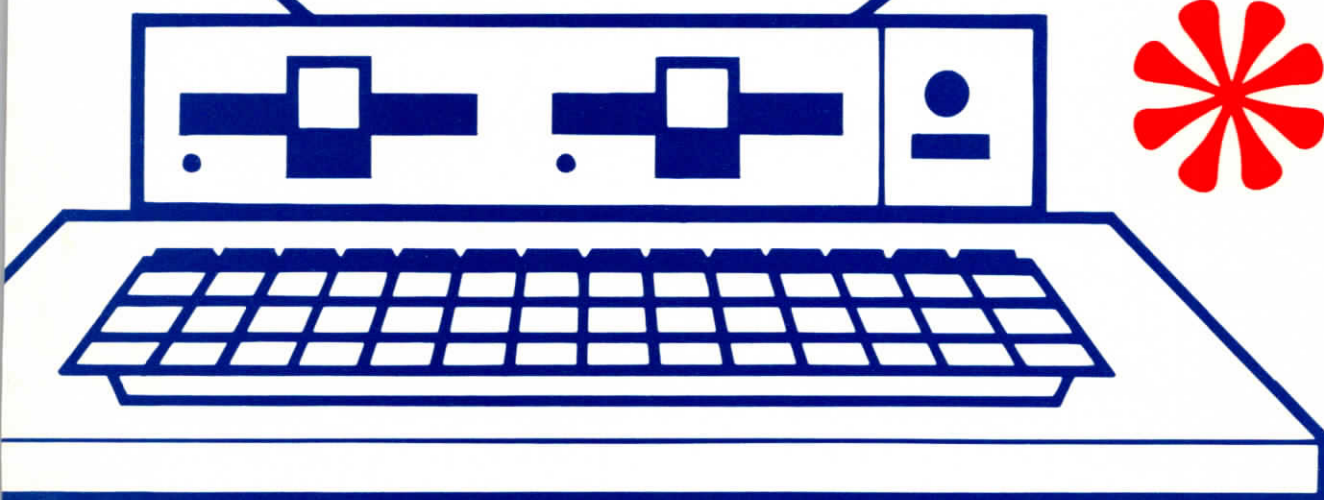
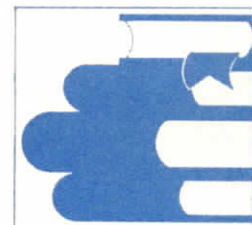
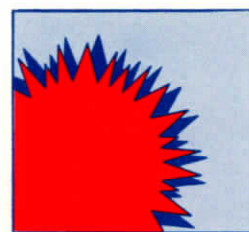


PRINT SHOP™ GRAPHICS

FOR LIBRARIES
VOLUME 4:

.....
DYNAMIC
LIBRARY
GRAPHICS



Judy Matthews
Shirley Lambert
Michael Mancarella
Mark Loertscher

**Print Shop™ Graphics
for Libraries**

Volume 4

Dynamic Library Graphics

JUDY GAY MATTHEWS
MICHAEL MANCARELLA
SHIRLEY LAMBERT
MARK LOERTSCHER

1988
LIBRARIES UNLIMITED, INC.
Englewood, Colorado

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If for some reason the original disk is defective, to receive a free replacement, send a letter with the disk label *only* to

Libraries Unlimited, Inc.
P.O. Box 3988
Englewood, CO 80155-3988

Disks in the set:

- v. 1: *Library Graphics* (Apple version)
- v. 2: *Perpetual Calendars* (Apple or IBM version)
- v. 3: *Books and Fonts* (Apple version)
- v. 4: *Dynamic Library Graphics* (Apple and Macintosh versions)
- v. 5: *States and Politics* (Apple version)

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Englewood, Colorado 80155-3988

Library of Congress Cataloging-in-Publication Data

Matthews, Judy Gay.

Print shop graphics for libraries. Volume 4,
Dynamic library graphics [computer file]. – Apple
version.

1 computer disk ; 5¼ in. + 1 manual.

System requirements: Apple IIe, II+, or IIGS; 64K;

1 disk drive; monitor; compatible 80-column printer.

Title from manual.

Not copy protected.

Audience: Adults and professionals.

Issued also in Macintosh version on 2 computer
disks (3½ in.) with approx. 200 graphics.

Summary: Contains seventy-six graphics and sixteen
screen magic images to assist the user in the creation
of printed products, such as flyers, newsletters,
announcements, bookmarks, bulletin boards, and other
forms of visual communication. Designed for use with
Print shop or any other graphics program which will
accept Print shop graphics as input.

1. Public relations—Libraries—Software.

2. Library publications—Software. I. Print shop
(Computer program) II. Title. III. Title: Dynamic
library graphics.

Z716.3.M37 1988 021.7 88-8644

ISBN 0-87287-690-X

ISBN 0-87287-691-8 (Macintosh version)

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Apple Version

Introduction and Directions for Use

Dynamic Library Graphics is designed to be used with the popular program Print Shop™ or any other graphics program that will accept Print Shop graphics as input. The disk contains 76 graphics on side 1 and 16 Screen Magic™ images (large pictures) on side 2. The graphics are adapted from the book *ClipArt & Dynamic Designs for Libraries & Media Centers—Volume 1: Books & Basics* by Judy Gay Matthews, Michael Mancarella, and Shirley Lambert (Libraries Unlimited, 1988, \$25.00). The disk has been designed for librarians and teachers who are interested in promoting reading and books. These graphics can also be used to create signs, posters, and graphics for flyers, newsletters, announcements, bookmarks, bulletin boards, etc. The use of the graphics is limited only by the imagination of the user.

Hardware needed. Minimum equipment requirements are listed in the documentation for Print Shop, and usually include a computer, one disk drive, a monitor, and a compatible printer. The printer will be the most troublesome link in the system, since a number of printers are not supported by older versions of the Print Shop. Check the documentation to see if your printer is supported.

Software needed. There are several versions of the Print Shop program available. At this writing, there is a version for the Apple II, Apple IIe, and Apple IIgs. Copies of Print Shop can be purchased at your local software dealer and should cost from \$30.00-\$60.00 depending on your discount. If you have owned the Print Shop for some time, the graphics on side 1 will work fine. The Screen Magic images on side 2 might not work with the oldest versions of Print Shop. If SCREEN MAGIC is one of the choices on the main menu of Print Shop, then you have the correct version. If not, you probably need to update your Print Shop program.

Other programs that can utilize the graphics on this disk are available on the market. We have tested two programs successfully: Printmaster Plus™ and Print Magic™. These programs can utilize the 76 graphics on side 1, but will not print out the Screen Magic pictures on side 2. If you have a graphics program that will print out hi-res images, you should be able to print out the 16 images on side 2.

Instructions. Whatever program you own, be it a version of Print Shop or other graphics package, you need to spend time learning the basics of that program. Some versions allow the mixing of fonts, color printing, choosing the sizes of graphics, etc. The documentation that accompanied your program will explain all of these features to you.

In all versions, when you are instructed to select a graphic, insert the *Dynamic Library Graphics* disk, select FROM OTHER DISK (or other similar instructions), and select the name of the graphic you wish.


















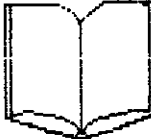


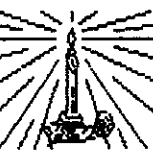












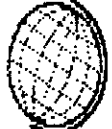















2 / APPLE VERSION INTRODUCTION AND DIRECTIONS FOR USE

For the Screen Magic pictures on side 2, select SCREEN MAGIC from the main menu and then GET SCREEN from the next menu. Be sure that side 2 of the disk is in the drive. Type the name of the desired hi-res panel and press RETURN. At this point, you can press ESC to go back and choose a different graphic or press RETURN to continue. On continuing, you may want to choose DRAW TEXT ON SCREEN. Follow the on-screen directions for selecting a font (lettering design). Finally, you may wish to choose PRINT SCREEN. Again, follow the on-screen directions. At this point, you will be asked to choose one of the following: NORMAL (lighted dots are printed) or REVERSE (unlighted dots are printed). Choose REVERSE if a natural picture is desired. In choosing NORMAL, the result is similar to a negative picture image. Continue to follow the on-screen prompts. The resulting printout takes up half a page.

If these instructions fail, ask someone who is familiar with the program to check your procedure. If you suspect that the disk has a flaw, do the following: boot your computer with the DOS 3.3 Systems Master, place the disk in the drive, type CATALOG. You should see a list of the graphic images on the disk. Turn the disk over and catalog the reverse side. You should see a list of the 16 Screen Magic pictures. If the computer cannot catalog the disk, either call Libraries Unlimited at 303-770-1220 or send the disk label back for a free replacement.

A Note about Screen Graphics. Users of Print Shop may be unfamiliar with "Screen Magic" as a part of the program. This feature allows half page images to be printed out and used with other parts of the Print Shop program. Messages can be typed under or over the picture or the pictures can be used on bulletin boards or as parts of signs or posters. If you have not used "Screen Magic" in the past, perhaps this will open up a whole new dimension to your use of Print Shop.

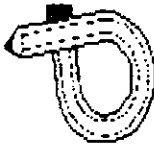
Index to Apple Graphics, Side 1

						
ACADEMIC	ADVENTURE	AMERICA	ARROWS	AU1	BEAR	BLOW
						
BOOK STOCKING	BOOK1	BOOK2	BOOK3	BOOK4	BOOK5	BOOK6
						
BOOK7	BOOK8	BOOK9	BOOK9.1	BOY READER	BUTTERFLYS	CANDLE
						
CAT	CHECK	CHIEF	CONSTITUTION	CUPID	ELEPHANT	ELF
						
EXCLAMATION	EYES	FLOWERING BOOK	FROG	GIRL READER	GLOBE	GRADUATE
						
GRANNY	GROWTH	HEAR YE	HEARTS	HORSE	LEGAL	LIBRARIAN
						
LINCOLN	LITTLE RED	LOVE	MEDICAL	MONKEY	MUSIC	MYTHOLOGY

4 / INDEX TO APPLE GRAPHICS, SIDE 1



PARTY!



PENCIL



PIG



POINT1

POINT2



PUBLIC



QUESTION



READER1



READER2



READER3



READER4



READER6



READERS



SCHOOL



SCI FI



SCIENCE



SKELETON



SNOWMAN



STORYTIME



TECHNICAL



THEATRE



TREE



UMBRELLA



WRITER



YA1

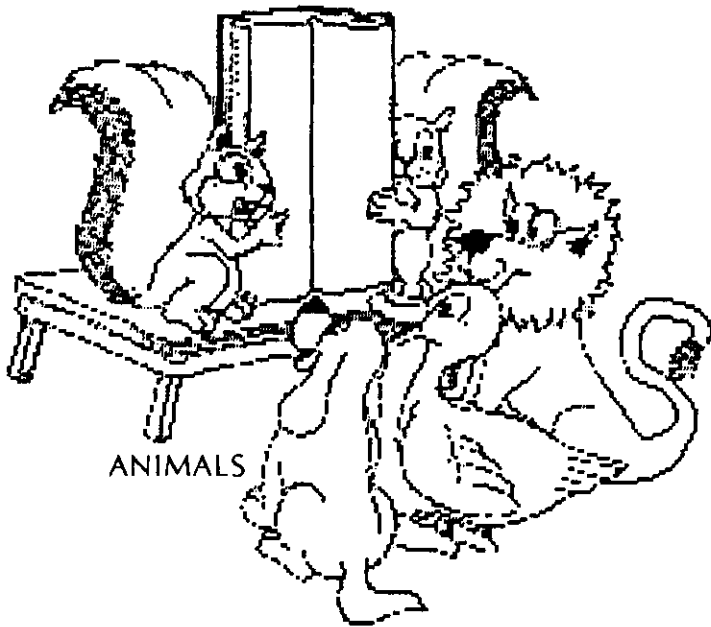


YA2



YOW!

