

Unit-I

PageMaker 6.5

Introduction

Adobe PageMaker 6.5 is the "world's leading cross-platform professional page layout software". PageMaker is primarily used for designing and producing publications such as flyers and newsletters and any other application that requires a combination of text and graphics. PageMaker 6.5 has a rich array of facilities to import text and artwork from other computer application packages, as well as allowing you to generate these directly from within PageMaker itself. PageMaker can handle text better than Illustrator and PhotoShop and also gives you the flexibility of graphic control not available in word processors.

Features in PageMaker 6.5

Document Layers

Layers allow you to place elements one over the other. It can be thought of as sheets stacked up one on top of the other. You can place elements on these layers or temporarily hide the layers. These layers can be used for adding annotations, floating or background images.

Easier Layout

There is a new concept of frames in PageMaker 6.5, which can hold any type of text or images. PageMaker's freeform layout capabilities have become even more flexible with its frame and text controls.

Better Integration

PageMaker can work seamlessly with PhotoShop, Illustrator etc. It also builds the ability to drag and drop images and elements directly from one of these applications to the other.

Color Controls

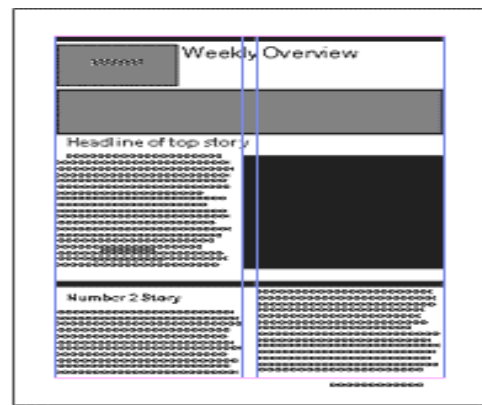
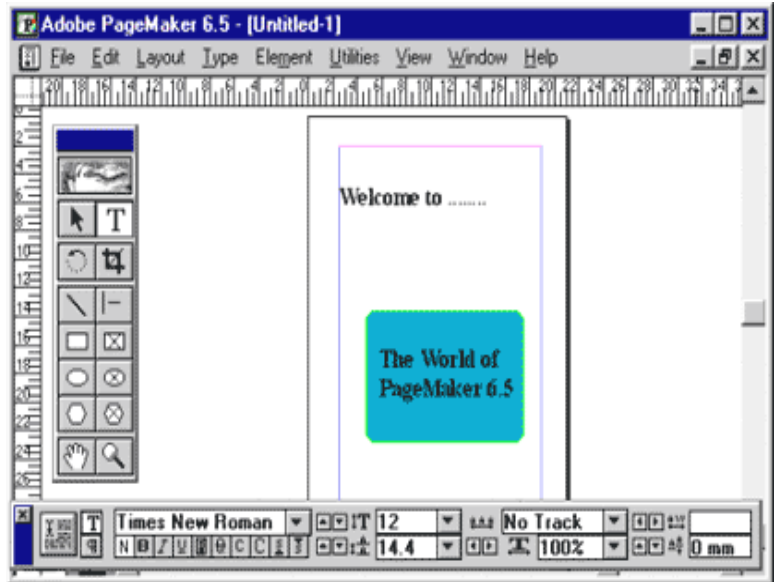
PageMaker 6.5 introduces new color technologies, which helps in reproducing high fidelity colors in your publications. A new desktop color separation tool is also included. The Kodak color management system now supports the International Consortium of Standard for sharing device profiles.

Internet Ready

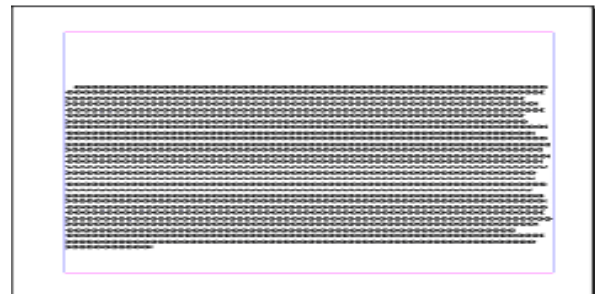
The current release of PageMaker (i.e. Version 6.5) includes an option to export your PageMaker documents to Internet ready HTML (Hyper Text Markup Language) files with the links preserved. The document images are converted to GIF or JPEG format required by the Internet. There is also an option to export the PageMaker documents in to Adobe Acrobat format.

Paper Orientation

You can set paper in two ways, portrait is one in which the paper is used with the longer size in the vertical direction. If we interchange the directions, we get the Landscape Orientation.



Portrait



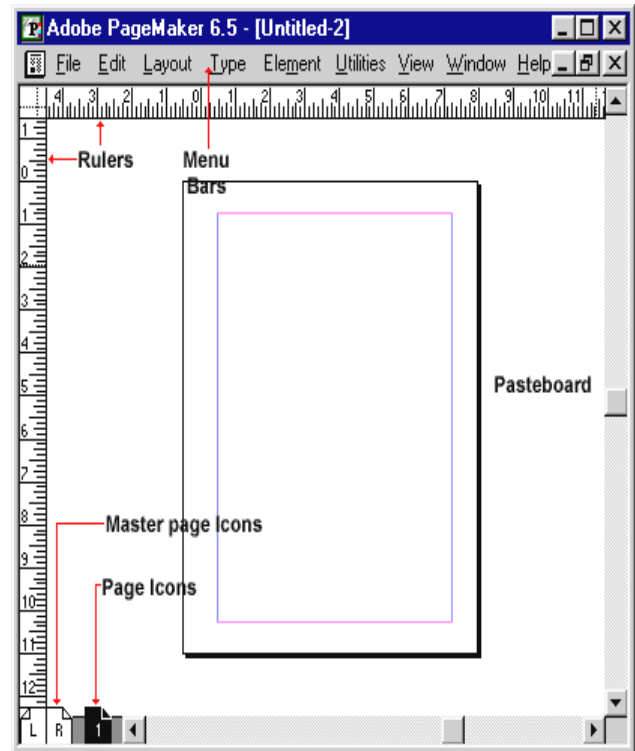
Landscape

Starting PageMaker

- Click the **Start** button.
- Select **Programs**.
- From the **Programs Menu** select **Adobe**.
- In the **Adobe Menu** select **PageMaker 6.5**.
- Click **Adobe PageMaker 6.5**.
- The **PageMaker** window is displayed.

PageMaker Environment

Menu Bar	The standard menu bar contains all the main menus for File, Layout, Element and other utilities.
Ruler	The top and left ruler bars helps you to precisely position the cursor, text, and graphics in the page. The Current Cursor location is shown by two dotted lines in the rulers. To view the rulers select View > Show Rulers.
Master Page Icon	The Master Page icon shows the position of the master Pages. Clicking it will display the Master Page. Master Pages contain text, graphics, layout and settings, which are common, thought the publication.
Page Icon	The Page icon shows the list of pages in the publication with the currently selected page in black. Clicking a particular page icon will display the selected page.
Pasteboard	Surrounding the page is an area of white space called the Pasteboard. It is used to store graphics and texts as you work. Items you place on the pasteboard are visible from any page and can be selected and moved regardless of the page you are currently working on.



File Menu

New	New command is used to create a new publication. This command gives rise to a dialog box where you define the various options before opening a new page of the publication.
Open	Open allow you to open an existing PageMaker file.
Save	Save command saves the current publication. To save all the open files, press the shift key while choosing the Save option.
Revert	Revert command rolls back all the changes made since the last save. It is the same as closing the publishing, without saving and opening it again.
Place	Place command is used to place text and graphics into the publication.
Acquire	The Acquire command is used to scan an image into your publication.
Export	Export command lets you export your publications into the format you select.

Edit Menu

Paste Multiple	Paste Multiple lets you paste multiple copies of text or graphics.
Paste Special	Paste Special is used to specify the format to use when you paste an object into your publication.
Insert Object	Insert Object is used to specify the format to be used to insert an OLE embedded object within a PageMaker publication.
Edit Story	Edit Story is used to toggle between the word processing mode and the layout mode.

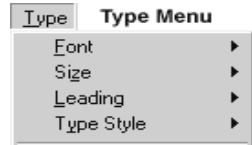
Layout Menu

Sort Pages	When you select Sort Pages command, a dialog box appears with all the pages of the publication. You can rearrange the pages in the publication graphically.
Column Guides	Column Guides lets you divide the pages of the publication into different columns of equal size.
Auto Flow	Auto flow is used to flow the text onto the pages of the publications on its own from a loaded text icon. It flows the text into pages from columns to columns and also adds pages on its own depending on the availability of text.



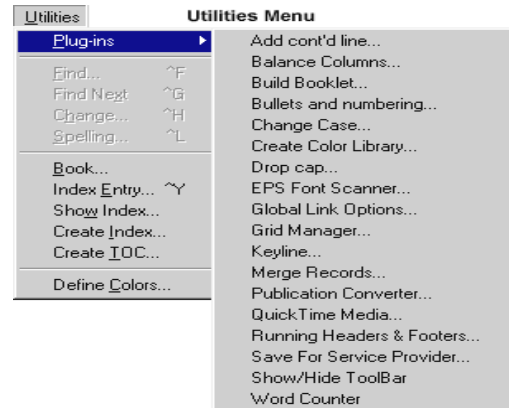
Type Menu

Define Styles	This option will present you a dialog box with the list of styles used in the publication. You can add, modify and delete styles from this dialog box.
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Element Menu

Frame	Frame has options for frame alignment, position and margins.
Align Objects	Align Objects lets you align multiple objects relative to each other.
Link Options	Link Options is used to define whether the linked text or graphic is to be updated along with the publication in use and also its frequency.

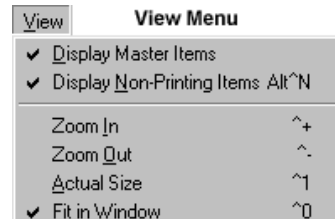


Utilities Menu

Plug-ins	Plug-ins has a list of sub commands, which lists out the various plug-ins, which have been included with PageMaker as additions.
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View Menu

Display Master Items	Display Master Items toggle the display of items from the master pages to be reflected in the current page of the publication.
Display Non-Printing Items	Display Non-Printing items toggle the display of non-printing items.



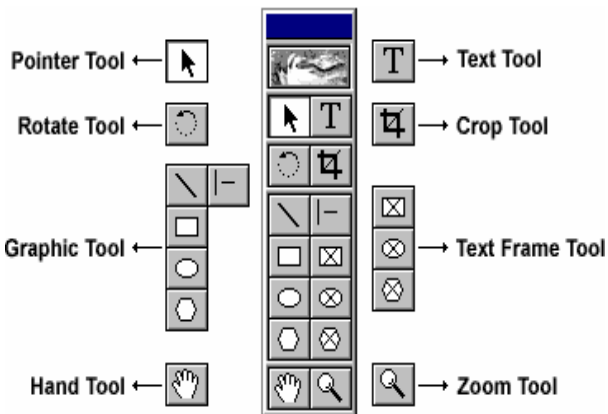
Window Menu

Show Tools	Hide/Show tools toggles the display of PageMaker toolbar.
Show Control Palette	Show/Hide Control Panel toggles the display of control panel on the screen.
Show Colors	Show/Hide Colors Toggles the display of the Color Palette on the screen.
Show Styles	Show/Hide Styles toggles the display of the Styles Palette on the screen.
Show Layers	Show/Hide Layers toggles the display of the Layers Palette on the screen.
Show Master Pages	Show/Hide Master Pages toggles the display of the Master Pages Palette on the screen.
Show Hyperlinks	Show/Hide Hyperlinks toggles the display of the Hyperlink Palette on the screen.

