu

□ Double-click any pattern to edit that pattern.

Paintbrush

□ Double-click the paintbrush to choose Brush Shape.

□ Use Command to paint with transparent paint.

□ Use Shift or Caps Lock to limit strokes to vertical and horizontal.

Spray can

□ Use Shift or Caps Lock to limit movement to vertical and horizontal.

□ Use Command to paint with transparent paint.

Paint bucket

□ Use Shift or Caps Lock to fill beyond the window.

Ovals, rectangles, and rounded rectangles

□ Double-click to switch between Draw From Center and Draw From Edge.

□ Use Shift or Caps Lock to draw squares and circles.

Polygon tool

☐ Use Shift or Caps Lock to limit lines to vertical, horizontal, and 45 degrees.

Any shape tool

☐ Use Command to draw shapes with patterned borders.

☐ Use Option-Command with a filled shape tool to paint with pattern effects (as set in the Preferences dialog box).

Line tool

☐ Use Command to make patterned lines.

☐ Use Shift or Caps Lock to limit lines to vertical, horizontal, and 45 degrees.

☐ Use Option-Command with the line tool to draw patterned lines with pattern effects (as set in the Preferences dialog box).

Pencil

☐ Double-click to zoom in to the 800-percent view or back to the 100-percent view.

☐ Use Command-click with pencil chosen to zoom in on a given point.

☐ Use Command-Shift-click with pencil chosen to zoom out on a given point.

☐ Use Shift or Caps Lock to limit lines to vertical and horizontal.

Eraser

☐ Double-click to erase the entire window.

☐ Shift–double-click to erase the entire document.

☐ Use Command with the eraser to revert the erased portion to the snapshot.

☐ Use Command–double-click to revert the current window to the snapshot.

☐ Use Command-Shift–double-click to revert the entire document to the snapshot.

☐ Use Shift or Caps Lock to limit erasures to vertical or horizontal.

Selection rectangle

☐ Double-click to select the entire window.

☐ Shift–double-click to select the entire document.

☐ Use Command to shrink the selection to fit.

☐ Use Command while dragging the selection to stretch the selection.

☐ Use Command-Shift while dragging to resize the selection while maintaining the image's same proportions.

☐ Use Option while dragging the selection to duplicate the selection.

☐ Use Option-Command while dragging a selection to make multiple copies.

☐ Use Tab while dragging a selection to use the Option-Command pattern effects (as set in the Preferences dialog box) to specify how overlapping patterns interact.

Lasso

- □ Double-click to select all black dots (and white areas enclosed in black) in the window.
- □ Shift–double-click to select all black dots in the document.
- □ Use Option while dragging selection to duplicate the selection.
- □ Use Option-Command while dragging a selection to make multiple copies.
- □ Use Tab while dragging a selection to use the Option-Command pattern effects (as set in the Preferences dialog box) to specify how overlapping patterns interact.

The grabber

- □ Use Shift or Caps Lock to limit scrolling to vertical and horizontal.
- □ Use Option to change any tool (except the text tool) to the grabber.

Text

- □ Use Option-Command-< to space active text lines closer together.
- □ Use Option-Command-> to space active text lines farther apart.
- □ Use Command-< to reduce the font size.
- □ Use Command-> to enlarge the font size.
- □ Use Command-Shift-< to choose the font above the current one on the Fonts menu.
- □ Use Command-Shift-> to choose the font below the current one on the Fonts menu.

Keyboard equivalents for menu commands

Bold text (Style menu)	Command-B
Copy (Edit menu)	Command-C
Trace Edges (Edit menu)	Command-E
Trace Edges with drop shadow (Edit menu)	Command-Shift-E
Show/Hide Actual Size (Goodies menu)	Command-F
Turn Autogrid On/Off	Command-G
Shortcuts (Goodies menu)	Command-H
Italic text (Style menu)	Command-I
Show/Hide Mouse Position (Goodies menu)	Command-K
Zoom Out (Goodies menu)	Command-L
Zoom In (Goodies menu)	Command-M
New document window (File menu)	Command-N
Open a saved document (File menu)	Command-O
Plain text (Style menu)	Command-P
Quit MacPaint (File menu)	Command-Q
Revert To Snapshot (Edit menu)	Command-R
Save (File menu)	Command-S
Rotate (Edit menu)	Command-T
Underline text (Style menu)	Command-U
Paste (Edit menu)	Command-V
Close (File menu)	Command-W
Cut (Edit menu)	Command-X
Take Snapshot (File menu)	Command-Y
Undo (Edit menu)	Command-Z
	Tilde (~)
	Escape
Activate an open window (Goodies menu)	Command-1...Command-9

Appendixes

Appendix A

Ready-Made Pictures

There are many sources of MacPaint pictures—you don't have to create every one from scratch.