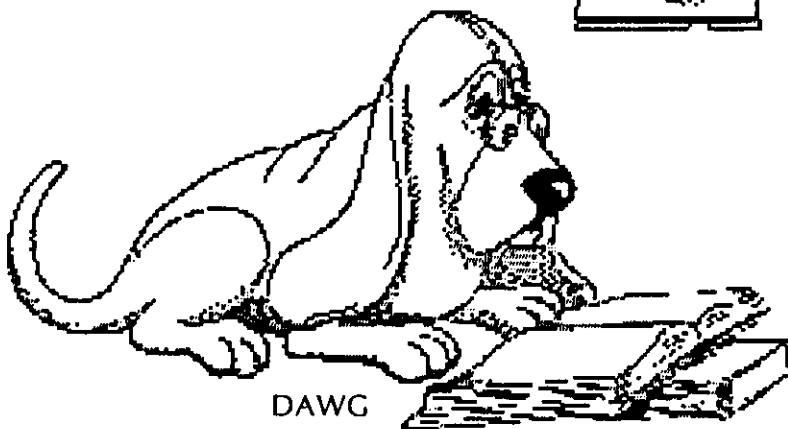
Index to Apple Screen Magic Pictures, Side 2



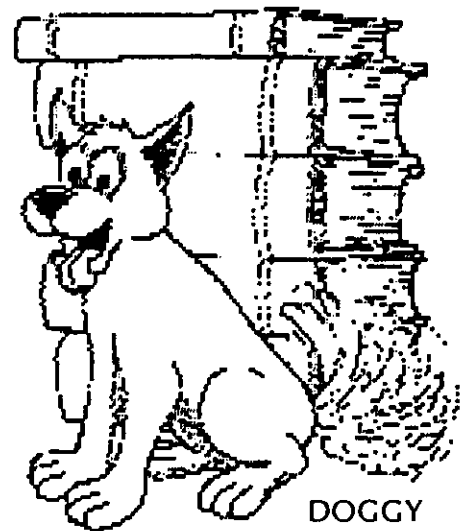
ANIMALS



CLOWN



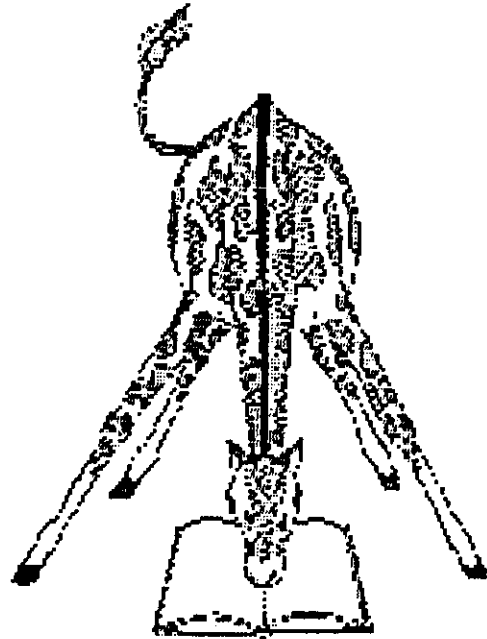
DAWG



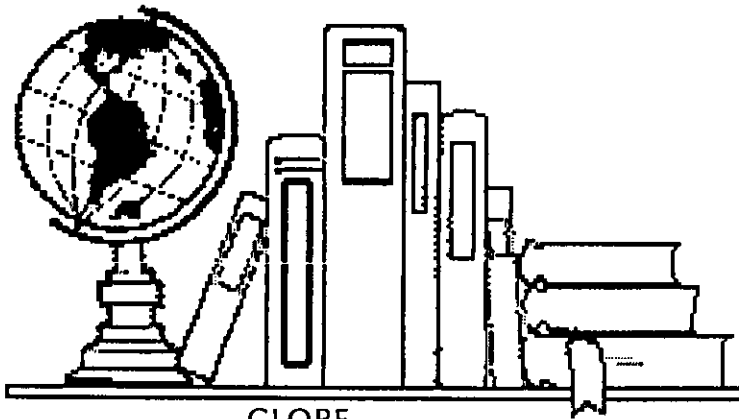
DOGGY



FLOWERS



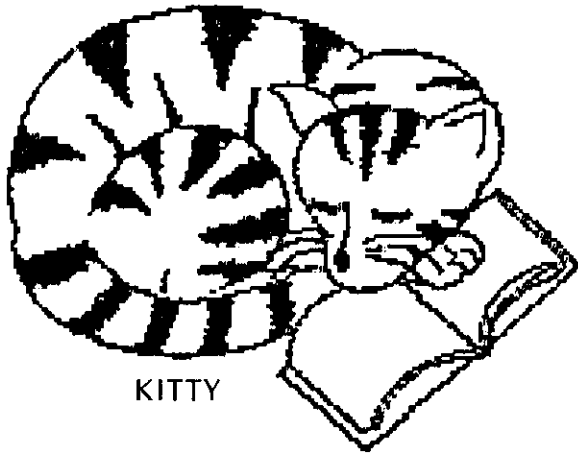
GIRAFFE



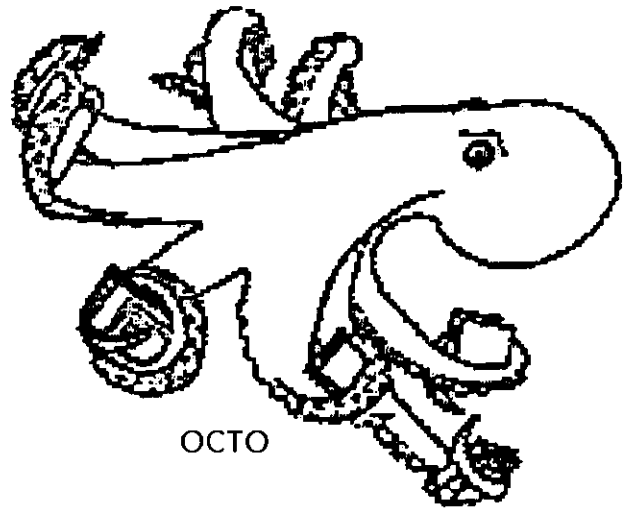
GLOBE



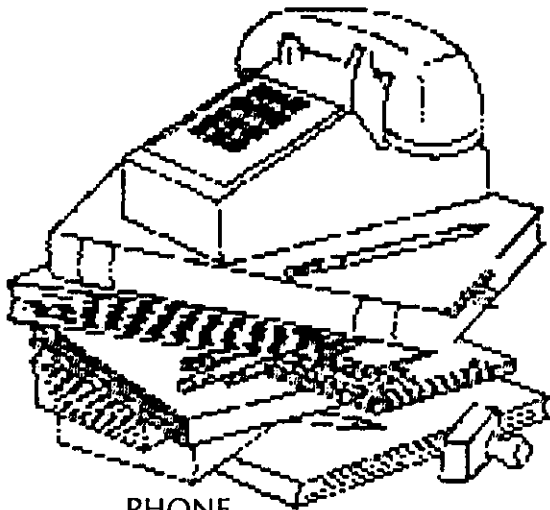
JACK



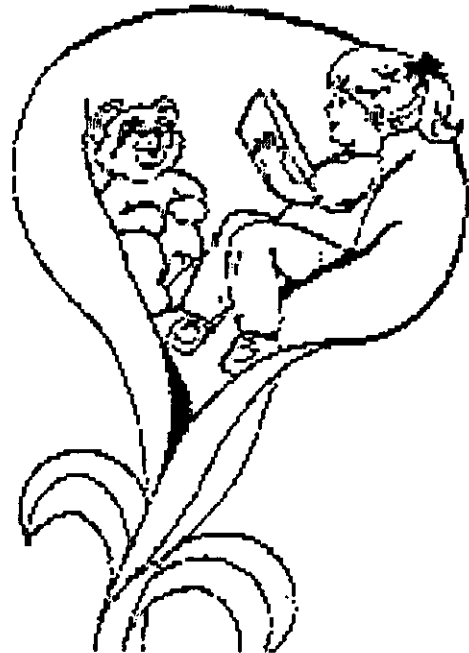
KITTY



OCTO



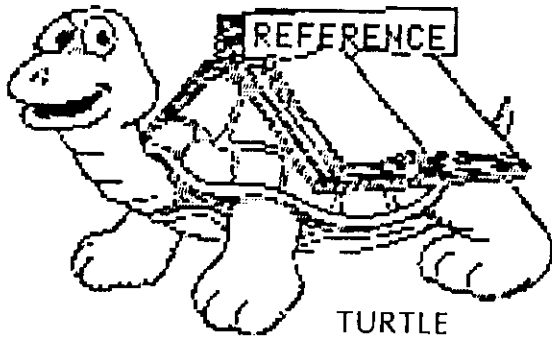
PHONE



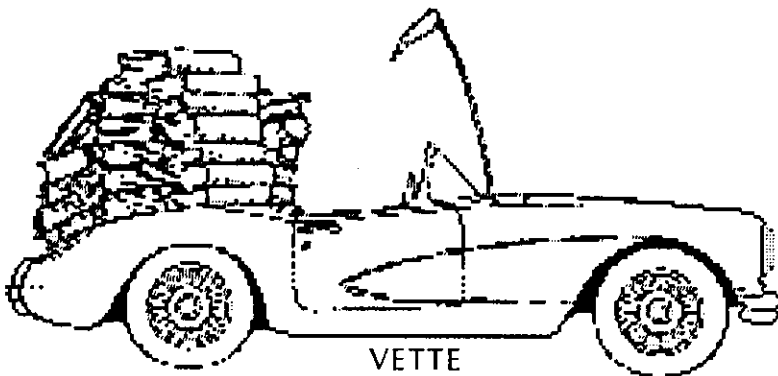
READING



STORY



TURTLE



VETTE



WITCH

Macintosh Version

Introduction and Directions for Use

The Macintosh version of *Dynamic Library Graphics* is much more comprehensive and flexible than its Apple version cousin. The very nature of the Macintosh environment allows graphic images to be used in many programs; the Print Shop program is only one of them. The two disks contain approximately 200 graphics, which were optically scanned and modified from the book *ClipArt & Dynamic Designs for Libraries & Media Centers— Volume 1: Books & Basics* by Judy Gay Matthews, Michael Mancarella, and Shirley Lambert (Libraries Unlimited, 1988, \$25.00).

Software needed. The graphic images of this program can be used by any program that can import MacPaint™ graphics. This means that they can be modified and sized for use in brochures, flyers, etc.

Users who wish to use the disk with the Print Shop graphics program should purchase the Macintosh version of that program at the local software dealer. It should cost \$30.00-\$60.00 depending on the discount.

Just a few of the other programs that can utilize *Dynamic Library Graphics* include Super Paint™ (pull in as MacPaint images), MacPaint, Adobe Illustrator™ (pulled in as templates), and Full Paint™

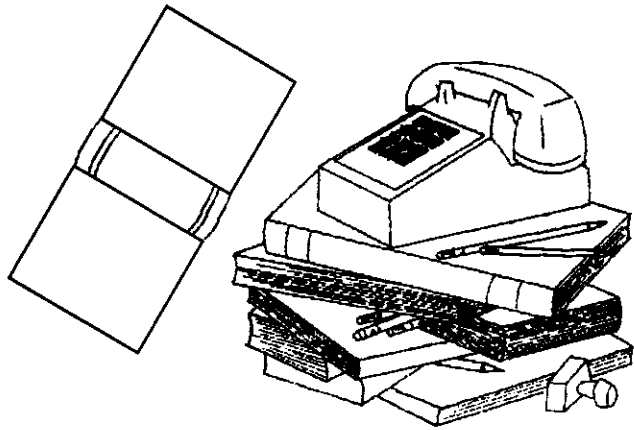
Hardware needed. The graphics have been stored on two 800K disks. This means that owners of Macintosh 128 and 512K machines will not be able to use the program. Minimum equipment requirements are listed in the documentation for Print Shop. For use in other programs that will accept MacPaint images, check that program's documentation for minimum requirements.

Instructions. The instructions in the documentation for the Print Shop Macintosh version should be studied carefully. Graphics from these disks can be accessed through the GRAPHICS bar at the top of the screen using the SELECT GRAPHICS portion of the pull-down menu. Wait until you need a graphic before inserting the *Dynamic Library Graphics* disk in the drive. If you are familiar with creating files for the Macintosh, the graphics can be stored on the hard disk if you have sufficient space. Graphics should be pulled in as MacPaint graphics, not as Print Shop graphics.