UNDERSTANDING PAGEMAKER TOOLS

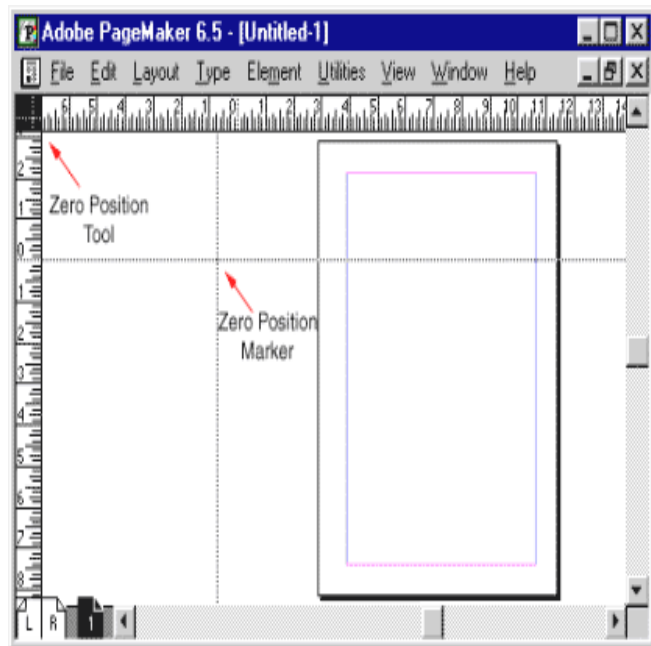
Toolbox

Toolbox contains all the tools used to create a publication in PageMaker. Choose Window and select Show Tools to display the toolbox. The individual tools will be explained in detail later in this session.



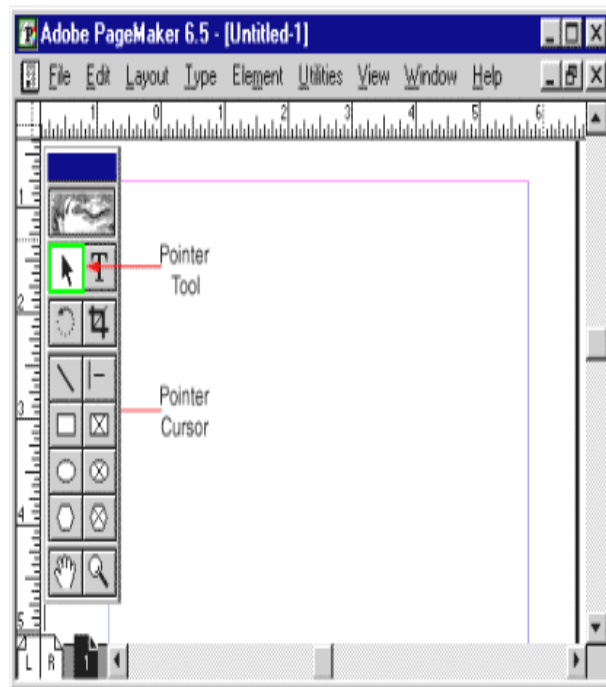
Zero Position

Zero Position allows you to set the zero position on the screen. Zero position is the position, where both the top and the left side rulers are at zero. By Zero positioning all measurements in the pages are made relative to this point. Click it and drag it to anywhere on the workspace to set it as the Zero Point



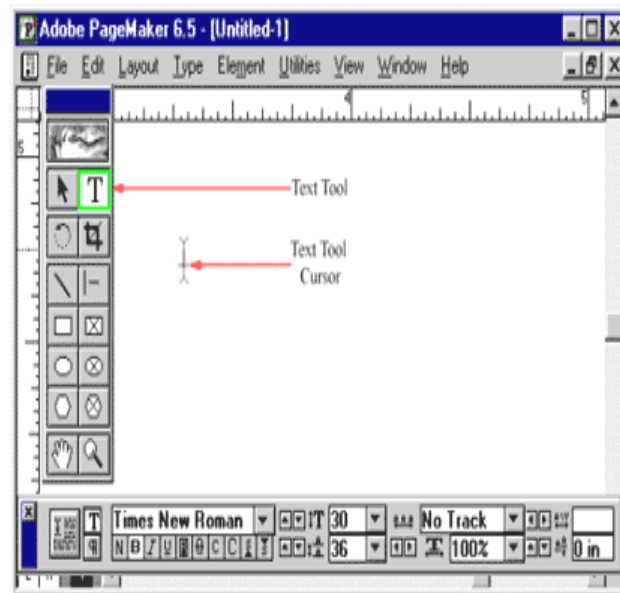
Pointer Tool

Pointer tool is used to pick, drag and drop graphics and text.



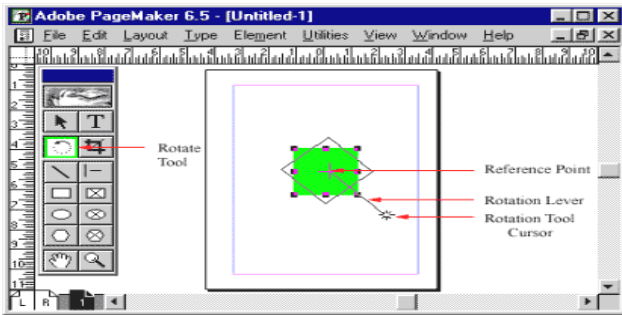
Text Tool

Text Tool is used to edit and select text and insert text frames. Click the text tool and click anywhere in the document and start entering text. The text tool creates a free flowing text box



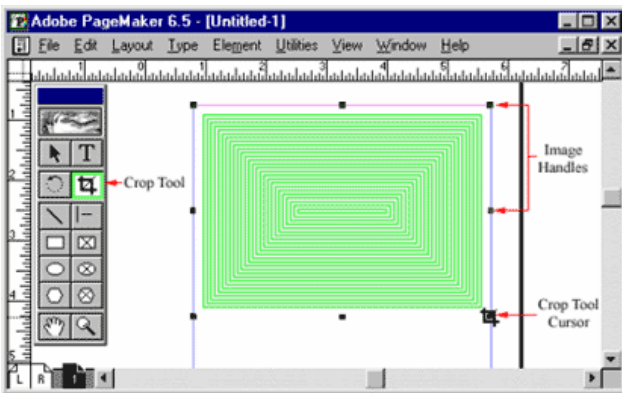
Rotate Tool

Rotate tool is used to rotate text and graphic objects. Click the rotate tool, then click on the object reference point and drag to rotate the object.



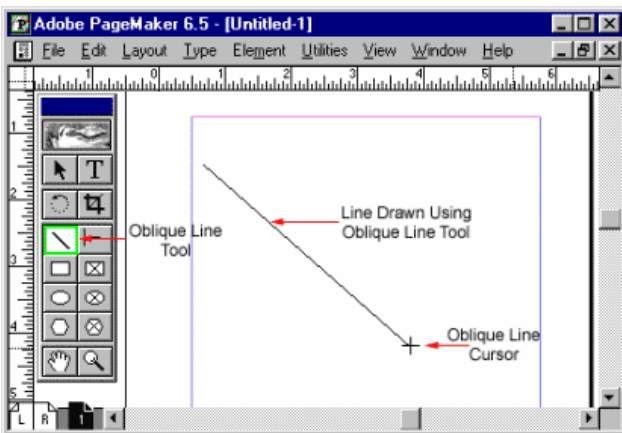
Crop Tool

The Crop tool is used to crop imported graphic images to the required size. The crop tool only works on TIFF type of images. Click on the toll and, drag the image handles, to crop the image.



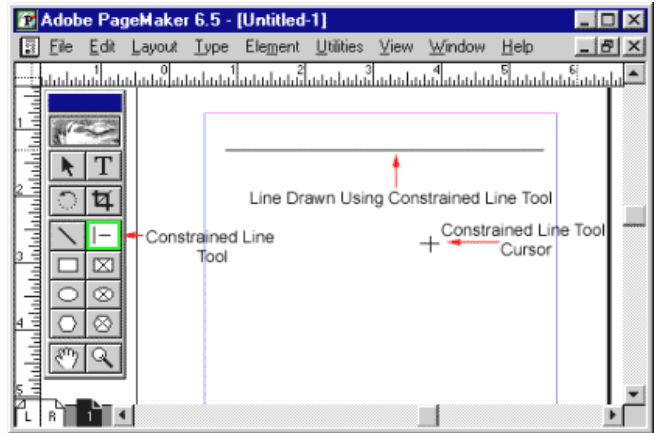
Oblique Line Tool

Oblique Line is used to draw slanting lines. To draw a line, click the oblique line tool, click and drag to draw a line in any direction.



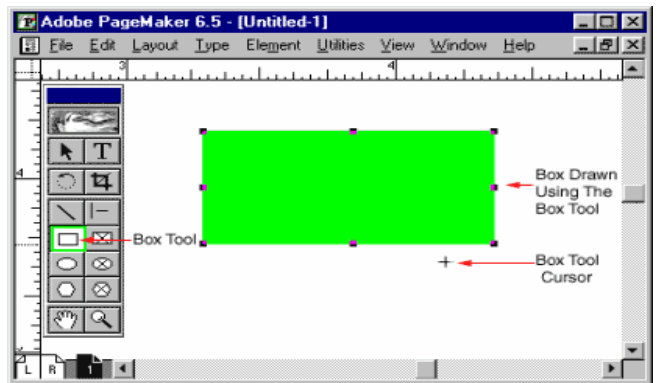
Constrained Line Tool

Constrained Line tool will draw lines at 45degree intervals, i.e., horizontally, vertically or diagonally.



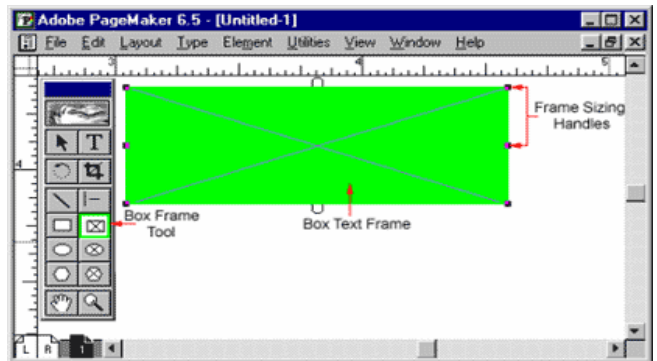
Box Tool

Box tool is used to draw a box



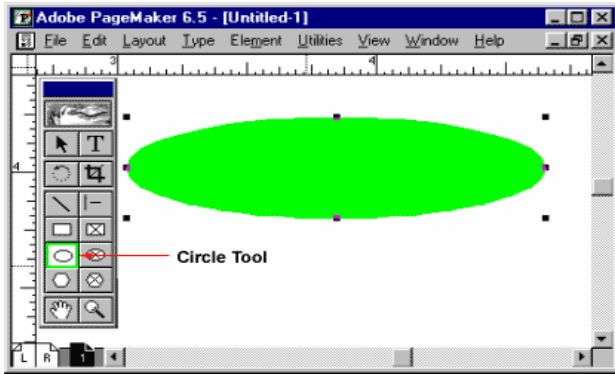
Rectangle Frame

Rectangle Frame is used to type text inside a box. First select the toll and draw the area to be enclosed by the rectangular frame, then select the text tool and click inside the drawn frame to enter text. The text will be constrained to the rectangular frame.



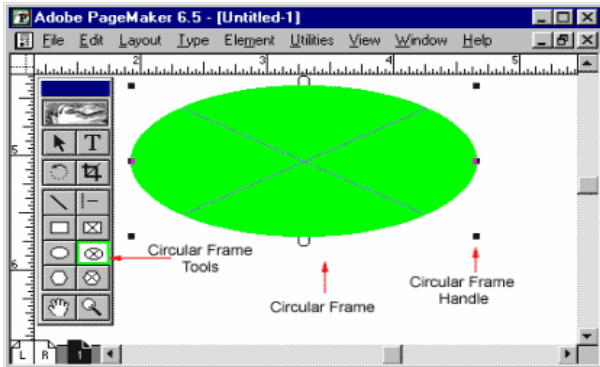
Circle Tool

Circle tool is used to draw a circle or elliptical graphic. To draw a circle or an ellipse, select the tool, click and drag to draw a circle on the document.



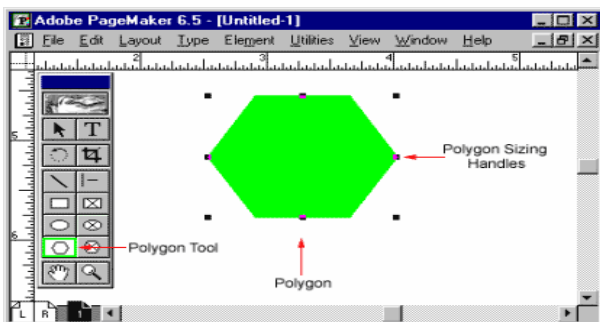
Circular Frame

Circular Frame is used to type text inside a circle or an oval. Use the Circular frame tool to draw the frame and then click inside with the text tool to start entering text. The entered text will be constrained to the circular frame.