Clip art

Clip art has traditionally been found in books full of images that, because they are not copyrighted, can freely be reproduced in newsletters, advertisements, and so on. MacPaint has spawned a whole new kind of clip art: disks of MacPaint images you can use in the pictures you make. Some of these images are in the public domain (not copyrighted), but others are copyrighted. Before using copyrighted images in a commercial publication, you must first get permission and sometimes pay a fee and credit the source.

What kind of clip art can you buy? Maps, symbols, portraits, fancy borders, buildings, furniture, logos, office equipment, cartoon figures, plants and animals, sports—you name it!

You can learn about available clip art at your CLARIS dealer, from magazines that feature Macintosh applications, and from user groups.

Screen dumps

You can capture almost any image from the Macintosh screen as a MacPaint document, even when you're not using MacPaint. See the owner's guide that came with your Macintosh for details.

Digitizers

Digitizers are devices that scan images and convert them to documents you can manipulate with MacPaint. Some of them also let you adjust brightness, contrast, and so on. Once an image is scanned, you can open the document from MacPaint and add text, combine several different images, and make any number of other changes.

There are two types of digitizers:

☐ Video digitizers consist of a video camera and special software that converts a video picture into digital form. They're ideal for capturing images of three-dimensional objects. They can also be used to digitize an image from a television screen.

☐ Scanners capture two-dimensional images from printed pages, drawings, or photographs and convert them to digital form. Some scanners scan a page as it's fed through a dot-matrix printer. Bed scanners digitize an image as it lies on a flat glass surface.

Appendix B

Using MacPaint on the AppleShare File Server

The AppleShare™ file server lets you store and share information over the AppleTalk® Personal Network. MacPaint 2.0 is compatible with AppleShare and is a network-ready application.

You can store MacPaint documents and MacPaint 2.0 on the AppleShare file server and open them from your AppleShare workstation. Only one workstation user at a time can open the MacPaint application stored on the file server. If another user tries to open it, a message tells the user that MacPaint is being used.

One recommended way to use MacPaint with the file server is for each user to have MacPaint on a workstation disk to work with MacPaint documents stored on the file server. With each workstation using MacPaint on a workstation disk, all workstations can open and work on MacPaint documents at the same time.

Different workstations can also open and work on the same document simultaneously. When two or more workstations open the same document, the first workstation to save the revised document can save it in the regular manner. Any workstation saving the document after that will see a message saying that the document has been changed since the last time it was opened. The workstation user then has the option of saving the document with a different name, replacing the document stored on the file server with the newly revised document of the same name, or canceling the save procedure.

See the *AppleShare User's Guide* for information about using network-ready applications on the AppleShare file server.

Warning   Remember, it is a violation of copyright laws to make extra copies of MacPaint for use on more than one computer or workstation at a time.

Glossary

actual size inset: A window appearing in an enlarged view that shows the normal (100 percent) view of the window.

Autogrid: An invisible grid covering a document. When the Autogrid is on, lines and shapes drawn with the line and shape tools begin and end where the invisible grid lines intersect. Text is also aligned to the grid.

Caps Lock key: A key that, when engaged, causes subsequently typed letters to appear in uppercase. The effect is like that of the Shift key except that numbers and other non-letter symbols are not affected.

Clipboard: A holding place for the last selection cut or copied.

clip art: Ready-made images that can be reproduced in MacPaint documents.

close box: A small box on the left side of the title bar of an active window. You click it to close the window.

command: A word, usually in a menu, that describes an action for MacPaint to perform. Also a combination of the Command key and another key on the keyboard that accomplishes the same action as the menu command.