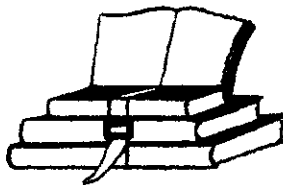
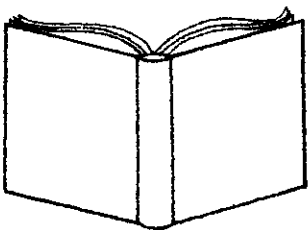
Index to Macintosh Graphics by File Name

All pictures shown in this index have been reduced at least 55 percent from the size produced by the disk.

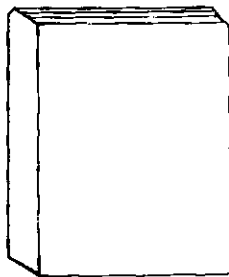
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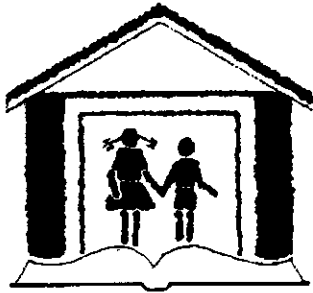
66



67



70



PUBLIC



LEGAL

71



TECHNICAL



ACADEMIC



MEDICAL



SCHOOL

72



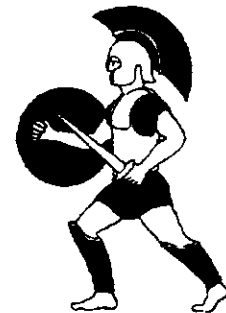
ADVENTURE



BIOGRAPHY

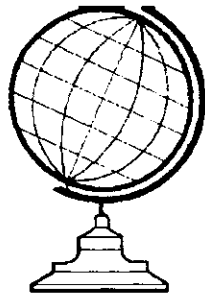


HISTORY

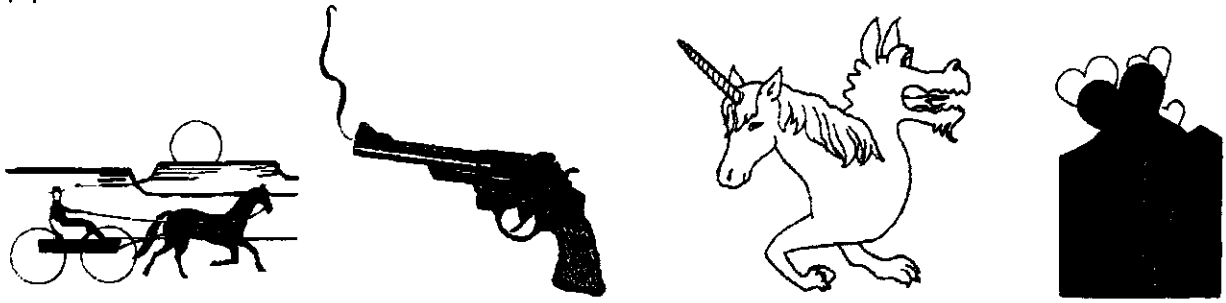


MYTHOLOGY

73



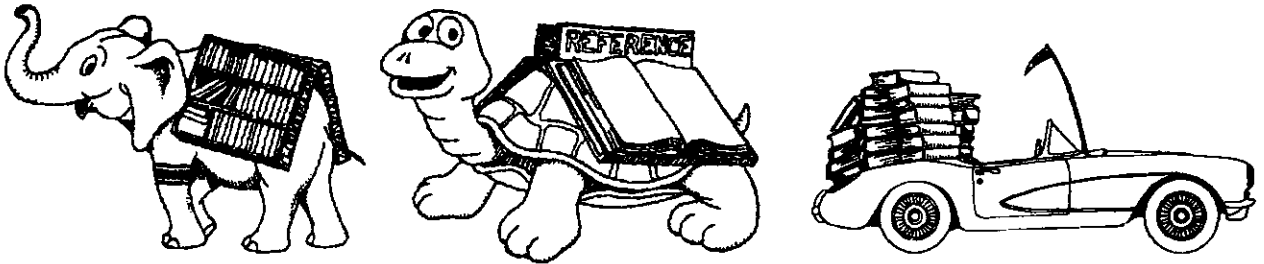
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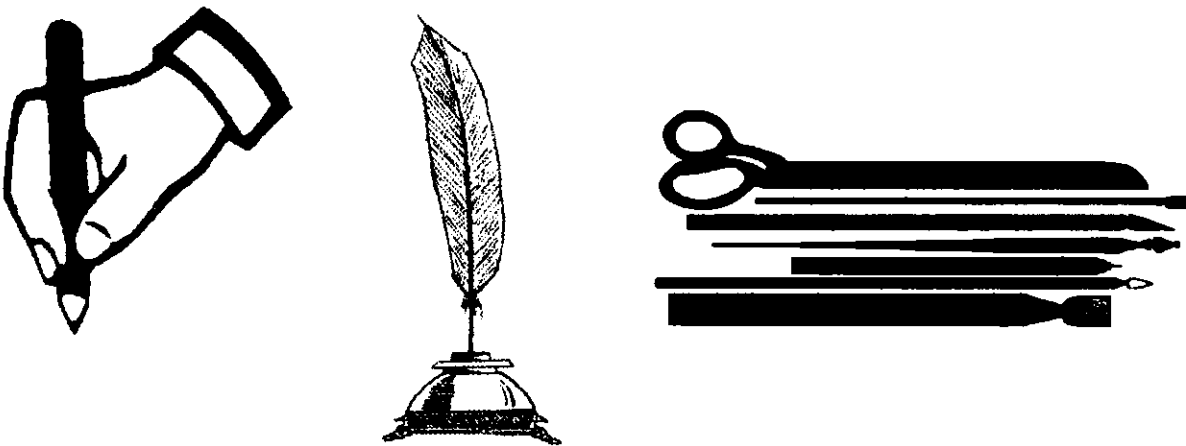
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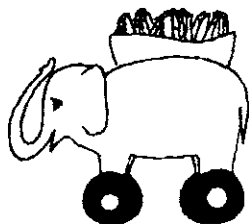




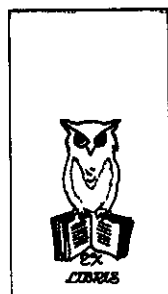
at the
LIBRARY



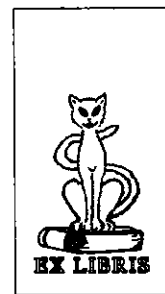
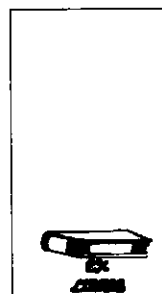
CURIOUS?
Ask Your Librarian



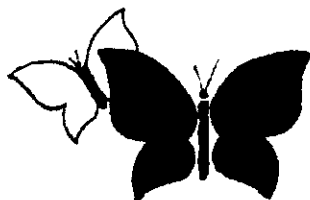
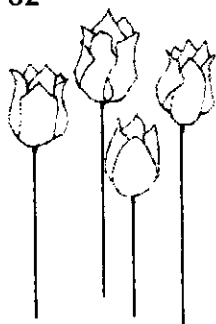
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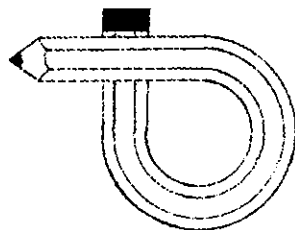
Back to School



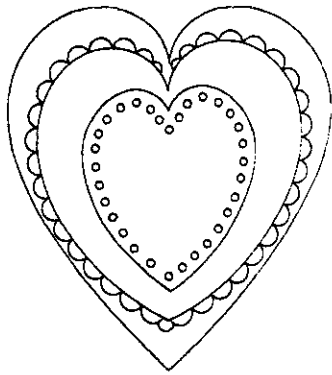
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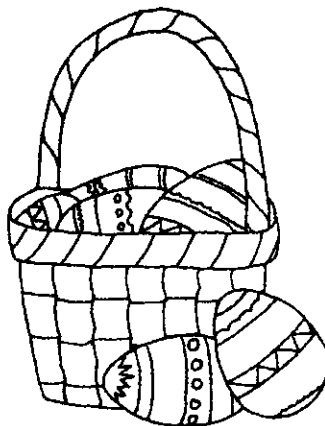
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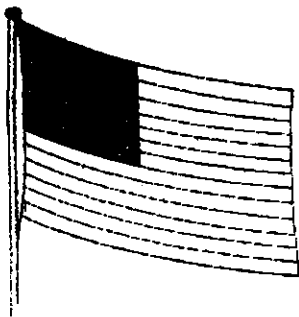
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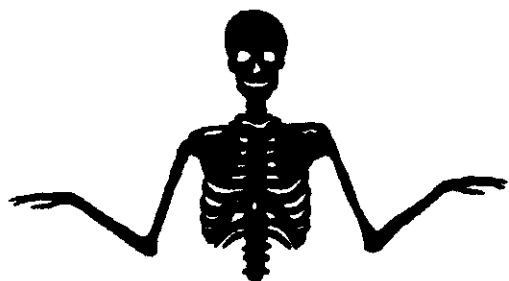
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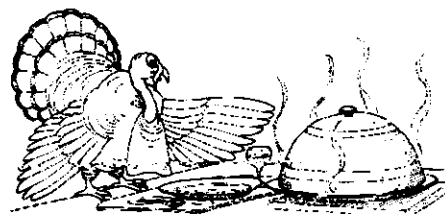
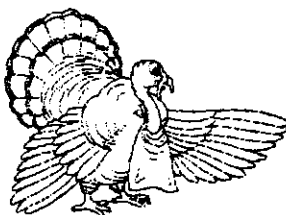
Happy
Halloween!



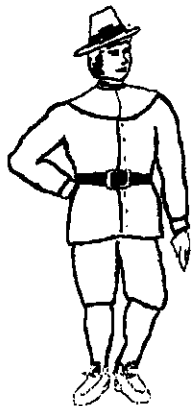
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99



16 / INDEX TO MACINTOSH GRAPHICS BY FILE NAME

100



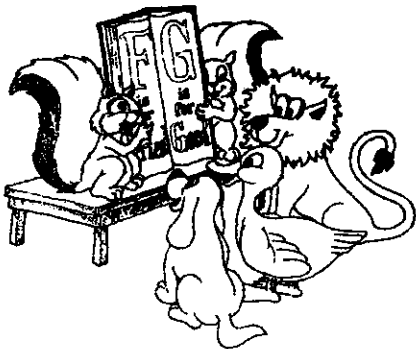
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103