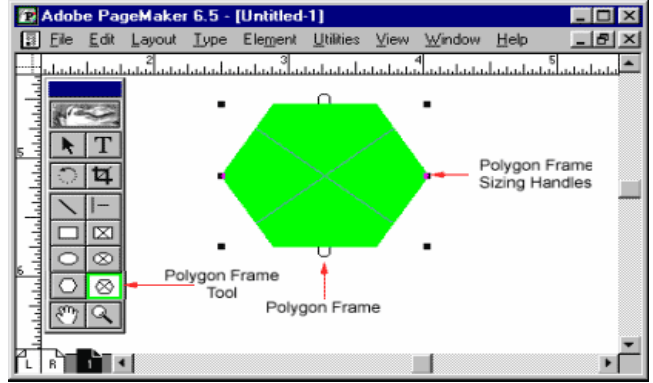
Polygon Tool

Polygon tool is used to draw a shape with more than four sides. You can modify the polygon by selecting Element and selecting Polygon Settings



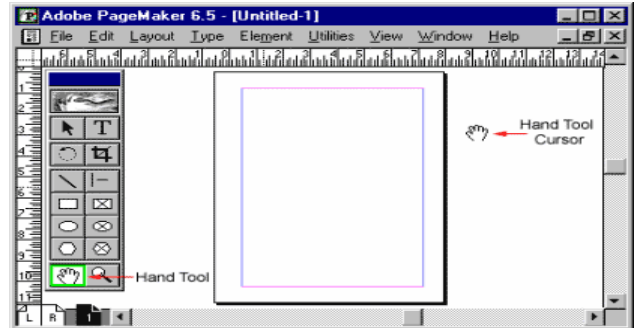
Polygon Frame

Polygon frame puts the text inside the polygon. Select the polygon frame tool, draw a polygon then select the text tool and click inside the frame to enter the text inside the polygon frame



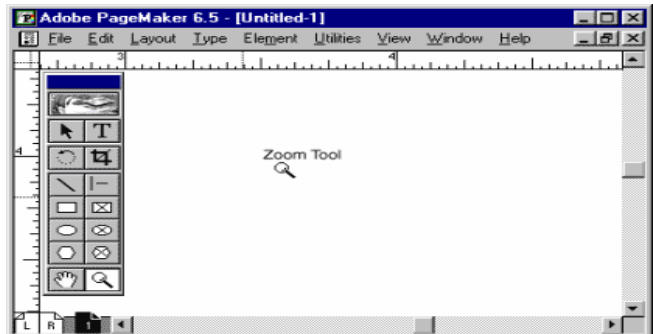
Hand Tool

Hand tool is used to move the screen. This tool is very useful when you are working with large documents. It helps you to easily navigate in a large page. To move a screen, just select the hand tool and click and drag the page to view different parts of the page.



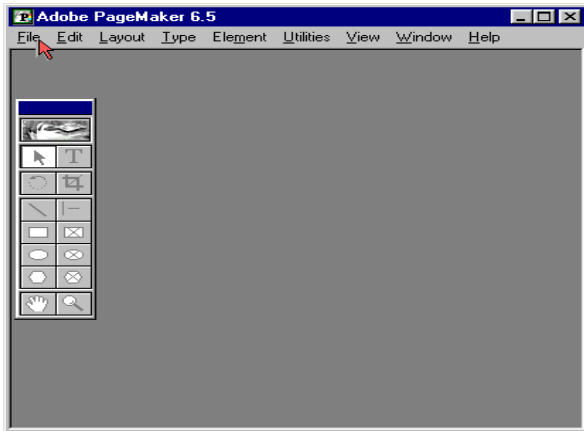
Zoom Tool

Zoom tool allows you to zoom in and out of the document view. By default the zoom tool will be in the zoom-in mode. To zoom out of page select the zoom tool and press control and click in the document window with the zoom tool.

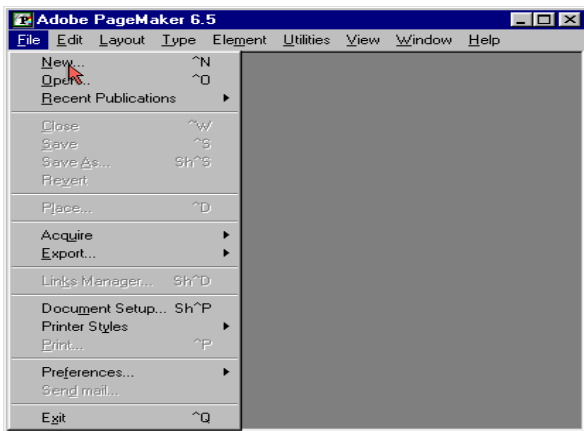


OPENING A NEW PUBLICATION

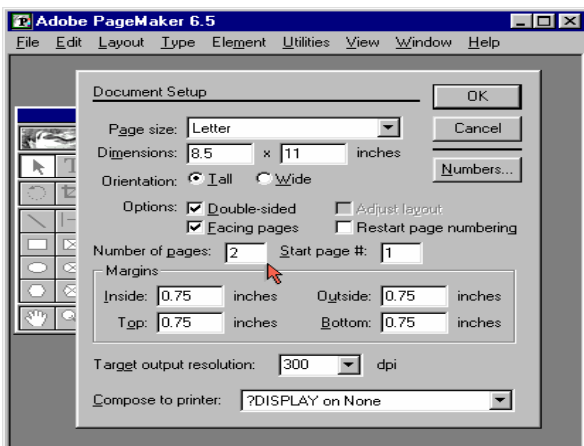
Click File.



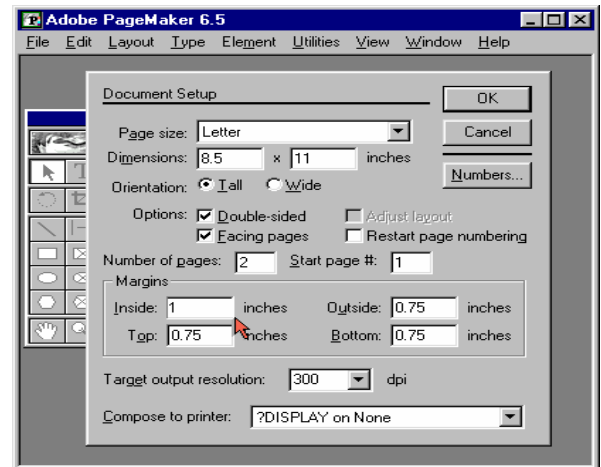
Select New.



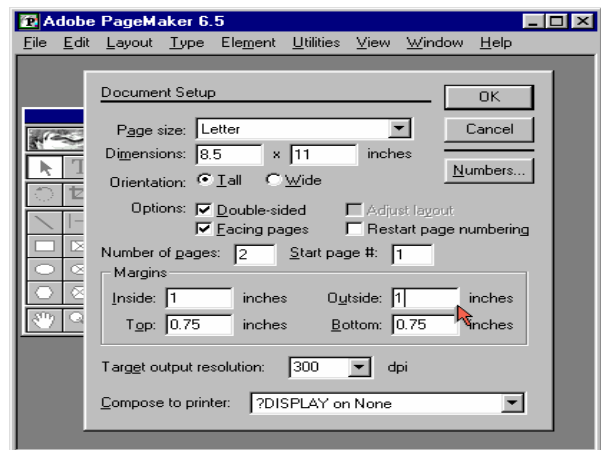
The Document Setup dialog box appears. Enter 2 in the number of pages text box and press the TAB key.



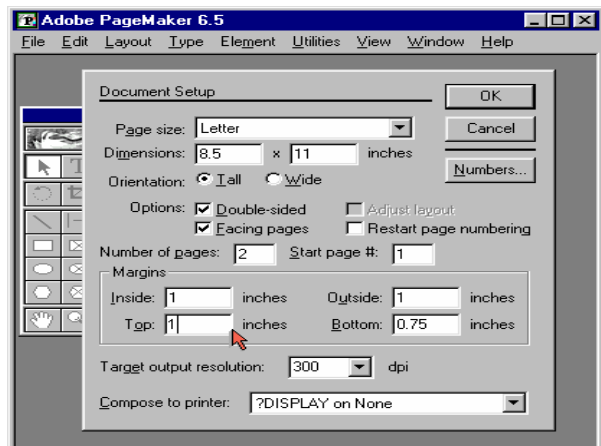
Enter 1 inch as the inside margin and press the TAB key.



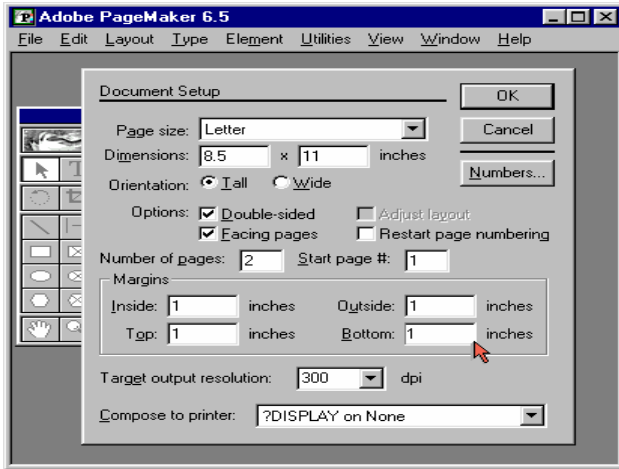
Enter 1 inch as the outside margin and press the TAB key.



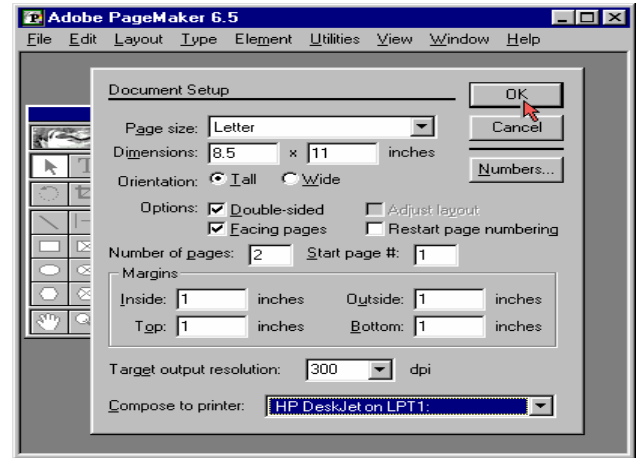
Enter 1 inch as the top margin and press the TAB key.



Enter 1 inch as the **bottom margin** and press the **TAB** key.

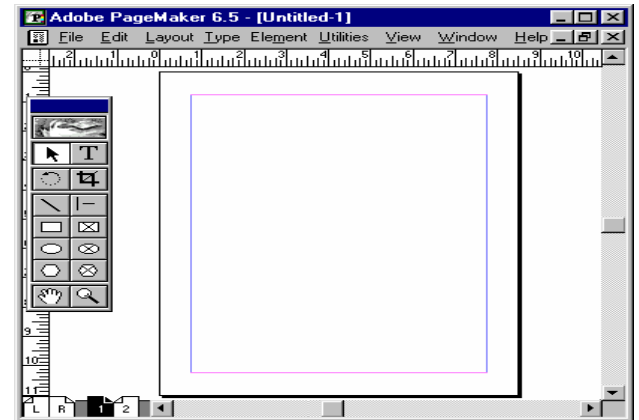
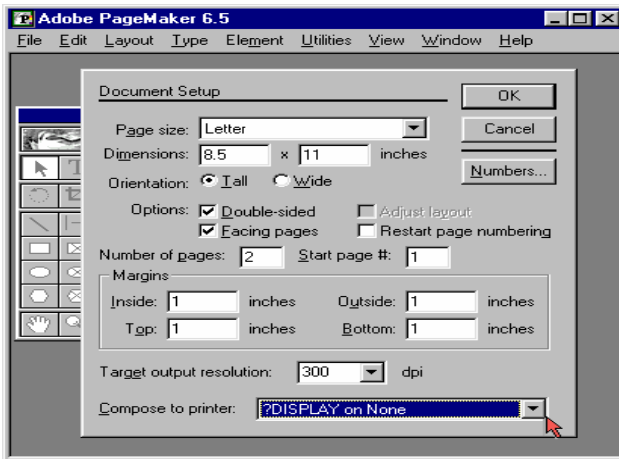


Click **OK**.