Command key: A key on the Macintosh keyboard. You can choose a command from a menu by holding down the Command key and typing another key.

constrain: To limit a form to a certain shape, direction, or angle while drawing or moving it.

crosshairs: The cross-shaped pointer used to indicate the starting and ending points of shapes as they are drawn.

cut: To delete a selection from a picture and put it on the Clipboard.

desk accessories: Mini-applications that are available from the Apple menu regardless of which application you are using—for example, the Calculator, Note Pad, Alarm Clock, Puzzle, Scrapbook, Key Caps, and Chooser.

desktop: The MacPaint working environment.

digitizer: A device that scans images and converts them to documents that can be used by MacPaint.

dimmed command: A command that appears gray rather than black in the menu. You cannot choose a dimmed command, usually because the command would be unable to act successfully.

double-click: To position the pointer and then press and release the mouse button twice in rapid succession without moving the mouse.

drag: To position the pointer on a portion of a picture, press and hold the mouse button, move the mouse, and release the mouse button.

Draw From Center: The command on the Goodies menu used to draw circles, rectangles, or rounded rectangles from the center. Compare **Draw From Edge.**

Draw From Edge: The command on the Goodies menu used to draw circles, rectangles, or rounded rectangles from the outer edge. Compare **Draw From Center.**

drop shadow: An outline of a shape that is heavier on the right and bottom than on the left and top.

duplicate: To make a copy of a selected area of a document.

eraser: A tool used to erase a picture or part of a picture.

Finder: The hub of the Macintosh system. The Finder lets you manage your documents and change applications.

flip: To turn a selected object upside down or sideways to its mirror image.

Font/DA Mover: An application available on the Macintosh System disk and on the LaserWriter Installation disk that allows you to add to or remove fonts from a disk's system file.

freehand shape tool: A tool used for drawing freeform shapes. The tool has a hollow and a filled form.

grabber: A tool used to move into view parts of the document that are outside the window.

I-beam: A type of pointer, shaped like the capital letter *I*, which appears when the text tool is selected.

icon: An image that graphically represents an object, a concept, or a message.

invert: To change a pattern by changing all black dots to white and all white space to black dots.

keyboard equivalent: The keys pressed to choose a command from a menu instead of pulling down the menu.

Key Caps: A desk accessory that shows you the optional character set.

lasso: A tool used for selecting an irregularly shaped portion of a picture.

line tool: A tool used to draw straight, vertical, horizontal, or diagonal lines.

line weight: The thickness of lines drawn with the line tool, or the thickness of the borders of shapes drawn with the rectangle, oval, polygon, and freehand shape tools.

mouse position inset: A window showing exactly where the pointer is in relation to the upper-left corner of the document and how far the pointer moves each time it is dragged.

Note Pad: A desk accessory that allows you to enter and edit small amounts of text while working on another document.

opaque paint: Paint that covers a shape or picture completely.

Option key: A modifier key that gives a different meaning or action to another key you type or mouse actions you perform. You use the Option key to type foreign characters or special symbols contained in the optional character set.

oval tool: The tool used to draw circles and ovals. The tool has a hollow and a filled form.

paintbrush: A tool used to paint black, white, or patterned brush strokes.

paint bucket: A tool used to fill an area with the current pattern.

Patterns menu: The menu used for choosing the pattern used by the following tools: the paintbrush, the paint bucket, the spray can, and the five filled shape tools.

pencil: A tool used for drawing thin black lines.

pixel: Tiny dots (picture elements) that make up a MacPaint document. At any moment, each dot is either black or white.

polygon tool: A tool used to draw polygons and open-ended shapes. The tool has a hollow and a filled form.

Preferences: The command in the Goodies menu used to change the MacPaint preset options concerning measurements, autogrid spacing, window sizing, menu positions, pattern effects, and text.

preset option: A MacPaint setting that is always in effect when a new document is created. You can change preset options to your own settings after opening a document.

rectangle tool: A tool used to draw rectangles. The tool has a hollow and a filled form.

revert: To change back to the version of the document previously saved.

rounded rectangle tool: A tool used to draw rounded rectangles. The tool has a hollow and a filled form.

scroll bar: A rectangular bar that may be along the right or bottom of a window. Clicking or dragging in the scroll bar causes the view of the document to change.

selection box: A box drawn with the selection arrow pointer. All objects enclosed by the box are selected.

selection rectangle: A tool used to select a rectangular portion of a picture.

snapshot: A version of a document saved automatically in memory by MacPaint when the document is opened. Updated versions of snapshots can be saved (taken) or deleted (thrown away) at any time.

spray can: A tool used to spray the current pattern.

startup screen: A screen that appears when the Macintosh is first turned on. MacPaint documents can be saved as startup screens by clicking the startup screen option on the Save As dialog box.

stationery: A MacPaint document that records the graphics, text, menu positions and other option preferences used routinely when creating documents.