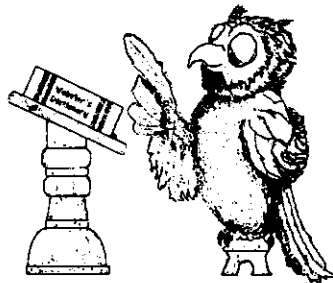
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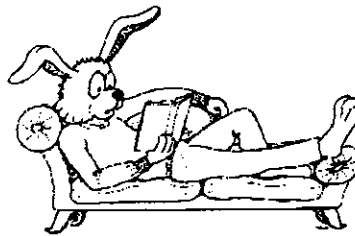
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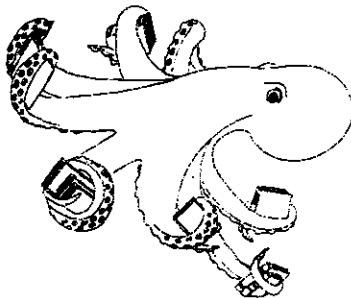
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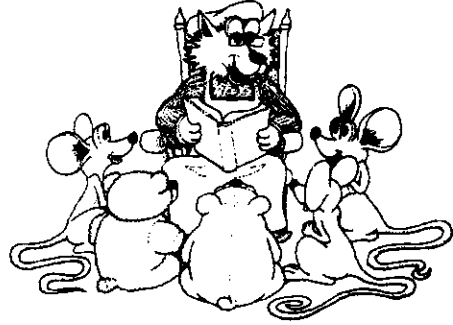
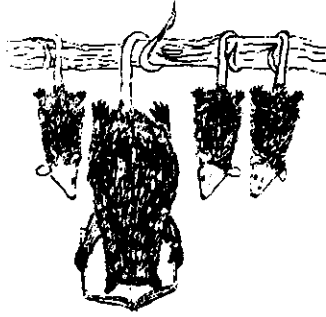
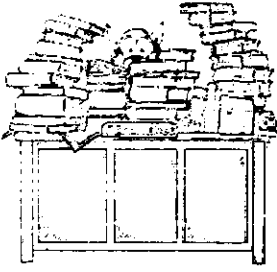
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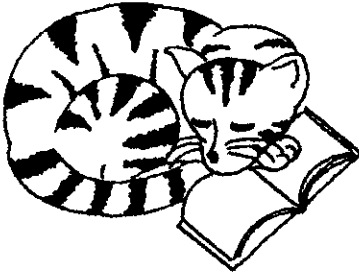
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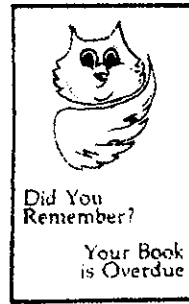
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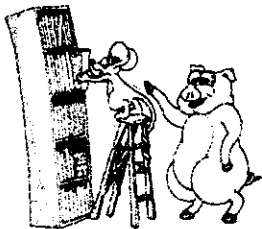
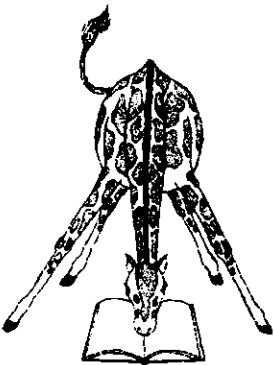
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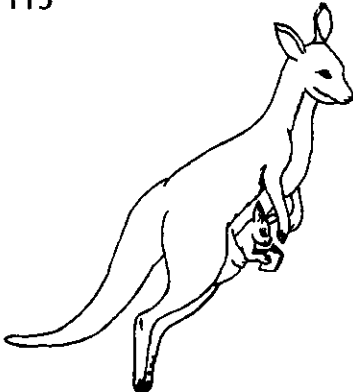
READ A
GOOD BOOK
LATELY?



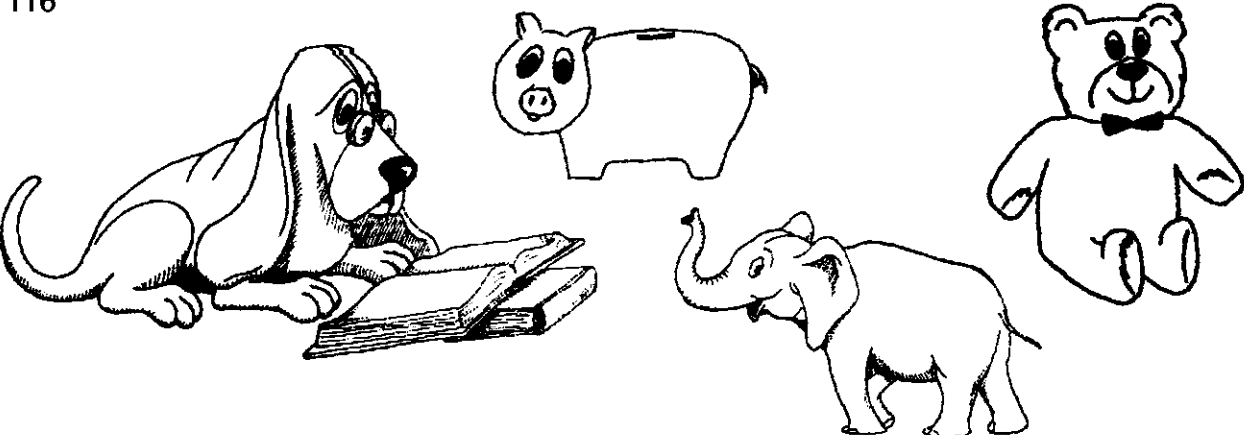
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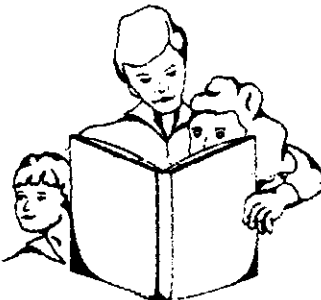
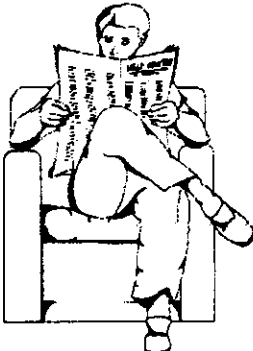
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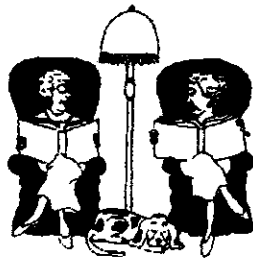
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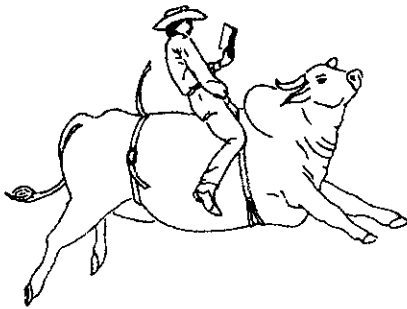
120



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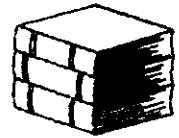
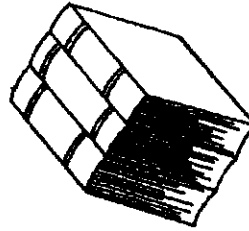
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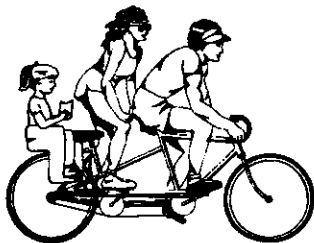
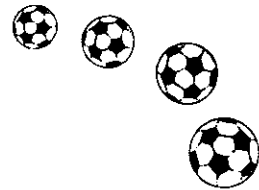
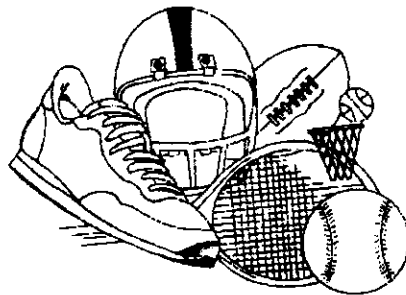
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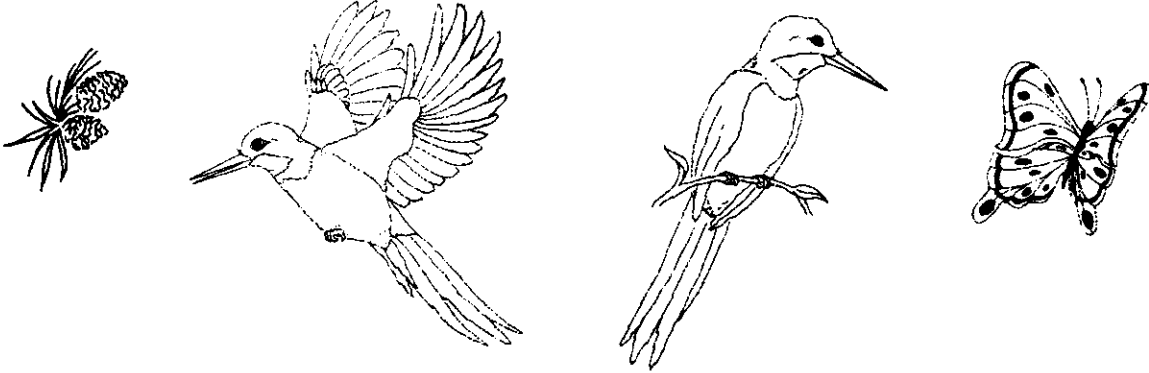
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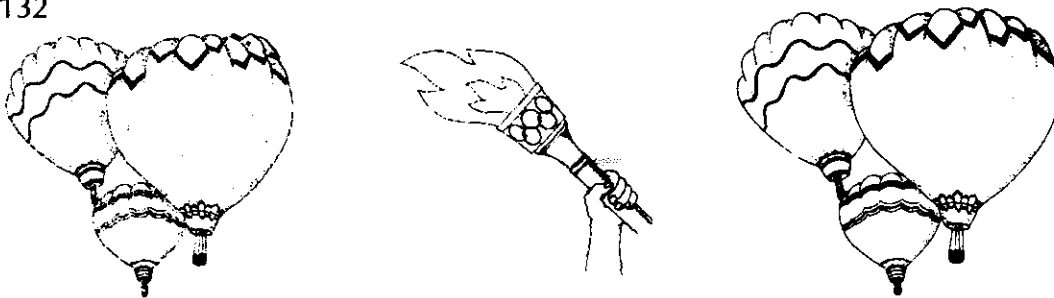
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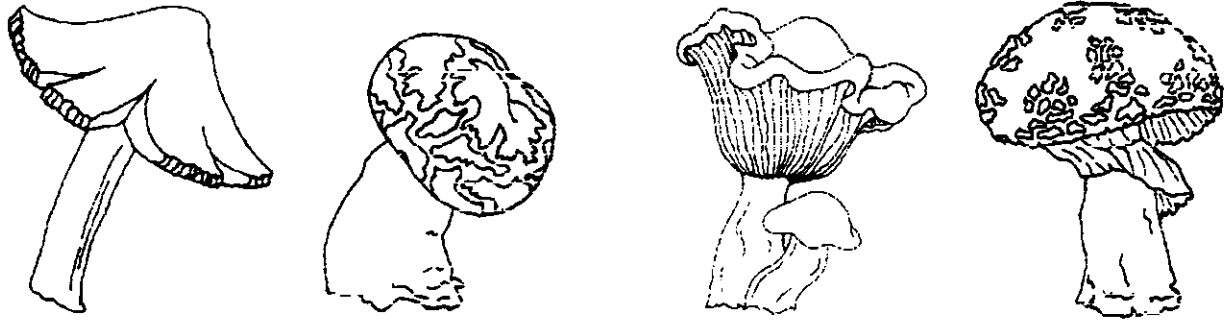
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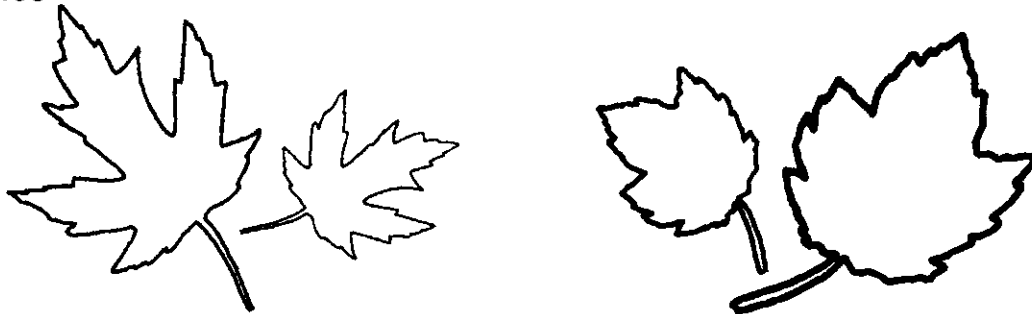
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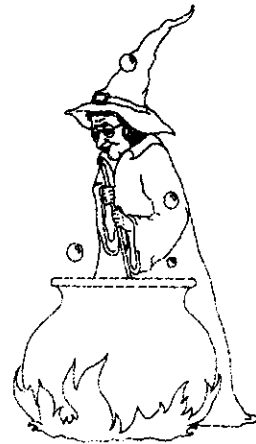
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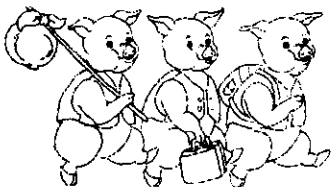
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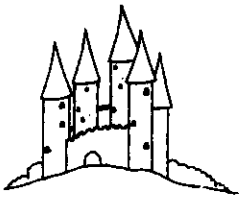
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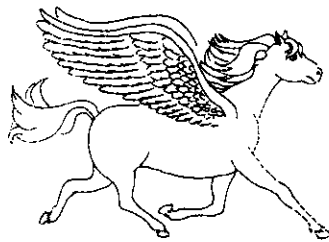
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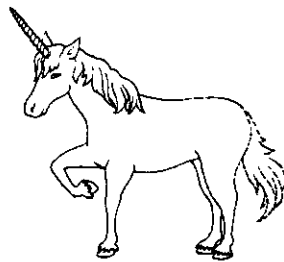
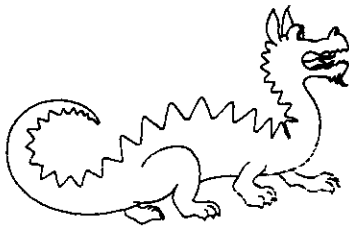
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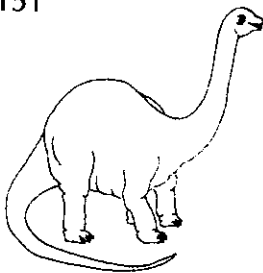
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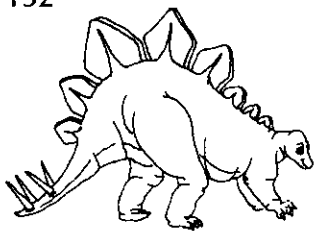
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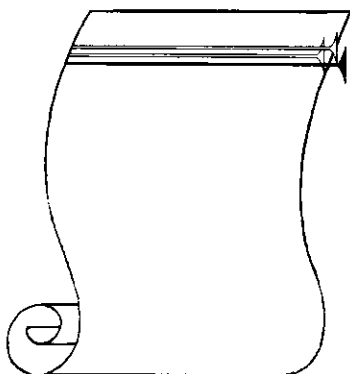
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Using Print Shop Graphics and Other Clip Art