A new document is opened with the required margins and the first page of the selected document is displayed.

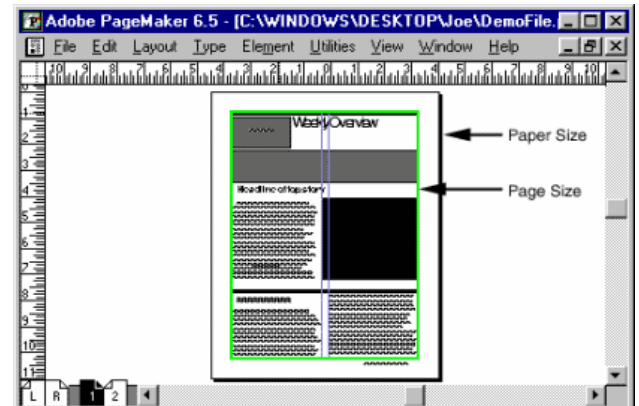
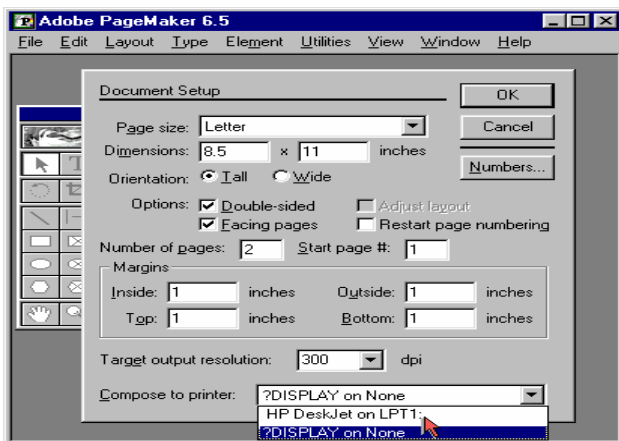
Click the **"Compose to printer"** dropdown menu.



PAGE SIZE AND PAPER SIZE

Paper size is the actual size of the paper and Page Size is the printable area of the page. The Page size is the area enclosed by the page margins.

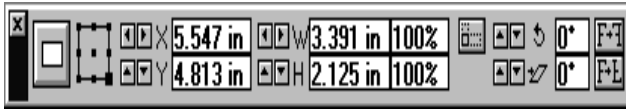
Select the printer **"HP DeskJet on LPT1"**



CONTROL PALETTE

The control Palette displays the properties for the selected paragraph, Character or object.

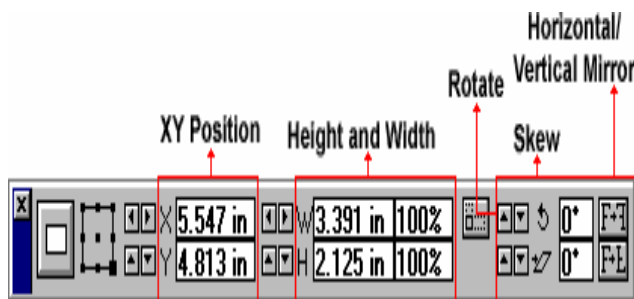
It is a sort of shortcut to the object, text, and paragraph properties. Choose Window and select Show Control Palette to display the Control palette.



CONTROL PALETTE IN OBJECT MODE

The control Palette when it has an object selected displays the object properties such as the reference point, position, size, scaling, cropping, printer resolution, rotating, skewing and horizontal and vertical reflection.

Horizontal/vertical mirror	mirrors the currently selected object along the x or y-axis.
Height/width	sets the height and width of the currently selected object, either numerically in inches or in percentages of the current size.
Rotate	Rotate, is used to rotate the selected object around an axis. The center of rotation is set as the object's center and exact measurements can be used
Skew	This skews, the currently selected object, in degrees.
XY position	Sets the horizontal and vertical position of the upper-left corner of the currently selected object.



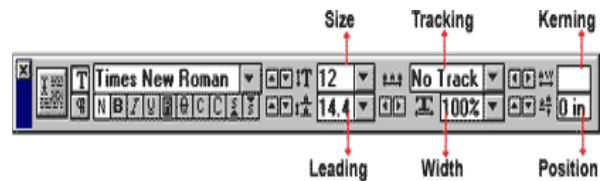
Control Palette in Character Mode

The Character Palette is displayed when the text tool is selected.

It has options for changing text styles, size, leading, tracking, width and Kerning.

There is a toggle button to shift between paragraph view and character view.

Kerning	Text Kerning adjusts the spacing between characters in text. It is selective, so you can adjust just one or two characters, or whole sections of text. Negative numbers move characters closer together, whereas Positive numbers space them out.
Leading	Text Leading adjusts the spacing between lines of text. This is applicable on line-by-line basis. Positive and Negative numbers have the same effect as they have on Kerning, except that the spacing is between the lines of text.
Tracking	Text Tracking adjusts how closely characters follow each other. Very tight tracking brings text closer together, very loose spreads it out a bit.
Size	Text Size adjusts point size of text.
Position	Text Position adjusts the placement of the text on a given line. Positive Numbers move the text into a super text position (above the line), and Negative numbers move it into a subtext position (below the line).
Width	Text Width adjusts the character width and does not affect height. The larger the percentage, the wider the word. Percentages over 100% make it proportionately larger than the standard sizing, under 100% make it proportionately smaller.



Control Palette In Paragraph Mode

The control Palette displays options for the paragraph style, alignment, indents, spacing, grid spacing and grid alignment

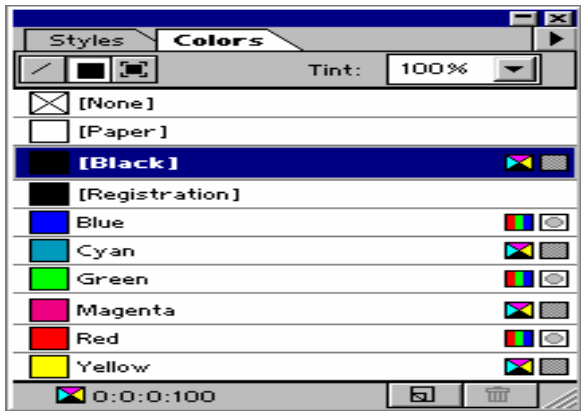


Color Palette

The color Palette is used to apply colors or view the name or kind of color applied to the selected text or object. The buttons stroke, fill or both, can be used to change the color of the graphic object and Object level.

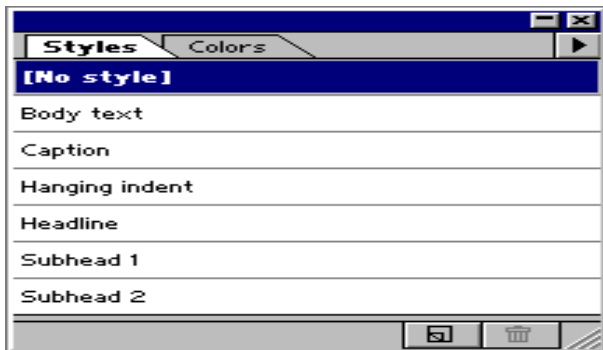
Tints allow you to have variations of the same color. To apply a color to a text or object, select the corresponding text or object and select the color from the color Palette.

Choose Window and select Show Colors, to display the Colors palette.



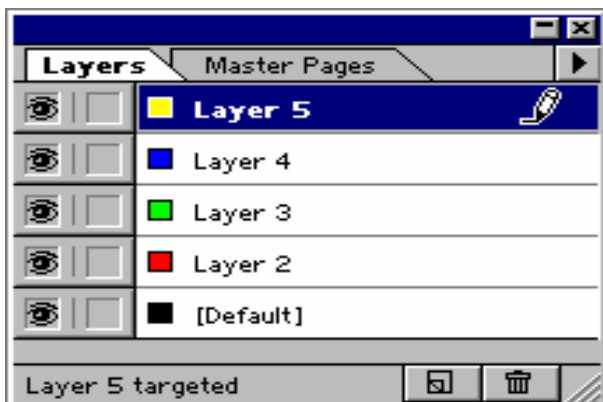
Styles Palette

The Styles Palette is used to apply styles or to view or edit styles defined for the publication. To apply a style, just click a paragraph with the text tool and then click a style name in the palette. Choose Window and select Show Styles to display the Styles palette.



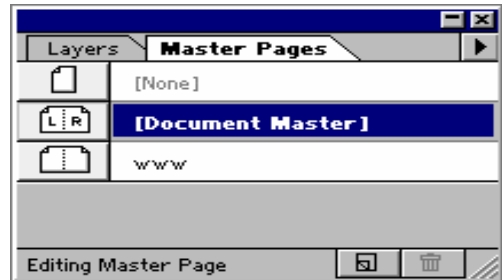
Layers Palette

The Layer Palette is used where a multiple layers document structure is required. Layers allow you to separate the different elements that make up your document. You can hide, display, add or delete layers as required. Choose Window and select Show Layers to display the Layers Palette.



Master Pages Palette

The Master Pages palette is used to create and apply masters. It displays a list of available master pages for a particular document. The master page icon at the bottom of the window is used when you want to go to a master page for editing. Choose Window and select Show Master pages to display the master Pages palette



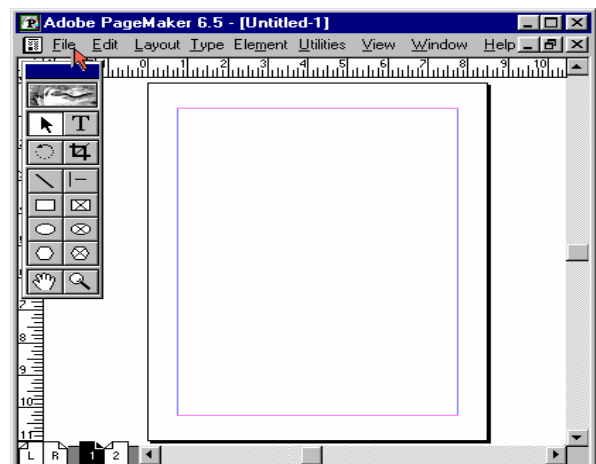
Hyperlink Palette

A hyperlink has two parts: a source, which is the hyper linked text, or graphic that you click, and a destination, which is where the source jumps. Inside a PageMaker publication, destinations are called anchors. You can also give a valid web hyperlink. Choose Window and select Show Hyperlinks to display the Hyperlinks palette

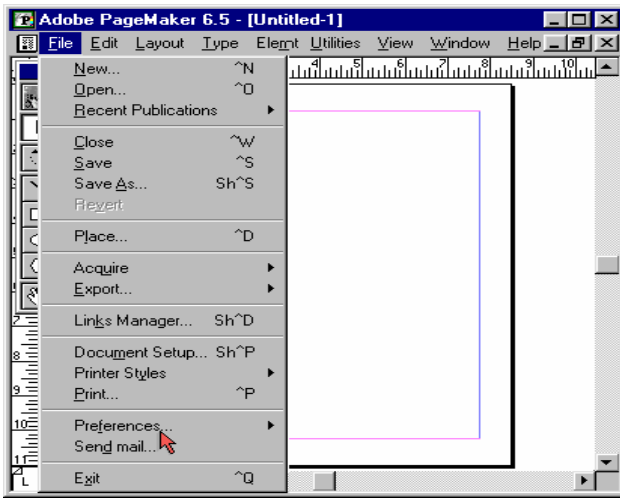


Setting a Measurement System

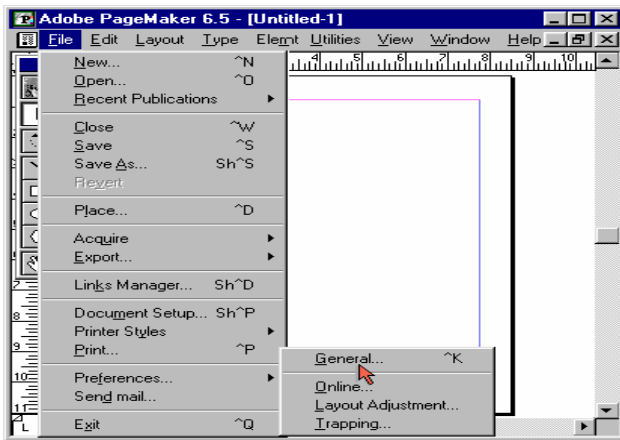
Click **File**.