System file: A file Macintosh computers use to start up and to provide systemwide information. The System file contains system programs.

tear-off menu: A menu, such as the Tools or Patterns menu, that can be dragged from (torn off) its original position and placed anywhere in a window.

text mode: Three choices of text to add to a picture: Normal, Overlay, and Inverted. Normal refers to text typed over a dark background and appearing within a white band. Overlay refers to text typed over a dark background not within a white band. Inverted refers to text that appears in black over a white background that is inverted to white over a black background.

text tool: A tool used for adding text to a document.

Tools menu: The menu that provided 6 line weights and 20 tools for creating MacPaint shapes and pictures.

transparent paint: Paint that blends with and does not totally block the view of a shape or pattern that it overlaps.

Index

irregular shapes. *See* freehand
shape tools
Italic command (Style menu) 136

K

keyboard equivalents 153
Key Caps (Apple menu) 78, 115

L

Landscape document icon 3
Larger Print Area option (Page
Setup command) 111
large-screen monitors 5
LaserWriter 93, 111
lasso 26–27, 64–69, 71, 74, 100,
138, 141
shortcuts 152
leading (of text). *See* Style menu
leaks (in shapes). *See* paint bucket
line tool 100, 138, 142
drawing with 9–10, 53
patterns and 59
shortcuts 150
line weight indicator box. *See* line
weights
line weights 24–25, 56, 100, 138,
139

M

Macintosh 512K, Take Snapshot
command and 8
MacPaint disk icon 3
MacPaint option (Save As
command) 108
magic eraser. *See* eraser
magnification. *See* Zoom In
command; Zoom Out
command
Measurements shown in:
(Preferences command) 127
Memorize menu positions
(Preferences command) 128
menu bar 4, 98, 99
menus/menu commands. *See*
specific menu/menu command
mirror images. *See* Brush Mirrors
command

monitors, large-screen 5
mouse position inset 77, 122–123

N

network. *See* AppleTalk Personal
Network
New command (File menu) 8, 86,
101, 103
new features xv–xvii
New windows: (Preferences
command) 128
Normal option (Preferences
command) 80, 130
Note Pad (Apple menu) 81, 115

O

100-percent view. *See* Zoom In
command; Zoom Out
command
Opaque option (Preferences
command) 128, 129
Open command (File menu) 4, 89,
101, 104–105
Open dialog box 104
Option-Command pattern effect:
(Preferences
command) 128–130
Option key, shortcuts 149–152
options (preset) 101
Options dialog box 111
Outline command (Style
menu) 136
oval tools 5, 14, 52, 100, 138,
146–147
drawing with 16, 54
shortcuts 149
Overlay option (Preferences
command) 80, 130

P

Page Setup command (File
menu) 93, 111
Page Setup dialog box 93, 111
paintbrush 100, 138, 143
painting with 11–12, 49–50
shortcuts 149
paint bucket 100, 138, 142

painting with 22–23, 58
shortcuts 149
painting 49–51
with paintbrush 11–12, 49–50
with paint bucket 22–23, 58
with spray can 12, 50
paint modes. *See* Erased option;
Opaque option; Reversed
option; Transparent option
Paste command (Edit menu) 70,
115
Patterns menu 6–7, 11–12,
47–48, 49–51, 57–60, 98,
100–101, 137
shortcuts 149–152
pencil 5, 100, 138, 143–144
drawing with 9, 61
shortcuts 150
pixels (defined) 61
pixels option (Preferences
command) 77, 127
Plain command (Style menu) 136
polygon tools 52, 100, 138, 148
drawing with 20–21, 55
shortcuts 150
Precision Bitmap Alignment option
(Page Setup command) 111
Preferences command (Goodies
menu) 7, 76, 77, 80, 127–130
Preferences dialog box 80,
127–130
preset options 101
Print command (File menu) 94,
95, 111
Print dialog box 94, 111
Print Selection command (File
menu) 94, 112