For each of the Print Shop Graphics for Libraries volumes, the authors have tried to include some helpful suggestions for use of the graphics for promotion and for curricular use. For this volume, the authors have condensed material from their book *ClipArt & Dynamic Designs* in hopes that the reader might gain some helpful suggestions for using not only Print Shop graphics, but other clip art in producing flyers, brochures, and other public relations materials. A few minutes spent with some art, some text, a pair of scissors and some glue can produce professional looking materials that will attract attention to the message to be delivered.

PLANNING FOR THE PROFESSIONAL LOOK: KEY DECISIONS

When you venture into a new printing or publicity project, planning is probably the most important step you will take and one that will make the difference between success and failure. Best results will be obtained if you proceed on a step-by-step basis. In planning your newsletter, bulletin board, poster, children's activity, etc., you need to consider all the steps listed below and ask yourself several questions.

Define the Purpose of the Project

Who is the audience? What is the theme or message? What benefits will your audience realize from your effort? What do you really hope to accomplish with your project?

Decide on the Format

Which design approach will have the most impact on this audience? (High school students may react better to a poster than a flyer; parents may prefer a flyer.) Different techniques and materials are required when making a poster for display or creating a newsletter that will be produced month after month. The **trim size** (finished size) of the project will certainly have to be considered. Cost may be a factor. Can you afford color if you are printing outside your institution? Will colored paper be effective? If you are mailing a flyer or announcement (or a catalog), postal regulations regarding size and weight will be a factor. Consult the Postal Service before getting too involved in any particular format. Consistency is important in any recurring project, such as a newsletter. You might want to design a **headline** for your newsletter and set

up regular column features. How many copies will you have to print each month? Can you line up people to regularly contribute items to your newsletter?

How Much Copy Is Necessary?

Look at the amount of text required for your project and think about the illustrations needed. Will they fit in the allotted space? There should be lots of white space left on the finished piece to give the eye a rest. Generally, the best copy is the briefest. Don't insult the intelligence of your audience, but do use headlines and subheads (smaller headlines) liberally to aid the reader who wants to skim. Advertising experts agree that a benefit of some kind should be a prominent part of sales copy. For example, the library could be offering an opportunity for personal or cultural growth and enrichment, entertainment, or an educational experience. **RULE:** Keep it simple for best results.

Bringing Ideas Together

After the text has been written it should be compared with the illustrations that will accompany it to see if both will fit in the allotted space. Decide on the finished size of your piece and pencil in where you think the pictures, headlines, and body copy will look the best. If you don't have a photocopier that will reduce and enlarge, cut out pieces of paper the approximate size you want the finished art to be, make a copy of the text, and move them around on your sketch to see how they relate to each other. You'll probably change your mind a number of times, but this step is essential to assure the most attractive piece possible.

Printing, Binding, & Folding Requirements

The choice of reproduction and binding or folding depends on a number of factors: Will you have multiple sheets to attach together, how many copies are needed, can the project be done in-house (photocopied or on a mimeograph), what is your budget, and will colored ink be considered (can you afford it? do you need it)? The way the piece will be printed and bound affects the way you prepare the art work.

A thorough evaluation of these factors will help you determine what method is best for you: doing it yourself, sending out for a quick-print job, or the use of a full-service printer. The more complicated the job, the longer it will take, and the more costly it will be. The choice is yours, and individual situations and requirements must be taken into account in your decision.

Examples of printing costs that will give you an idea of how much colored ink will cost compared to black ink only are given on page 46. Be sure to consult a number of local printers before making a solid commitment to your format, ink colors, etc.—the printer's costs may be prohibitive, or there may be alternative ways of producing the project that will save you money and be just as attractive. Professional printers can be of enormous assistance in the planning stage, so don't hesitate to call on them whenever a question arises about ink, paper, format, binding requirements, turn-around times, delivery, etc.

CLIP IT, TRIM IT, GLUE IT: TOOLS FOR THE DESIGNER

With a few basic tools, top quality brochures, flyers, newsletters, announcements, and posters can quickly be created. Within these pages are ideas to stimulate and inspire you. A totally new image can often be created by combining two or more illustrations with text, and by cutting, trimming, and pasting, a new look can emerge.

The various stages of a particular method to be used are explained with text and illustrations, and highlight the process and the end product expected. Proceed slowly at first and remember that effective communication with the target audience is the goal. Carefully developed projects should be simple and attractive and designed to keep people informed. A way to build on the process of communication is to take your creative thoughts and proceed through this idea book for inspiration.

To begin, you will need only the items discussed below. Assembling all the tools necessary before you begin will save time and frustration later. Average prices are indicated for most items as each is discussed.

Paper	Erasers
Illustration board	Pens and markers
Rulers	Correction fluid
T-squares	Masking tape
Triangles	Rubber cement and thinner
X-Acto™ knife and blades	Glue
Scissors	Drawing board
Pencils	

Paper

Sketching Paper

There are two kinds of paper you will find very useful: tracing and layout. Tracing paper (9-by-12-inch pad, \$3.00) is ideal for tracing details accurately but has a slightly grayish cast. Layout paper (9-by-12-inch pad, \$5.00) is whiter and not quite as transparent, but still has enough transparency to enable you to trace easily. In pad form, most paper comes in standard sizes, ranging from about 9 by 12 inches to 19 by 24 inches.

Illustration Board

Generally available in two surfaces, smooth and **laid** finish, illustration board (15-by-20 inches, \$5.00/pkg. of 4) is a heavy paper, brilliant white, with about 50 percent rag content. The smooth surface is suitable for all illustrations and hand lettering where detail is important. The laid finish, which is slightly pebbled, is more elegant and suitable for work such as invitations.

Rulers

An 18-inch etched steel ruler (\$6.00) is essential for all kinds of measuring and determining sizes for art work and text. Steel rulers have sufficient weight so they won't slip under pressure and provide a sturdy guide for cutting with an **X-Acto knife** (a lightweight knife ideal for cutting around intricate art work).

T-Squares

A T-square (\$9.00) has a crossbar attached perpendicular to one end of the long blade, much like a ruler. When you butt the crossbar flush against the side of a drawing board, vertical and horizontal lines can be drawn truly square. The T-square is also used to determine if art work and text are aligned properly. The head of the T-square should be solidly fixed to the ruler portion. For most projects the 24-inch size is best, but it is a good idea to select a size that accommodates the size of your drawing surface. The least expensive T-square is made of wood and is acceptable for most art work. However, if you are going to use it for a cutting edge, be sure to get a steel one.

Triangles

Triangles are used with a T-square to square up art work and text and to provide accurate 30 degree, 45 degree, or 60 degree angles, and can be used like a ruler for working with pencil, marker, or pen. A 12-inch triangle (\$5.50) is the most versatile size. Do not use plastic triangles for cutting edges; once nicked, the plastic triangle is useless.

X-Acto Knife & Blades

X-Acto knives and blades are made of lightweight aluminum and are ideal for any art project. Blades come in many sizes and shapes and have plastic safety caps for blade tips. A number 11 or number 16 blade is very versatile and comes in a safety dispenser. A knife and blade combination will cost about \$6.00. Blades are also available in bulk packed containers and cost about \$17.00 per 100.

While scissors are ideal for cutting around objects, you will find that the X-Acto knife, designed to fit the hand, is sharper, more easily maneuverable in small spaces and around tight corners, such as trimming out clip art, and useful for cutting heavier materials also, such as thin cardboard used for posters.

Scissors

While any type of scissors will do, editor's shears (8-inch, \$18.00) have long, slim, tapered blades, and are precision ground for smooth cutting. True accuracy is necessary when cutting typeset copy, art work, and other materials, and these fine scissors are ideal for general art work.

Pencils

Pencils are rated in degrees of hardness: "H" is hard, "B" is soft.

The most useful pencil for general use is probably either the 2H (medium hard) or 2B (medium soft). An HB is good for general sketching and layout. Softer pencils may smudge and need sharpening more frequently. Absolutely essential to any project that may be printed later is a **nonreproducing blue pencil**. This pencil, used extensively in the commercial art field, does not photograph when printing plates are made.

Erasers

For general purposes the most popular eraser is the **art gum eraser**. It is nonabrasive and good for erasing pencil lines; it does, however, leave crumbs on the art work, so be very careful when brushing them away. The **kneaded eraser** (\$6.00/dozen) is a pliable material, which cleans the drawing surface without leaving crumbs. Because it can stretch to fit your hand and be molded into shapes, it is useful for cleaning up corners or other delicate areas of art work. A **pick-up eraser** is used for picking up bits of dried rubber cement.

Pens & Markers

Felt-tip pens and markers come in a variety of colors and tip widths and are useful in highlighting or adding color to art projects. Markers dry almost instantly and are smudgeproof, and with the exception of black, the colors are transparent. Ball point pens can be used on general art work but they have a tendency to smear and feather around the edges; to avoid bleeding of the ink into unwanted areas, use a very fine quality paper or illustration board for projects that will require ink and marker work.

Correction Fluid

White-out or correction fluid (\$1.50) is useful for touching up projects and erasing lines and shadows for projects that will later be printed or photocopied. It is applied sparingly with a light dot pattern, not brushed, and letters can be restruck over it with a typewriter or printed or drawn over with pens and markers.

Pentel™ sells a correction pen that is very convenient for small areas. The fluid is applied from a pinpoint applicator, and is suitable for use with typewriter, pen ink, and photocopying corrections.

Note that computer-produced artwork can be very rough around the edges and of uneven darkness in large black areas. It is wise to plan to touch it up before using it in a printed project.

Masking Tape

Masking tape (we recommend Scotch™ brand, ½-inch by 60 yds., \$3.50/roll) comes in a variety of widths, but ½-inch or ¾-inch is the best size for most projects. White is preferable since it is less distracting on white paper projects. It makes photoreproduction less of a chore, since it helps to reduce the need to **opaque** (paint with white paint or correction fluid) shadows.