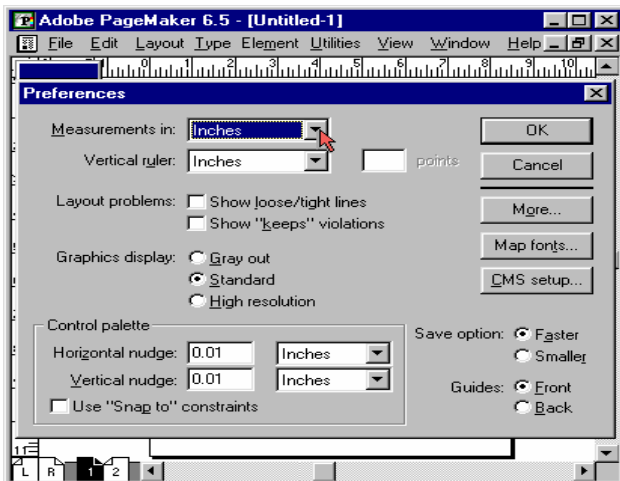
Select Preferences.



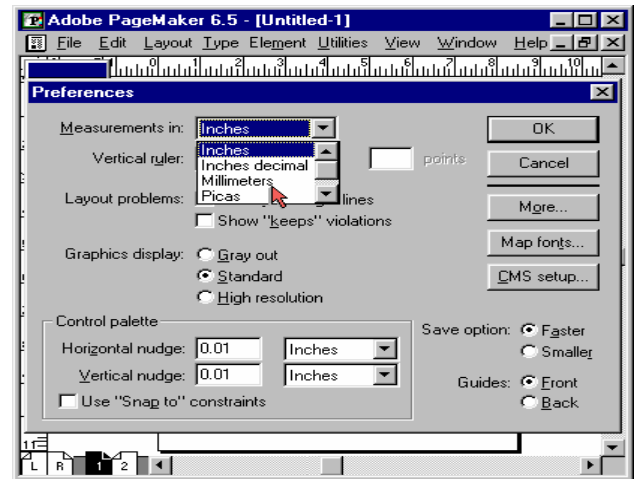
In the Preferences menu select general.



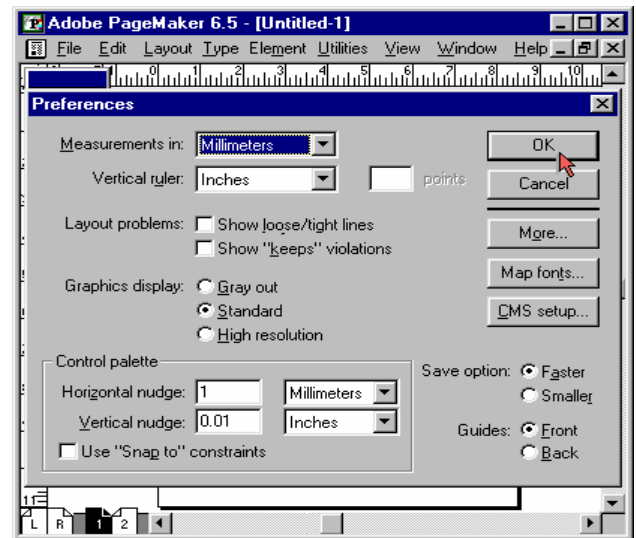
Click the "Measurement in" drop down box.



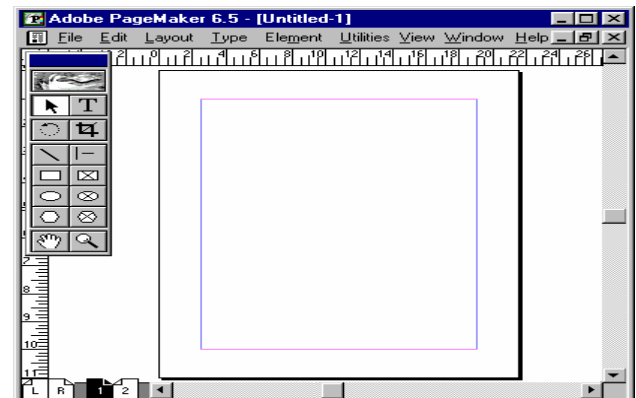
Select Millimeters.



Click OK.

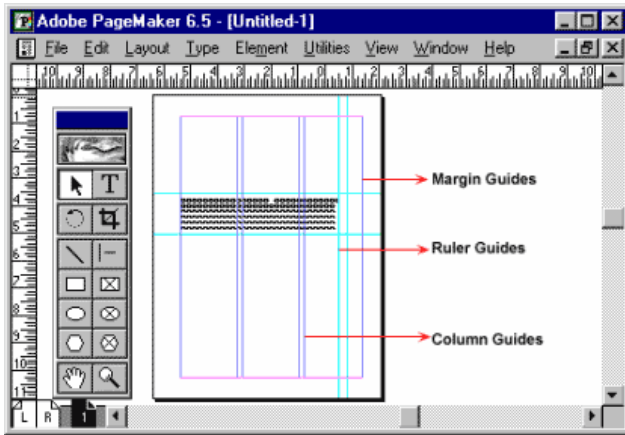


You will notice that the rulers have changed from Inches to Millimeters.



GUIDES

Margin Guides	Margins are defined in the Document Setup dialog box, when you first create a publication, and are applied to the Document Master page. These are represented by pink lines on the top and bottom and by blue lines on the left and right.
Column Guides	Column guides serve as boundaries for text you place within them. You can have as many as 20 columns per page. Column guides control the flow of text and are represented by dark blue lines.
Ruler Guides	Ruler Guides are also non-printing guidelines which are primarily used to align objects in the publication and are represented on the screen by Light blue lines.



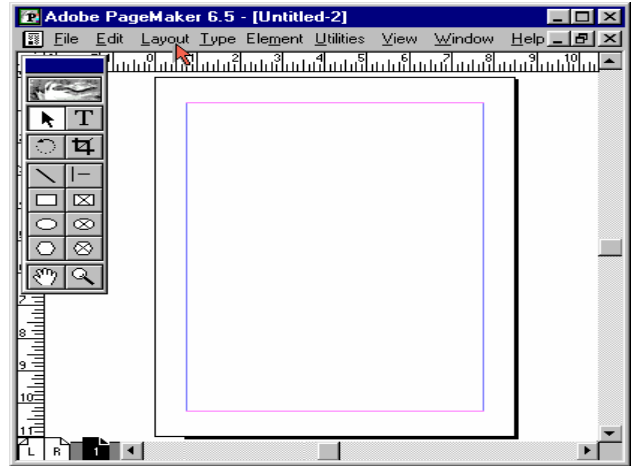
Viewing Pages

Zoom In	Zoom in Magnifies the Document to the next level
Zoom Out	Zoom out Shrinks the Document view to the previous level
Actual Size	Actual size Displays the entire page or a two page spread within the publication window.
Fit in Window	Fit in window will display the current page in its entirety within the publishing window. This view is especially useful to check the layout of the page.
Entire pasteboard	Entire pasteboard displays the page with the entire pasteboard so that you can find or view objects.

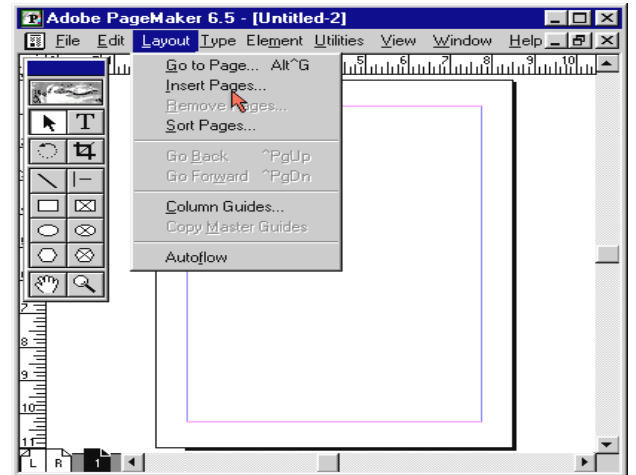
- ✓ Display Master Items
- ✓ Display Non-Printing Items Alt^N
- Zoom In ^+
- Zoom Ot ^-
- Actual Size ^1
- ✓ Fit in Window ^0
- Entire Pasteboard Sh^0

INSERTING PAGES

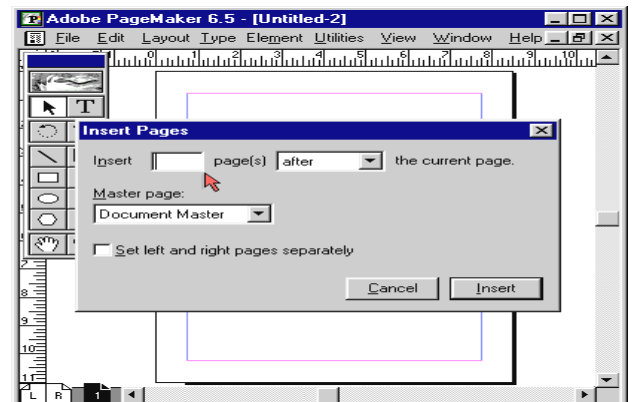
Click **Layout**.



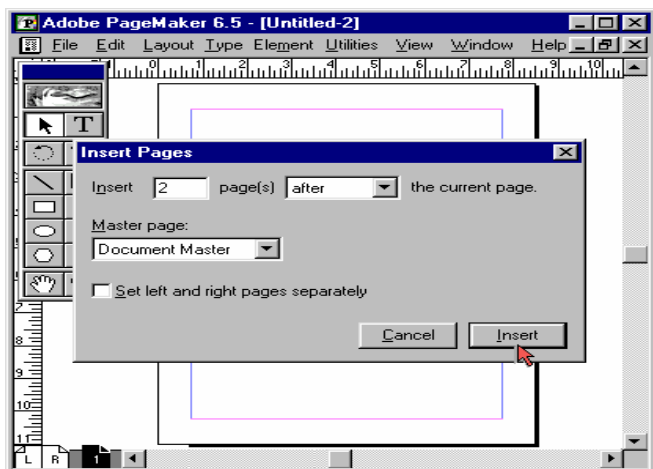
Choose **Insert Pages**.



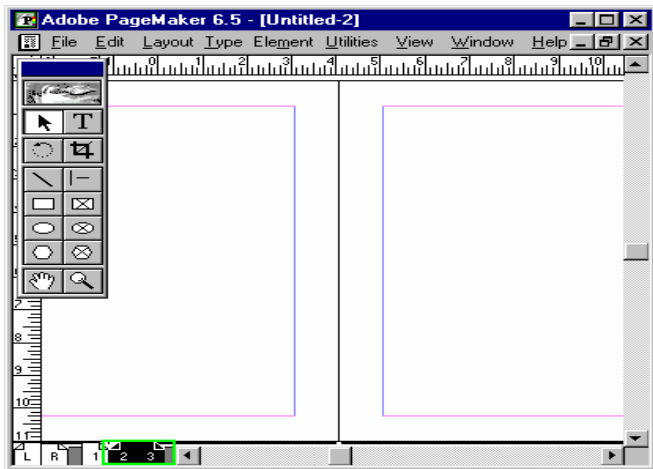
The Insert Pages dialog box is displayed. Enter 2 as the number of new pages to add.



Click Insert.

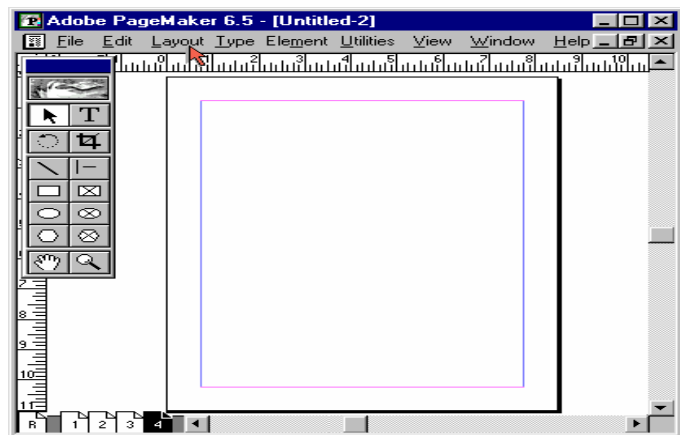


You will notice that **new pages** are added to the page icon bar.