Q

Quit command (File menu) 112

R

rectangle tools 14, 52, 100, 138,
145–146
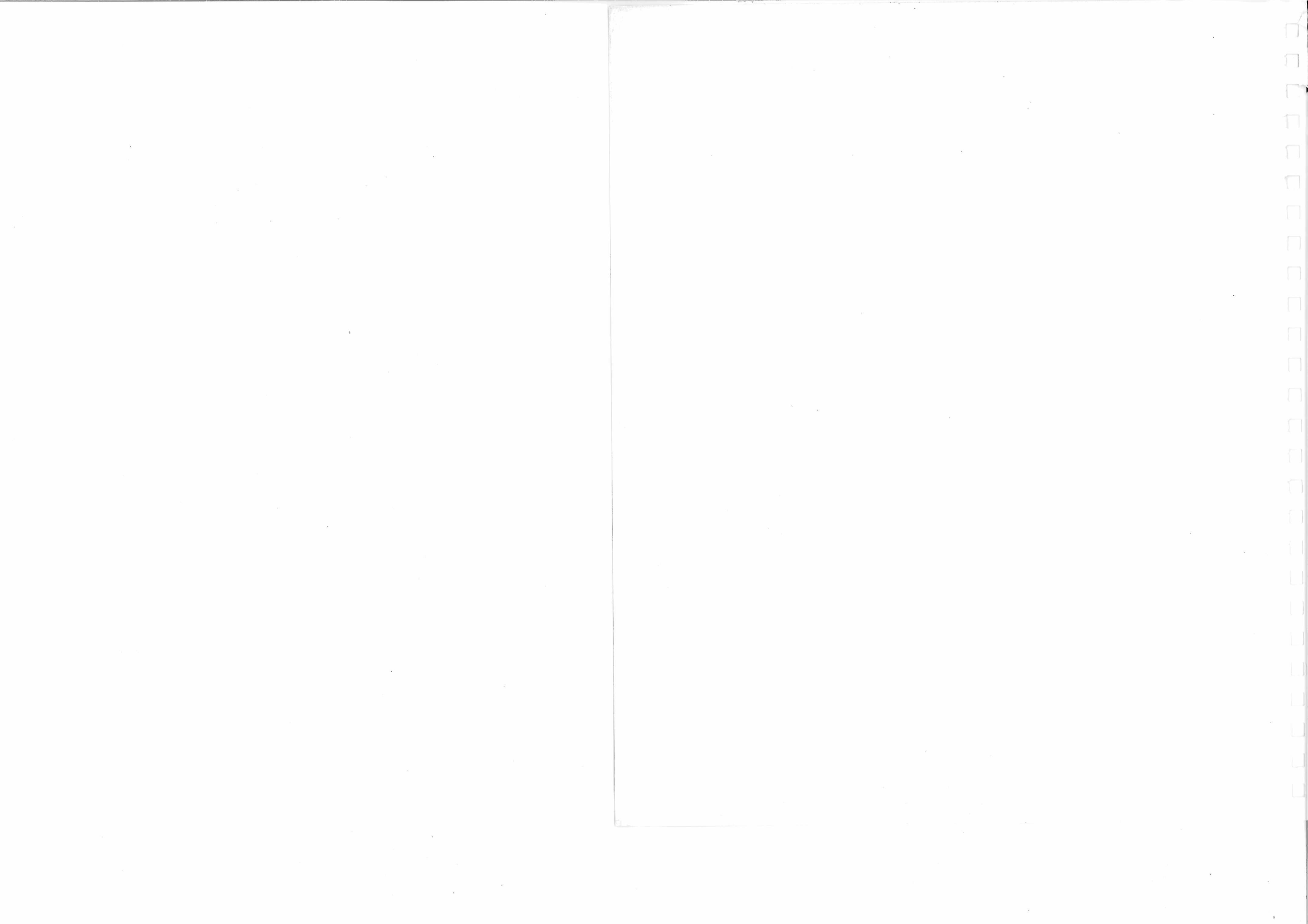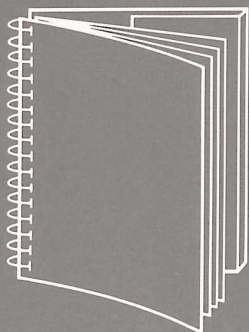drawing with 14–16, 53
shortcuts 149

CLARIS™ MacPaint®

CLARIS

MacPaint®

Tuck end flap inside back
cover when using manual.

8-60-005A