Rubber Cement & Thinner

One-coat rubber cement is an excellent adhesive for all kinds of wrinkle-free pasting. Apply the cement to one of the two surfaces to be pasted together. While the cement is wet it can be repositioned repeatedly. Purchase is most economical in the quart (\$5.00) or gallon (\$19.00) size. Pint-sized dispensers (\$4.50) with a cap and brush depth adjustment are handy to use. Rubber cement will thicken, but by adding thinner (\$3.00/pint) and shaking the bottle the solution will be restored to the proper consistency.

You may also find a rubber cement pick-up eraser helpful to remove excess cement after it has dried around the edges of your art. Rubbing will also remove the excess, but could result in displacing the art or smudging.

Rubber cement is potentially combustible when placed or stored near heat. There is a noncombustible type available for classroom use.

Glue

Glue sticks (\$0.80) are useful for cardboard, fabric, photographs, drawings, etc. A screw-on top keeps the contents fresh. Elmer's Glue-All™ (8 oz., \$2.00) bonds all porous materials together. It dries transparent, and won't stain. Plastic squeeze bottles with applicator tips are available in sizes up to one quart.

Drawing Board

Any sturdy table could be used as a work surface, but an artist's drawing board (\$25.00) is well worth considering if you can afford it. Drawing boards have adjustable legs, and a nonglare white working surface, and are portable. They are available in sizes from 18 by 24 inches to 24 by 36 inches, and larger. The board must have a true-edge, a metal strip already attached to the lefthand side, which is used for lining up your T-square and allows it to slide up and down easily.

A luxury item, but nevertheless extremely useful if you can afford it, is an illuminated tracing board (\$125.00). The illumination comes from below and shines through a frosted glass top to reduce eye strain. The table has a true-edge and can be propped up at the back end to tilt at an angle, which facilitates use and helps to eliminate back strain, since it can be adjusted for personal preference. It is light in weight and can sit flat on any work surface. With illumination from below you can position or trace materials with ease, and the table also serves as a compact, all-purpose work surface. If you simply cannot afford an illuminated board, don't forget that for positioning or tracing purposes, a window will do in a pinch!

LET ME COUNT THE WAYS: LAYOUTS

A **layout** (or dummy) is a plan of what you hope the finished project will look like. It provides a general picture of the finished piece with all the text and art in place. A complete layout includes:

- text copy to be included
- position of type in relation to illustrations

- kind and color of paper
- overall size of project
- color of ink to be used
- fold, if appropriate

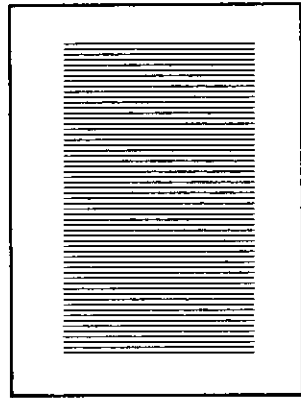
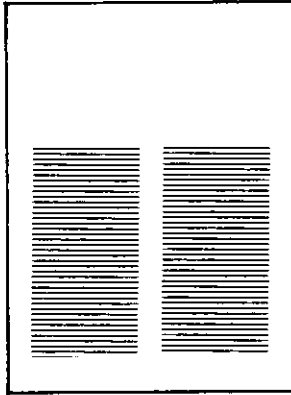
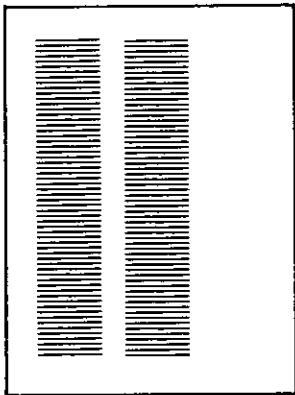
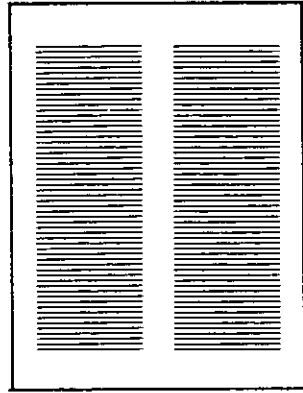
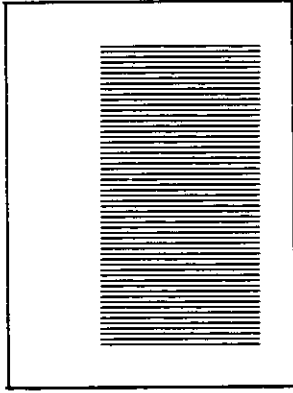
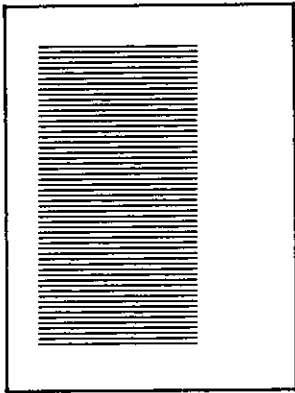
Professional results are rarely achieved on the first try. Some designers spend hours preparing many **rough sketches**, then discard them all to begin over again with a fresh idea. Each sketch should build on the previous one, eliminating the weak areas as a new sketch is created. Put your ideas on paper rapidly. Experiment with many different layouts, vary the dimensions of the overall piece, try a few colors to see how it looks. Make a preliminary layout of the entire project and the lettering to be used. Use a printout of your Print Shop graphic to see how it fits.

Use areas of white space to make the design elements more prominent. White space is actually a background for the art work and type, so use it effectively. Emphasis can be added to headlines by surrounding them with white space, and it makes the headlines easier to read also.

Think about using boxes to draw attention to elements that might otherwise be overlooked. A portion of the art work can be boxed, photographs and illustrations can be highlighted with a box, material can be **reversed** (white letters on a dark background) in a box, and **screens** (fine dot pattern that results in various intensities of original color) can be used to lead the eye to important information. Everything should be in harmony and good taste, and only through experimentation with the various elements can the desired results be achieved.

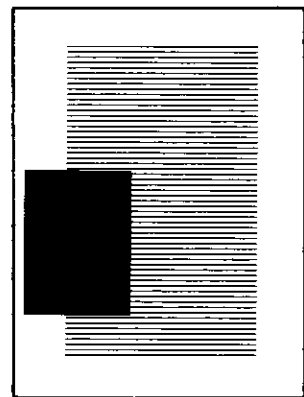
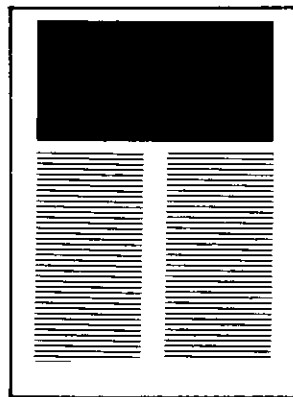
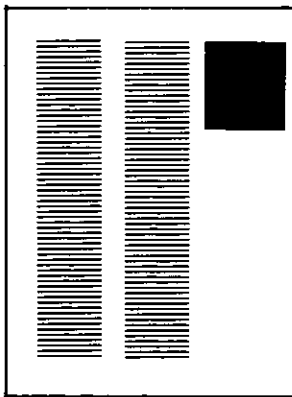
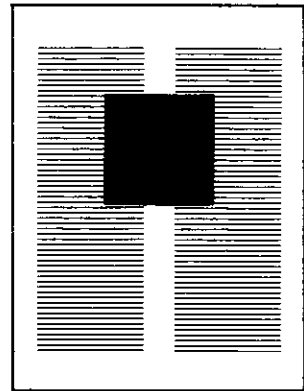
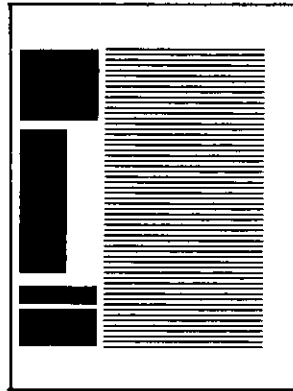
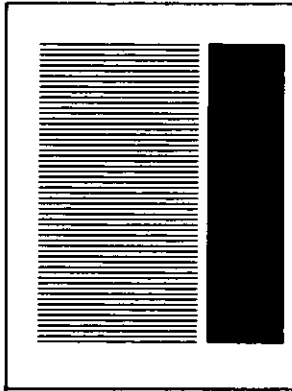
Arranging Type & Illustrations

Provide a focal point for the reader. Avoid clutter and confusion, and think simple. If you have two pages that will be facing each other, concentrate your creative efforts on both pages at the same time to avoid creating pages that lack harmony when placed side by side. Numerous examples of pleasing page arrangements, both for text only and text with illustrations, are provided below.



Page arrangements for text only.

38 / USING PRINT SHOP GRAPHICS AND OTHER CLIP ART



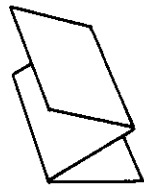
Page arrangements for text and illustrations.

Various Ways of Folding a Sheet

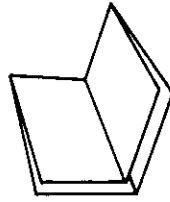
The way in which you fold your flyer, newsletter, or bulletin also says something about it. Folds can be formal or whimsical (as can the size and shape of the piece). To experiment, tape several pieces of paper together until you have a piece that is the size you think you will need. Sometimes you need to experiment with several sizes and folds. For example, if you are doing a brochure to let your patrons know about new books and activities, you might have a lot to say, more than will fit on an 8½-by-11-inch sheet. Try taping two together, then folding them in half and in half again. Several convenient sized pieces can be obtained using an 11-by-17-inch sheet, which is also a very common size and therefore economical. A brochure could also be folded in thirds, but horizontally. See below.



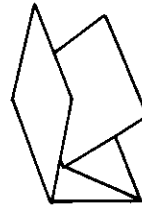
Letter fold (6 pages)



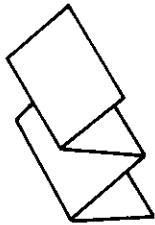
Accordion fold (6 pages)



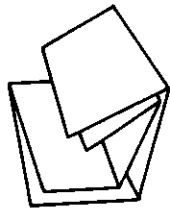
French fold (8 pages)



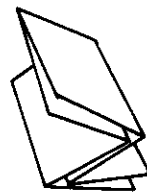
Two parallel folds (8 pages)



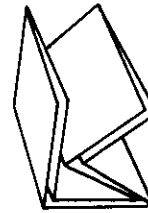
Accordion fold (8 pages)



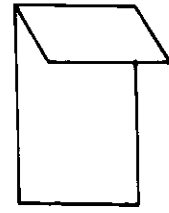
Regular fold (12 pages)



Accordion fold (12 pages)



One parallel, two right-angle folds (16 pages)



Short fold

Some papers don't fold well because of the surface texture used on them, so if you have any questions about what paper is best suited to certain kinds of folds, consult a professional printer.

OVER THE RAINBOW: USING COLOR EFFECTIVELY

Color adds excitement and personality to art work. It costs more to commercially print a piece with color because of the technology, extra steps, and printing techniques involved, so color must be used with care in order to get the biggest effect from the smallest investment. When color is used correctly it can clarify the message, improve communication, and enrich the project:

- Use color as background
- Use color as a decorative tool
- Use color to emphasize specific elements
- Use color to separate one set of items from another

It is very important to remember that ink is transparent. The color of the paper stock chosen can affect the color of the ink chosen. Colored paper stock tends to pull down the intensity of the ink applied to it, so when planning a project "think ink" before you get too far into your specifications. Lighter or pastel papers combine well with stronger ink colors. Combinations of ink and paper of the same color will be illegible. Consult your professional printer before you make a final selection.

Two-Color Printing

Using two colors of ink (e.g., black and another color, or two colors, one of which is dark enough to use for text copy) is a very popular way to add pizzazz and sparkle for a small increase in cost. Choosing colors is confusing; the system for identifying color that is the most widely used is the Pantone Matching System.[™] Books of ink samples (PMS books) are available from most art stores for about \$15.00. Each color is assigned a code number and is reproduced on both shiny and dull paper. The number refers to an ink formula, and one can spend hours contemplating the possibilities of which color will go best with what. Don't try this if you are color blind!