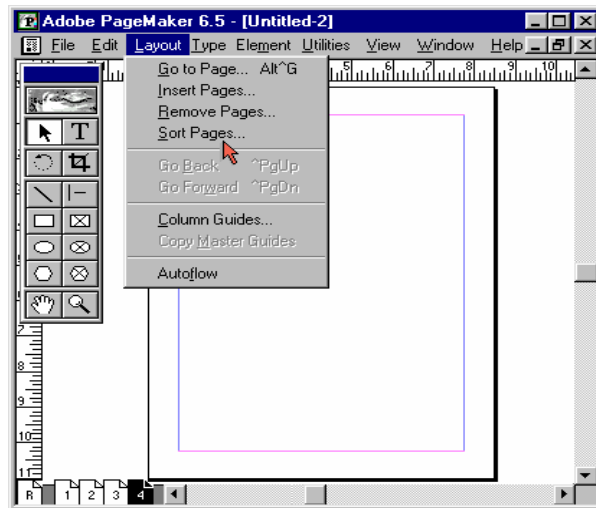


SORTING PAGES

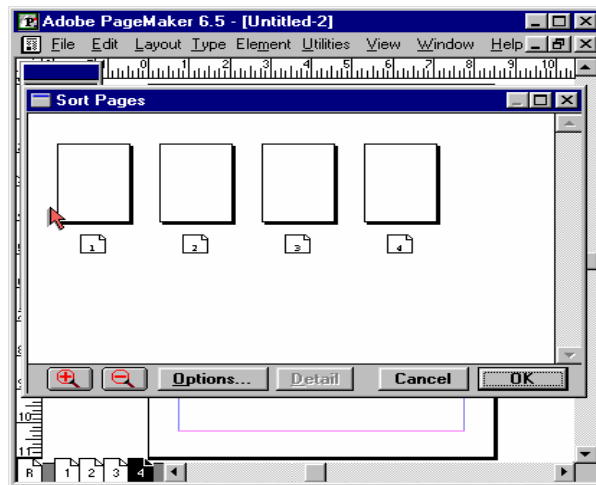
To change the page order Click **Layout**.



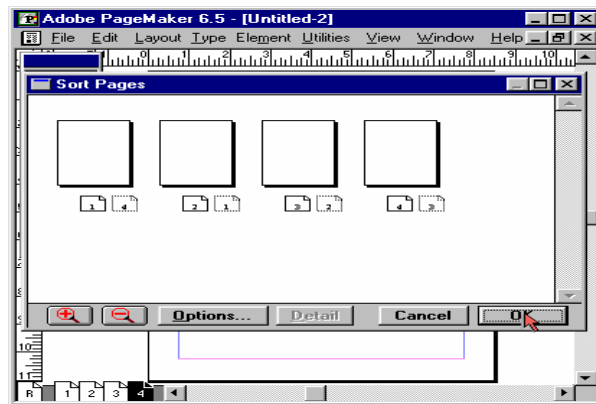
Select **Sort Pages**.



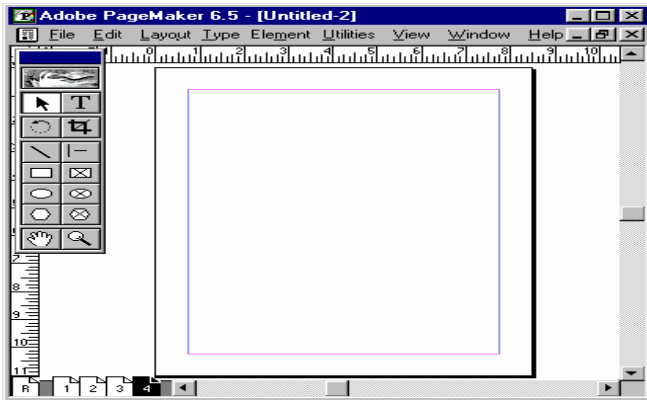
A dialog box with the page icons appears. Click on the **fourth page**, and place it before the **first page**.



Click **OK** to close the dialog box.

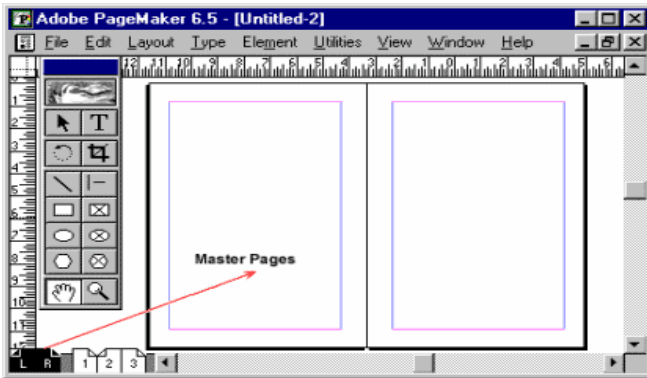


The Page is rearranged and the page numbers are changed accordingly.



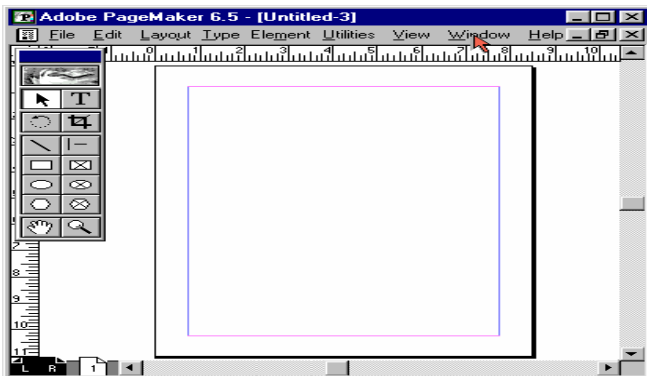
MASTER PAGES

Master Pages are a sort of a template for all of the pages in a publication. The Master pages can contain text, Graphics and guides. These are reflected in all the pages of the publication. They generally contain logos and volume title, which are to be repeated in every page of the publication and also guides, which help to maintain uniformity throughout the publication.

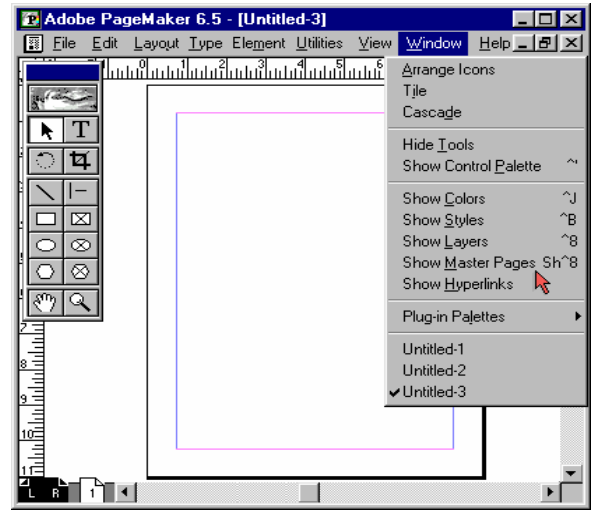


Creating a New Master

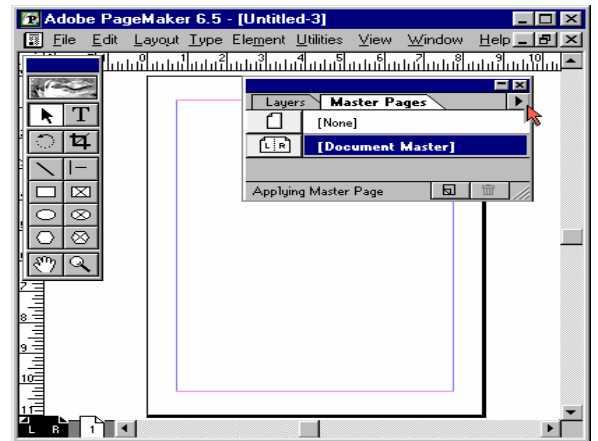
Click **Window**.



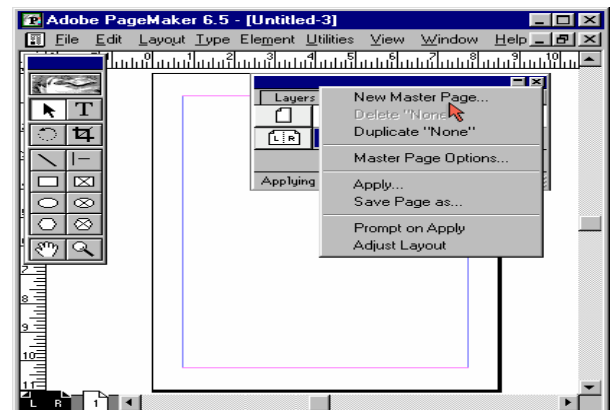
Select the Show **Master Pages Palette** from the **window** menu.



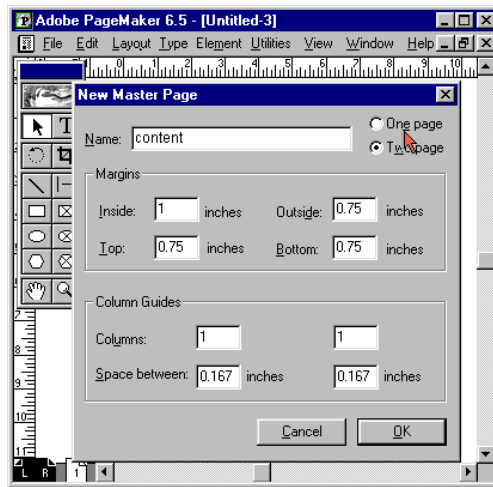
In the **Master Pages Palette** Click on the Top right arrow to display the **Palette Menu**.



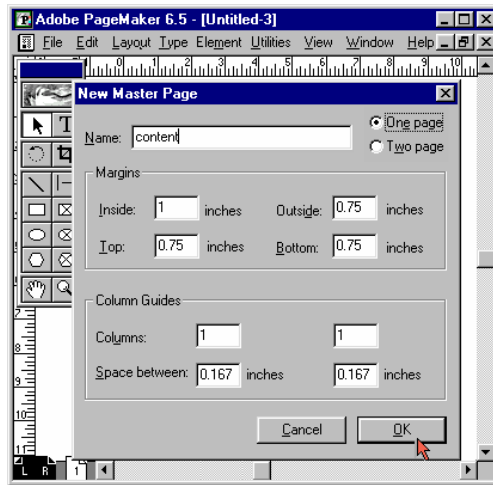
Now select **New Master**.



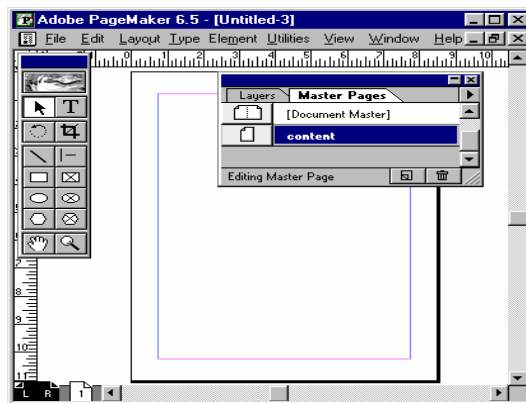
In the **New Master Page** dialog box enter the name as "**content**". Select the option "**One page**".



Click **OK**.

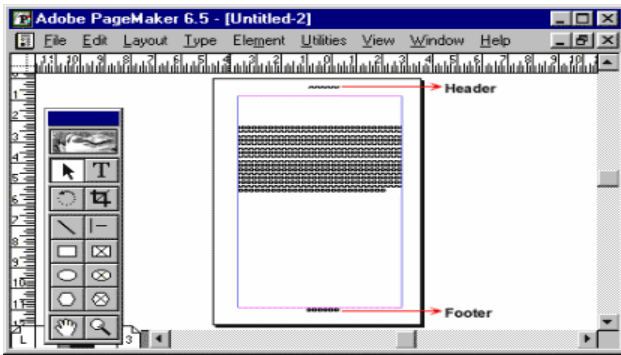


The **New Master Page** is added to the document.



HEADERS AND FOOTERS

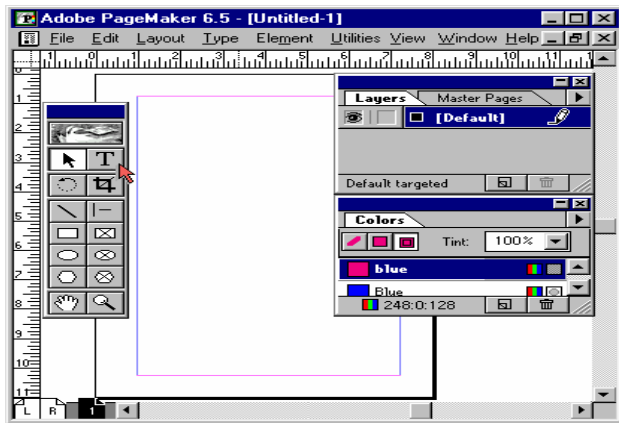
Headers are text or graphics, which are located above the top margin and below the bottom margin in case of footer. They are used to display information about a page such as chapter title or page numbers, current date and time of publication or revision date.



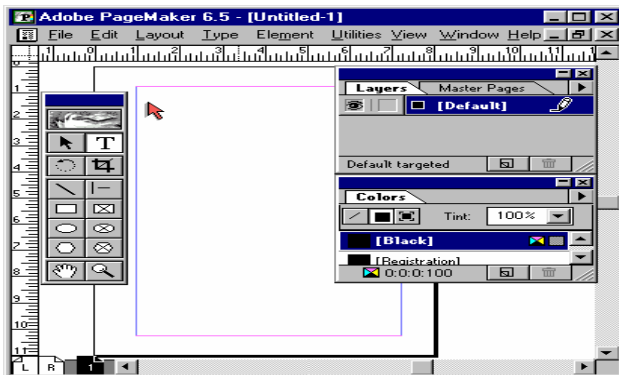
TEXT BASICS

Entering Text

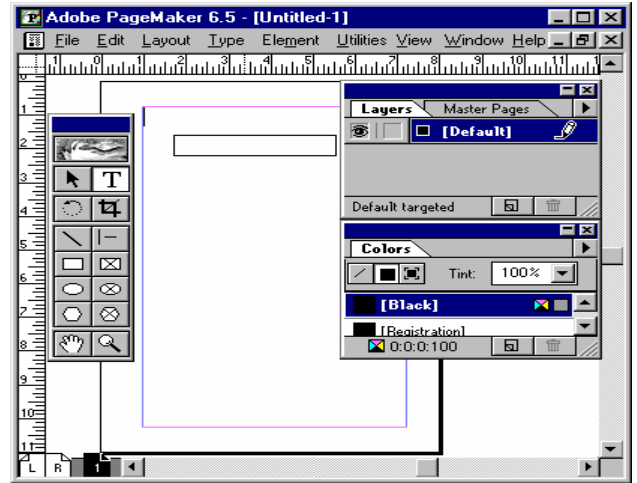
In PageMaker, text is typed in text blocks or frames. Text blocks are defined by the amount of text and the margins of the page. To open a text block First click the **Text tool**.



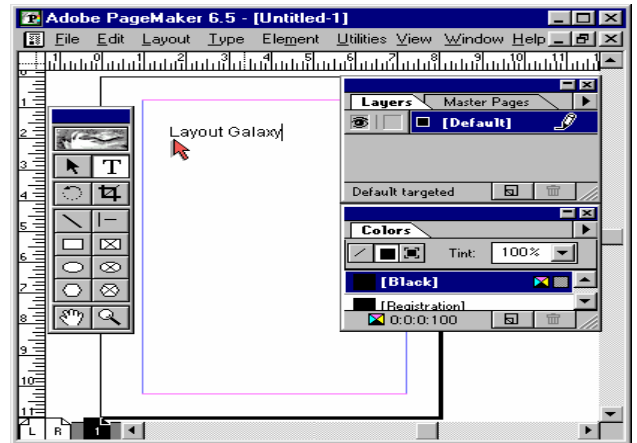
Click anywhere on the page within the **margin guides**.



Press the mouse button and drag the insertion point to the right. Release the mouse when you have opened the box to the correct size.

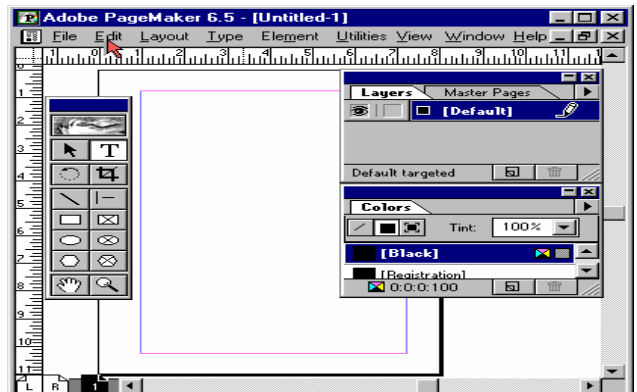


Type "Layout Galaxy".

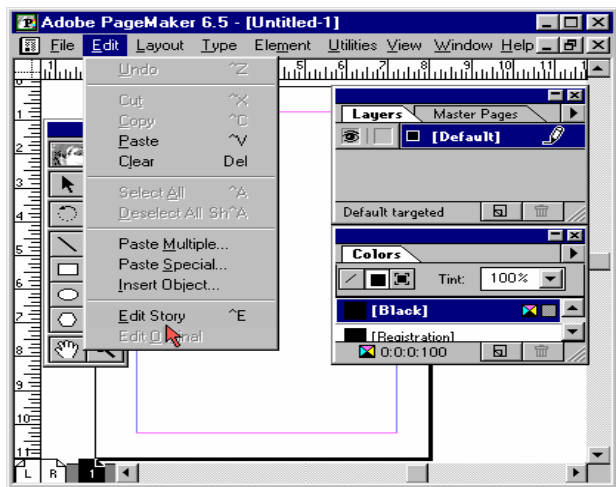


Placing Text

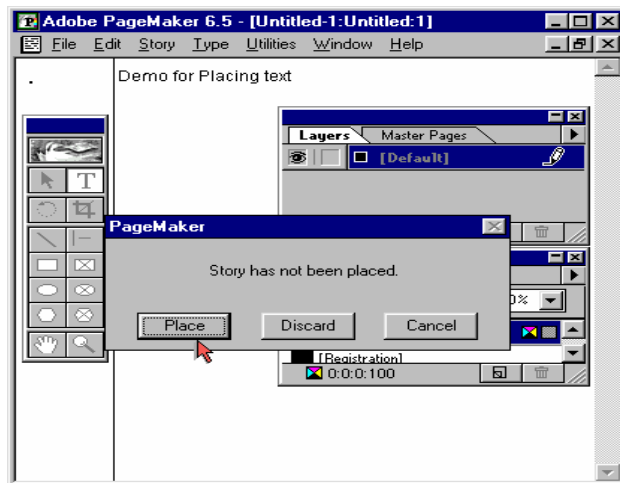
Click on **Edit Menu**.



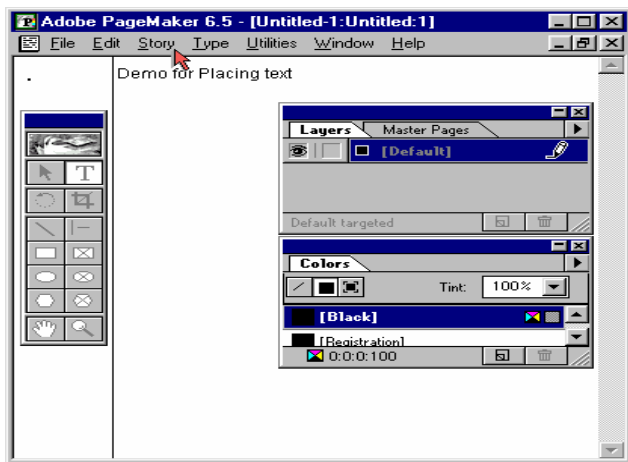
Select Edit Story.



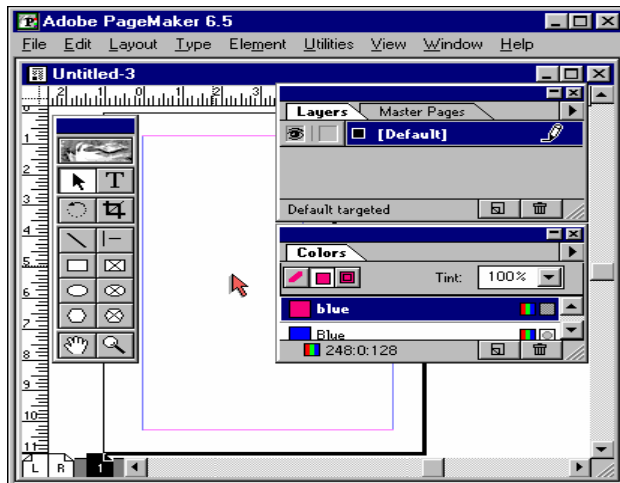
PageMaker displays an alert message that says, "The story has not been placed." Click the place button to place the story.



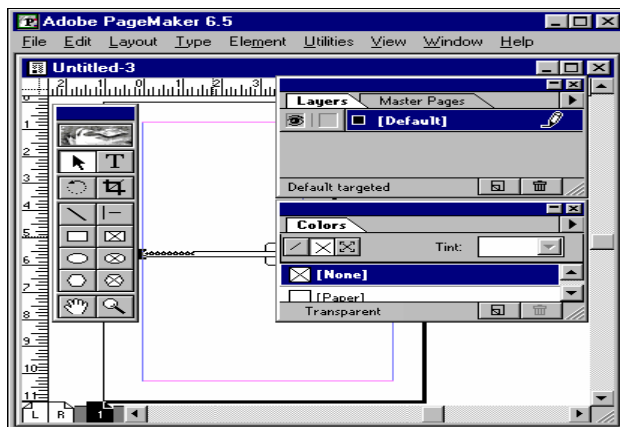
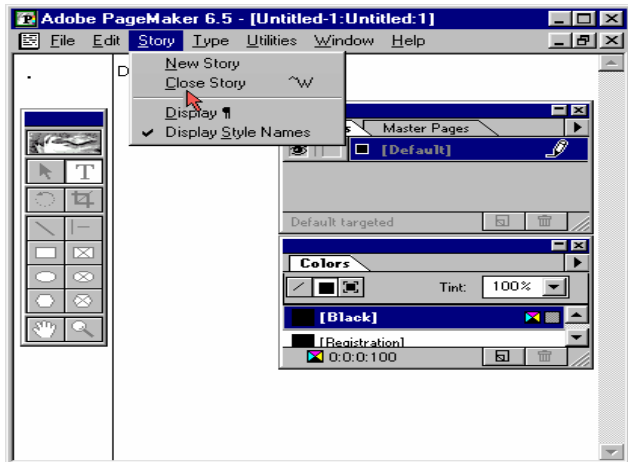
Type "Demo for Placing Text". Click on Story.



PageMaker displays a loaded text icon. Click the icon to flow text into the frame or column you click on.



Select Close Story.



Text Objects, Stories and Editors

Understanding text objects and stories	Text in PageMaker is part of a story. A story can be a single letter or several pages of text and can be contained in a single text object or threaded through many different objects.
Layout Editors and Story Editors	Text blocks that are threaded together in the Layout Editor comprise the same story in the Story Editor. A text block may be split among several pages in the Layout Editor, but it appears as a continuous story in the Story Editor.

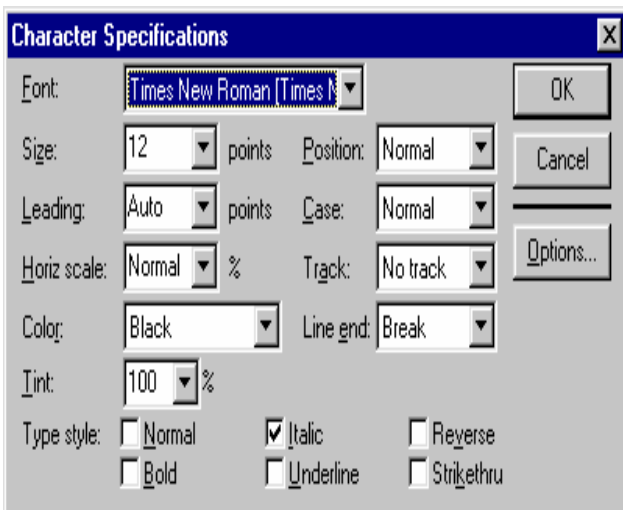
Automatic pair kerning	Automatic pair kerning adjusts the space between certain character pairs, based on the kerning information that's built into the font.
Manual kerning	Manual kerning lets you kern any range of text, from one character pair to a whole story, using cursor keys or by using the Control palette.
Expert kerning	Expert kerning calculates a manual kerning value for every character pair in a selected range of text.