FROM THE GROUND UP: PAPER

Once you have your design and layout, you need to choose your paper. Paper comes in all kinds of weights, textures, and colors, with varying degrees of shininess, foldability, and durability.

Standard Sizes

The economics of printing and the cost of paper dictate the use of certain standardized sizes when possible. Paper sizes vary according to the grade of paper. Bond paper, used for letters and business forms, comes in a standard printing sheet of 17 by 22 inches. Offset paper and coated (shiny) stock come in 25 by 38 inches. Text paper, used for booklets and brochures, comes in 25 by 38 inches; cover stock, a much heavier weight than bond paper, measures 20 by 26 inches in standard size.

Weight

Paper weight ("basis weight") is measured in pounds per 500 sheets (a ream). Thus, a 20-pound bond paper in standard size printer's stock, 17 by 22 inches, would weigh 20 pounds. One ream of 8½-by-11-inch paper (one-fourth of a printer's standard sized sheet) would weigh 5 pounds. Papers are available from 20-pound to 175-pound and higher.

The weight of the stock chosen may be important if the piece will be mailed. It is wise to ask the paper supplier or printer to prepare a paper package that has the exact number of pages of your project so that it can be weighed before proceeding too far with the project. Lighter paper stock may save on postage and does not necessarily make the piece feel cheap or look flimsy.

Remember that the heavier the paper stock chosen, the more expensive it will be to produce. The additional cost can be justified by considering the look and feel of the finished product, and the fact that some projects prepared for mailing must meet certain postal regulations. Check with your local post office to see if your plans meet these regulations before you make a final decision on paper stock.

Opacity

An aspect of paper stock that helps prevent type from showing through from one side to the other is called **opacity**. If the printing on one side of the paper shows through to the other side of the paper, it is called **show-through**. The thicker the paper the less show-through. Request printed samples of paper stock so that you can make an intelligent decision about the weight of paper to be used. The less the paper costs, the greater the likelihood of show-through.

Coated (Shiny) Stock

Shininess is achieved by coating the paper with chemicals that close up the surface irregularities. Photographs will reproduce better on coated paper, screened illustrations will have better definition, and ink appears to have more depth.

Kinds of Paper

Each grade of paper serves a particular use. The most common classifications likely to be encountered for simple projects are bond, coated stock, text, cover, and offset. Some kinds of papers are more expensive than others, even though they weigh the same. Cost differences are due to surface textures and overall quality.

Bond. Used for letters and business forms. The surface is ideal for typewriter use and it accepts ink well for all business purposes. Most letterheads and business forms are 8½ by 11 inches.

Coated. This is a standard paper sheet to which a shiny surface has been added. Because of its smoothness and receptivity for ink, coated paper is used when high-quality printing is desired. Quick setting inks are used to maintain brilliant color and good gloss. Coated glossy stock comes in white and cream only.

Text. Text sheets come in many textures and attractive colors and are useful for announcements, booklets, brochures, and invitations. They accept colored inks well and are very popular for all printed projects.

Offset. Similar to coated and uncoated papers, offset paper is used extensively for all printed pieces. It is a little more expensive than text; it accepts ink very well and is easier for the printer to use when printing large blocks of solid color.

Cover. Heavier weight and matching colors are the main features of cover stock used mainly for booklets or office forms that require some rigidity. Special textures are available in a wide range of colors.

Texture

The texture of the paper stock chosen is important. **Woven** paper has a uniform, smooth surface. Laid paper has fine lines running through it, which are only truly visible when it is held up to the light. Offset papers are coated with sizing to make the surface less porous, which allows the ink to sit on the surface and not seep into the fibers. Each type of paper stock has unique qualities that make it suitable for different projects.

Finish

“Finish” is a term related to the smoothness of the paper. Antique, eggshell, and vellum are the customary finishes of uncoated paper. These papers can be coated to further improve the finish and smoothness.

Embossed patterns can be added to paper also, resulting in surface finishes such as linen, tweed, and pebble. These surface treatments are quite subtle, but do lend distinction to many paper sheets.

Colored

An unlimited range of color sheets is available from various paper supply houses or your printer. Because ink is transparent, there are some problems with colored stock. Printing photographs on colored stock can make them appear muddy and lifeless. If the colors of the paper and ink don't complement each other, the project will be unattractive and can even cause reader fatigue. On promotion pieces, the use of unique color combinations can be very exciting, but the result depends on subtle use of various colors of ink. Ask for a test run before committing to the entire project if in doubt.

If there is a need for repeated use of the same colored paper stock, be sure it will be available in the future. The color chosen could become a means of identification, just like a logo, so be sure adequate stock is available for long-range projects. Ordinary colors are generally well stocked, so it might be a good idea to consider these before selecting something special and unique.

A final note: Paper companies have wonderful packets which they give out to customers, usually those customers who are large users of paper. However, many are happy to have a customer (even a small customer) who is interested in their product, and they will give out some very interesting samples. ASK!

WHAT DO YOU MEAN, IT'S NOT STRAIGHT?: PREPARING MECHANICALS

A **mechanical** is the complete original art and text ready for printing, with all the elements in position. The result is referred to as camera-ready copy.

Gathering the Pieces & Marking Them Up

Gather together all the tools and materials needed, along with the pieces of the project, such as text and art work selected. With scissors or an X-Acto knife, trim off all excess margins. Select paper or illustration board and secure it to the work surface with masking tape. Lightly mark guidelines to indicate the overall size of the project. If making a poster or other art work for display, use a hard lead pencil (guidelines will be erased later). If making a piece for printing, use nonreproducing blue pencil to draw the dimensions of the finished pieces, using the T-square for horizontal and vertical lines.

Folds are indicated with a lightly drawn broken line. To show where an illustration is to go on a page, draw a line (called a **keyline**) around the area using blue pencil, showing the dimensions of the graphic. Keylines can also be drawn in ink to be printed later (e.g., boxed copy). Identify in the block the name or number of the graphic to be placed there.

Pencils and ball point pen can smear, so be very selective about their use. Do not use transparent tape (Scotch tape) on mechanicals since it could appear as a shadow on the printed piece. Precise measurements and attention to detail are essential when preparing mechanicals. Smudges, dirt, excess glue, and poor alignment are very obvious on printed and folded pieces, so be precise when working on the art board. Use white correction fluid or white paint to correct minor mistakes and spots.

Assembling the Mechanical

Before you **paste up** all the design elements in their proper positions, take some time to proofread once more. Check for spelling mistakes and typographical errors. Make sure that nothing important has been left out. Ask a coworker to review the art work; it is easy to overlook your own mistakes. Check the graphics: make sure lines are drawn in properly, that the bottoms of columns line up, and, if the piece is multipaged, if there is a guide to tell readers where the material continues. Careful checking can mean the difference between a high-quality production and a disaster.

Apply a thin coat of rubber cement and place the elements on the illustration board (or paper) within the designated areas. Rubber cement remains workable for some time, so before pressing the pieces into place, be sure they are straight and aligned properly with other copy.

Printers prefer the use of rubber cement over tape of any kind to affix art work and text. Tape will photograph as a shadow on negatives and has to be opaqued out. Rubber cement, used sparingly, provides a permanent bond for the various pieces of the project.

Recording Instructions & Information

Indicate which areas are to be which color, drawing lines in nonreproducible blue pencil to each area from the margins. "Print all text black" is a frequent instruction. When indicating color, use the PMS number and the percent of that color you wish to print, for example, "100% PMS 186" is bright red; "30% PMS 186" will print as pink.

Protect every piece of art work against damage by putting a flap over the face of it. Generally this will be tracing paper on which instructions to the printer are written. Don't write on the flap with ball point or felt tip pen because it might soak through and ruin the art underneath. It could also cause indentations in the face of the art work, which could show up as shadows when photographed. The flap is a handy place to record information such as the name of the project, the date, number of copies printed, and initials of anyone assuming responsibility for the proofreading (**proofreader**) and approval of the final copy.

YOU'VE GOT A FRIEND: INSTANT AND COMMERCIAL PRINTERS

Both instant and commercial full-service print shops have a place in the graphics industry. Instant printers offer low cost, small quantities, and fast service, often in one day or less. Many instant print shops use paper plates on their presses which will give good quality on simple, short-run jobs. The disadvantages of this method are that it allows no room for improvement of the original copy, and it is generally limited to small quantities (less than 800 copies) because the paper plate does not hold up on longer runs. Because most instant print shops have limited equipment and small presses, they often prefer more simple designs and standard-sized paper; often they cannot exceed paper stock larger than 11 by 17 inches.

A full-service commercial print shop is able to offer high-quality, very complicated printing processes, and large quantities. Because of the more sophisticated equipment in commercial print shops they are able to take a concept and produce it from start to finish, maintaining color consistency and crisp definition, and they can provide halftones and four-color photographic images and binding services. The use of negatives and metal plates allows the commercial printer to improve on the original copy and run large quantities without sacrificing quality.

Most commercial shops have art departments with designers on the staff and in-house binding equipment, which allows complete control of printing and binding orders. Many also have the ability to do large mailings from customized mailing lists.

Working with a Cameraman or Printer

When working with a printing firm be clear and concise about what is wanted, or costly mistakes may occur. Convey information to the printer in one of the two methods below:

1. Attach a tag to the art work and give specific instructions for handling any reductions or enlargements, or advising of special techniques that are required.
2. Produce a **mock-up** (a model of the project with text and art in place) of the piece using a photocopier, sketches, etc., that will help the printer to visualize what is wanted. If you

prepared a layout of the project before you proceeded with the art work and text, you can present that to the printer to help clarify what you want done.

Printers are professionals. Ask them for advice whenever information is needed about size, weight, cost, paper stock, or other technical questions that may occur as the project develops.

Page Proofs & What to Check For

When you send a project to the printer it will come back for approval as **page proofs** (copies of all pages of the project to be checked for errors, either of interpretation of your instructions to the printer, or something you may have left out when you prepared the camera-ready copy). These proofs should be carefully checked against your layout to make certain there are no errors.

If you are printing multiple pages, make sure all the pages are in correct order. Are the page numbers in place? Check for dust spots, uneven color, and spots of white on solid blocks of inked copy. If you are using photographs, are they sharp and clear, or fuzzy? Is the color true to the original? If you are printing letters or a graphic in white on a solid black or colored background (a "reverse"), check for little white spots on the solid color and be sure the edges of the letters or graphic are sharp and clear. If the piece is to be folded, do the ends meet correctly and is the crease sharp and clean?

Check line endings to be sure that the printer has not inadvertently chopped off any copy. Check horizontal and vertical alignment, and make sure there are no broken letters (letters which have not been fully printed). In short, make sure that all your instructions were followed. Some minor corrections or modifications may be necessary in any job. These corrections are divided into two categories at this stage: printer's errors and changes made by you. The cost of changes that you introduce at proof stage will be charged to you!

When all the changes and corrections have been clearly identified, the proof is returned to the printer. At this stage your project should be perfect, so if you have any doubts or questions, consult with your printer immediately before approving the proof for final printing.

Printing Costs & Material Specifications

To estimate the cost of printing, the printer needs an accurate idea of the work the project will require. A mock-up and list of material specifications should be supplied to several printers for estimating. Create the mock-up using the actual paper stock chosen for the project for a clear idea of what it will look like when finished. A mock-up is an excellent tool to use as a starting point for discussions about the technical specifications for the project, such as "What size will the page be?" "What weight of paper will be used?" "How many copies are needed?" "Will the project have a cover?" "Will it be printed with colored ink?"

A sample price list for printing is shown below. Based on this list, printing 100 copies in black ink of a one-sided 8½-by-11-inch page would cost \$6.70. One hundred copies printed in black ink of a two-sided project would cost \$12.25. Using colored inks is a real temptation, but the cost can be prohibitive. The chart below illustrates just how expensive color work is: one additional color on one side of an 8½-by-11-inch sheet adds \$22.00 to the cost! Screens (shading) can be an effective alternative to an additional color and are less expensive. The cost of a 4½-by-5½-inch screen is about \$9.00; an 8½-by-11-inch screen costs \$15.00. The more copies you print the less it costs per piece, so if you are considering multi-color work, the print run should be carefully considered.

MATERIAL SPECIFICATIONS AND
DELIVERY INSTRUCTIONS

Date: _____

Title of project: _____

Finished size: _____

Number of pages: _____

Quantity to print: _____

Ink color(s):
Text: _____
Cover: _____

Paper stock:
Text: _____ lb. (weight)
Color(s): _____
Cover: _____ lb. (weight)
Color(s): _____

Photographs:
Number: _____
Special effects required: _____
Reductions required: _____
Enlargements required: _____

Page proofs:
Required: _____
Not required: _____
To attention of: _____

Binding requirements:
Folded: _____
Stapled: _____
Saddle stitched: _____
Plastic comb: _____
Perforated: _____
Laminated: _____

Delivery date: _____

Packing instructions: _____

Ship to: _____

PRINTING COSTS

No. of copies	Black ink		Black ink		8½x11, 1 side 1 addl. color	8½x11, 1 side 2nd addl. color
	8½x11, 20 lb. white 1 side	2 sides	8½x14, 20 lb. white 1 side	2 sides		
100	6.70	12.25	9.15	15.95	28.70	56.25
500	16.95	27.45	21.50	36.00	38.95	71.45
1000	29.75	47.40	37.25	63.65	51.75	91.40
ea. addl. 1000	22.90	37.25	27.80	49.00	44.90	81.25

KEEPING YOUR ACT TOGETHER: SIMPLE BINDING TECHNIQUES

Some basic methods of binding (assembling) material together are described below.

Stapled. The top lefthand corner is the usual place for the staple. If you print more than three pages it might be wise to consider designing the piece with an interesting fold and avoid stapling altogether (see page 39 for various ways of folding a sheet).

Saddle stitched. The material is stapled through the fold of the spine. It is very inexpensive compared to other binding methods and allows the pages to lie flat when opened.

Plastic comb. An opening is drilled through the face of a stack of sheets and a comb is inserted to hold the pages together. This method is frequently used for cookbooks, notebooks, reports, and other materials that must lie perfectly flat when opened, for easy use. Material to be comb bound must have very deep **gutter** (the area surrounding the printed material, either between two facing pages or around the entire piece) margins to accommodate the binding; additional planning at the initial stage of development of the project is necessary.

Perforating. If a part of the page is to be detached, it could be perforated. This is done by the bindery after the piece is printed. The decision to include perforation in the original design should be carefully thought out. It costs about \$15.00 to perforate 1,000 "tear-offs" on an 8½-by-11-inch sheet. Perforation is used for order forms or other material that you want returned. There are postal requirements for the weight of any piece that is to be mailed back. Before you decide to perforate anything, check with your local post office to be sure you are selecting the proper weight paper stock to meet all their regulations.

Laminating. You are probably already familiar with laminating materials for classroom use. The process consists of applying a layer of clear plastic material, such as mylar, to the face of the project, using heat. Lamination makes the colors sparkle and gives the project greater durability.

THANK YOU, XEROX: USING YOUR PHOTOCOPIER AS A GRAPHIC TOOL

Using a photocopier is a lot cheaper for reproducing small quantities than going to a printer, and you can take advantage of a variety of colored paper stocks. Some photocopiers produce clean line art; others are better for large dark areas. If you need to use a photocopier to produce your flyers or newsletter, try to find one in your community that produces the best possible quality reproduction. Be aware, however, that most do *not* reproduce photographs well!

A few materials are needed to transform photocopies into attractive finished items: a ruler or T-square for clean lines and perfect corners; scissors or an X-Acto knife for trimming; rubber cement or clear paste for mounting; and felt-tip pens and colored markers for brightening up your art. If you do not have a work surface with a mar-proof top, protect your work area with heavy cardboard. Always use paste in moderation to avoid lumpy areas. Some copiers will enlarge and reduce images in exact 1 percent increments; however, you should be aware that when you make a copy of a copy on most copiers, the quality of the image deteriorates very rapidly. If you have

different types of copiers at your disposal, so much the better, because different brands will produce darker and more detailed copies. Experiment—trial and error is the best way to ensure that you are getting the best copy possible. Many photocopiers can also copy on gum-backed paper, which makes the production of attractive labels simple.

Always attach your project to the work surface with masking tape in the corners to keep it from moving around while you are working on it. To prevent smudging your copy when using colored pens or markers, lay a piece of paper under your hand.

Shadow lines may appear when an image has been pasted into position and then copied. Use white correction fluid to paint out any shadows before you copy your original.

HANG IT UP: POSTER CRAFT

The main requirements of a poster are to attract attention and to deliver a message. To do this, the poster must capture the viewer's attention immediately. Since every poster delivers a message, the visual elements can be as creative as the imagination will allow.

Theme Elements

List the illustrative elements that symbolize the desired message. Of the elements chosen, focus on just one or two words that will be the heart of the poster. All other elements of the poster will relate to these items.

Thumbnail Sketches

Make lots of **thumbnail sketches** (very small, hastily done sketches) using the elements selected to see how they flow together. The major words should be very large. Check the composition to see if it is balanced and has real impact. Don't crowd the lettering; isolated words can get a lot of attention, so concentrate on size, placement, and possible colors.

Poster proportions are generally 14 by 18 inches or so, but make many small sketches and scale them up later if necessary. When the final sketch is selected for enlarging, apply some color and check it for dramatic effect. If the sketch looks good small, it should look good enlarged also.

Materials Required

Before actually putting the poster together, assemble the materials needed:

Heavyweight paperboard, illustration board, or index card stock

Masking tape

Crayons, colored ink, pens, markers

Pencils

T-square, triangle, ruler

A T-square and triangle are needed for drawing guidelines for letter placement and for getting the project squared up. Tape the project down before working on it, and proceed with caution.

Technique

Transfer the final sketch in detail to the illustration board with very lightly drawn pencil lines, which can be erased later. Block in areas where color will go and where lettering will be, and indicate any large areas that will be solidly colored. Using colored markers, begin laying in the color for the background. In addition to regular markers, tips are available in ½-inch, 1-inch, and even 2-inch sizes for broad stroking, which is ideal for background areas. **Index card** stock is recommended when using markers since it is very smooth and will not allow ink to feather or spread at the edges. Be sure to replace caps on markers right after use, since they dry up rapidly.

If a white margin is required around the poster, place paper masking tape carefully along the edges. If colors overlap on the tape the poster won't be ruined. Use very thin paper tape and press the edges flat to avoid having ink run under them.

By studying travel posters, bookstore poster art, and all forms of advertising art, anyone can see the unlimited range of subjects that lend themselves to poster craft.

Glossary

Art: In general, all nontext material.

Art gum eraser: Nonabrasive all-purpose eraser used on all art projects.

Art mechanical: See Mechanical.

Bleed: When copy, lines, or illustrations extend beyond the trim edge of a page. Also, when pens or markers feather around the edges.

Blueline proof: A proof copy of each page of the project received from the printer. All type and art appear blue. The proof is made from the negatives. Changes made after negatives are shot are very expensive.

Bold: Printing made to appear darker and more pronounced than regular letters.

Camera-ready: Material that is ready to be printed, with all elements pasted into position. See *also* Mechanical.

Caps: Short for all capital letters.

Clip art: Any art or design already created that can be cut out and used, with or without modification, to enhance the written word.

Color key: A type of proof that prints each color of the project on separate acetate layers so that exact positioning can be checked.

Comp: Short for comprehensive layout. An accurate mock-up of the final product showing headlines, blocks of text, and illustrations, all in the correct size and position.

Crop: To select a part of an image by cutting off part of it to fit a defined area.

Cut and paste: To select text and graphic elements from various sources and recombine them to create a unique piece.

Display type: Used to attract attention, as in headlines. Usually 18 points and larger. See *also* Headline.

Dummy: A model of a project, without a great deal of detail, made for planning purposes. See *also* Mock-up.

Face: In type, a collection of letters and characters in a given style.

Family: Variations on the same basic typeface, such as medium, italic, and bold.

Font: A complete set of the letters and characters in one typeface and size.

Gang-run: To run several jobs at one time for cost effectiveness.

Gutter: Any area surrounding the printed material, either between two facing pages or around the entire piece.

- Headline:** Bold or display type used to draw the reader's attention. See also Display type.
- Illustration board:** Lightweight white cardboard on which to prepare mechanicals (e.g., Bristol board).
- Index card stock:** A type of lightweight white cardboard with a very fine smooth surface, ideal for all projects where ink is used.
- Instant lettering:** Preprinted sheets of letters, numbers, punctuation, and symbols that you cut out of a backing sheet or rub off an acetate sheet and apply to art projects.
- Italic:** A typeface that slants to the right.
- Justify:** To align text along a margin (left or right), or to spread type from edge to edge in a given measure.
- Keyline:** Line drawn around copy or illustrations, either to be printed (e.g., boxed copy), or as a guideline only.
- Kneaded eraser:** Made of pliable rubber, it can be molded to the hand and is ideal for cleaning up delicate areas of art work.
- Laid:** The surface texture on paper which appears to have fine lines running through it in both directions.
- Laminating:** A process of using heat to apply clear plastic material to the face of a project, which results in greater durability.
- Layout:** A diagram and instructions for typesetting and placement of illustrations.
- Leading:** The amount of space between lines of type.
- Line art:** Illustrations drawn in black and white only.
- Mechanical:** The complete original art and text ready for printing, with all the elements positioned on illustration board or paper. See also Camera-ready.
- Mock-up:** A model of the project with text and art in place. See also Layout.
- Negative:** White print on a black background.
- Nonreproducing blue pencil:** Blue lead pencil that does not photograph when photographic negatives are made.
- Opacity:** The quality of paper that helps prevent type from showing through from one side to the other.
- Opaque:** To paint out unwanted areas on text or illustrations with white paint or correction fluid.
- Overlay:** Transparent paper or acetate laid over art work to show layering of elements, or for protection.
- Page proofs:** Copies of all pages of the project to be checked for errors.
- Paste up:** Pasting all the design elements in their proper positions on the mechanical.
- Perforation:** Generally a dashed line punched through paper or cardboard that is torn off; often used for coupons or other material that is to be returned by mail.
- Photomechanical transfer (PMT):** A copy of original material on slick paper that retains most of the detail of the original. Used for positioning purposes and as camera-ready art.
- Pica:** A unit of measure equal to approximately 1/6 of an inch; 6 picas equal approximately 1 inch.
- Pick-up eraser:** Designed to be used to pick up bits of dried rubber cement.

Plastic comb: A comb device inserted through holes punched along a stack of sheets to keep them together. Used for cookbooks, notebooks, and other material that must lie perfectly flat when open.

Point: A unit of measure $1/72$ of an inch; 12 points equal 1 pica.

Positive: Black print on a white background.

Proofreader: The person who is responsible for checking type and illustrations to be sure that they are the same as the original copy.

Register marks: A device applied to the face of art work to ensure correct positioning in printing. A cross in a circle or "L" brackets are generally used.

Reverse: White print on a black background. Also called negative.

Rough sketch: Preliminary sketch showing only important areas of blocked text and illustrations, without details. See *also* Thumbnail sketch.

Saddle stitch: Staples that are driven through the fold of the spine, instead of through the corner of two or more flat sheets.

Screen: Fine dot pattern that results in various intensities of original color. Used for creating the appearance of more than one color from the original color at less expense. See *also* Halftone.

Show-through: Printing on one side of a sheet that is visible as a shadow on the other.

Staple: Used to attach two or more pieces of paper together.

Stencil: Cardboard or other material, such as metal or wood, cut out with letters or designs whose outlines are traced onto a surface.

Template: Cardboard or other material (similar to a stencil) perforated with letters, punctuation, and designs whose outlines are traced onto a surface. Templates generally have risers to keep them off the work surface to avoid smearing when using ink to trace characters.

Thumbnail sketch: Very small, hastily done sketch, to provide a rough idea of what something will look like. See *also* Rough sketch.

Trim size: The full dimensions of the finished project.

Word spacing: The space between words.

Woven: A surface texture on paper that has a uniform, smooth surface.

X-Acto knife: Lightweight, handheld knife used to trim around intricate art work.