Formatting Text

Changing Font Sizes	In PageMaker, by default the type size is 12 points but you can change the size as often as you like using the Control Palette. The Control Palette can be activated or deactivated from the Window menu.
Changing Typeface Styles	There are ten different styles for any typeface. They are Normal, Bold, Italic, Underline, Reverse, Strikethrough, Small caps, All caps, Super script and Sub script.



Changing Character Specifications	The Character Specifications dialog box allows you to choose several type attributes in one step. This dialog box can be opened by double clicking the Text tool.
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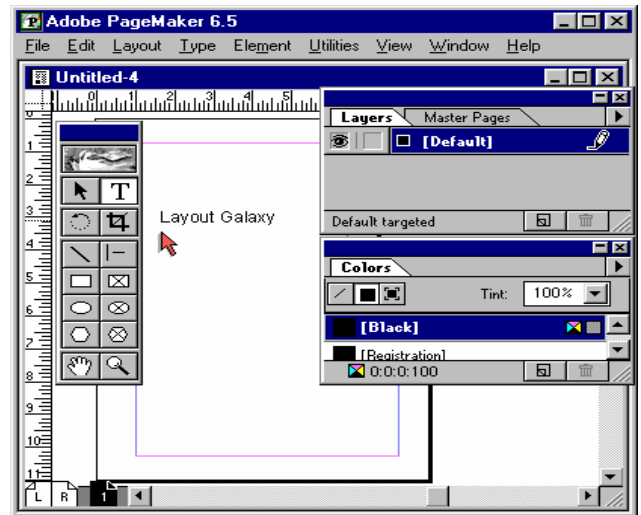


KERNING AND TRACKING

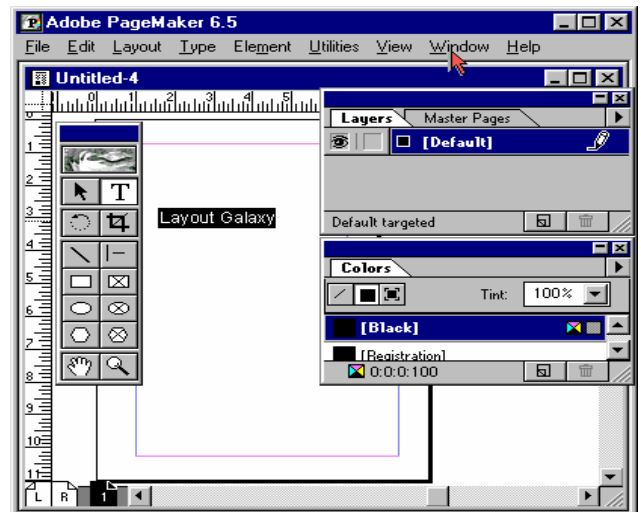
PageMaker provides three types of kerning.

Tracking

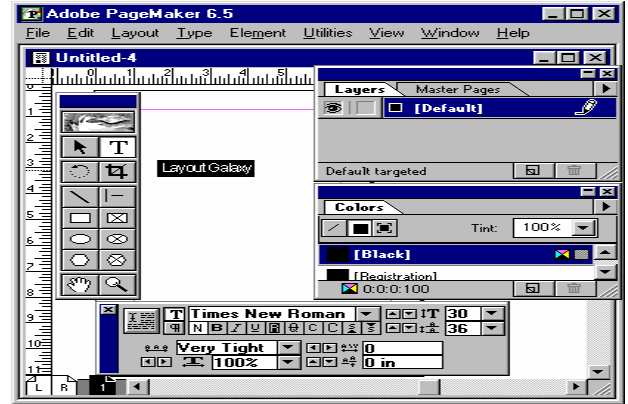
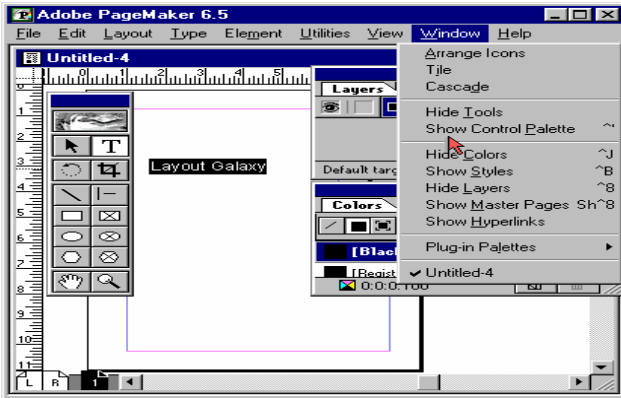
Tracking is similar to kerning in that it deals with the horizontal space between letters. PageMaker includes five built-in tracks from **Very Loose** to **Very Tight**. To set the required track, first select the text.



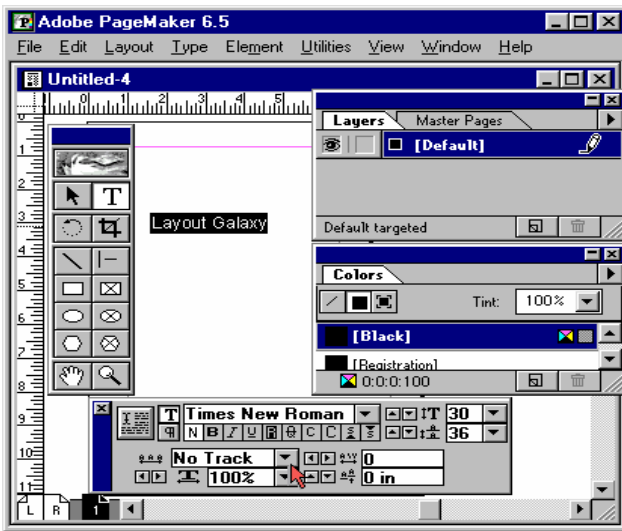
Click the **Window** menu.



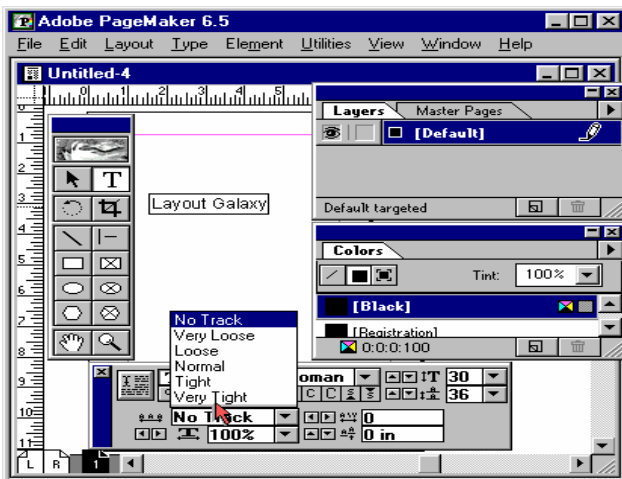
Select Show Control Palette.



Click on the Tracking pop-up menu.

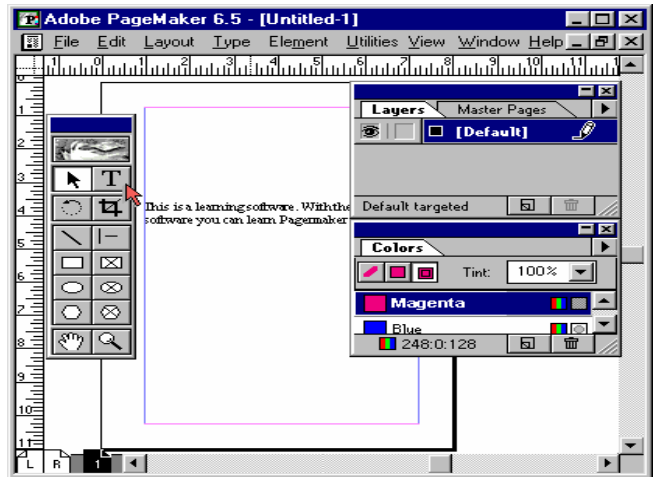


Select Very Tight from the menu.

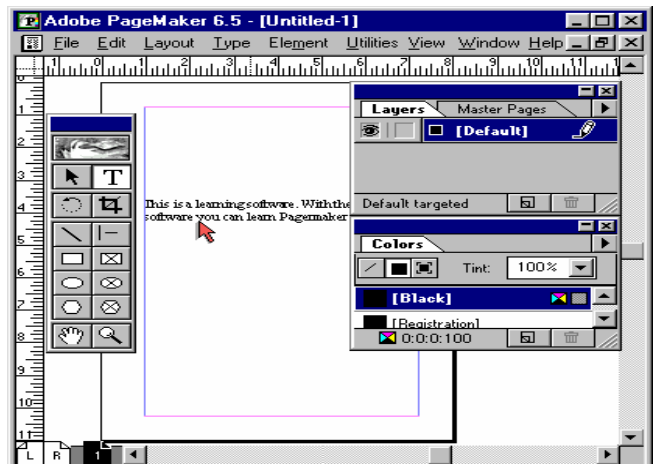


PARAGRAPH SETTING

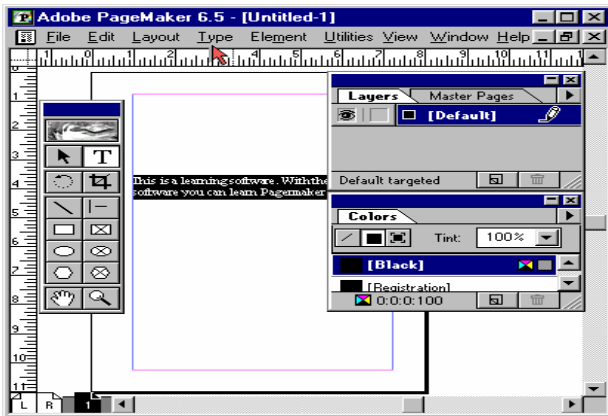
Paragraph formatting includes setting indent values, paragraph spacing, text alignment, dictionary, etc. In this exercise we shall see how to draw a line below a paragraph. Click on the Text tool.



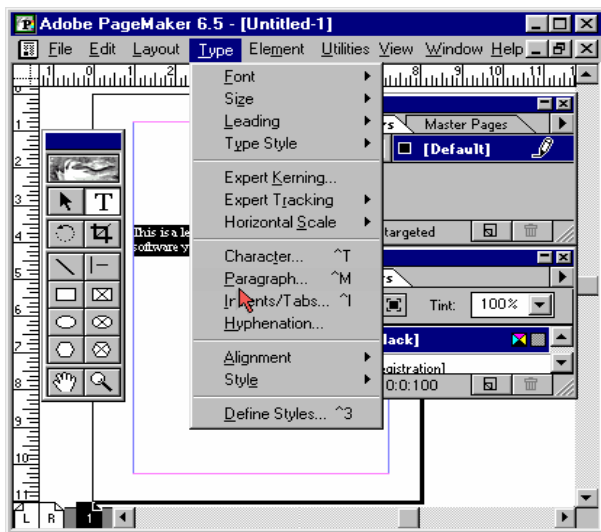
Select the paragraph.



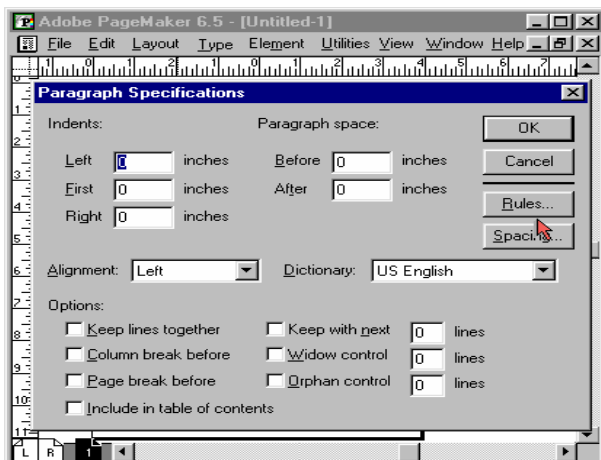
Click on the **Type** menu.



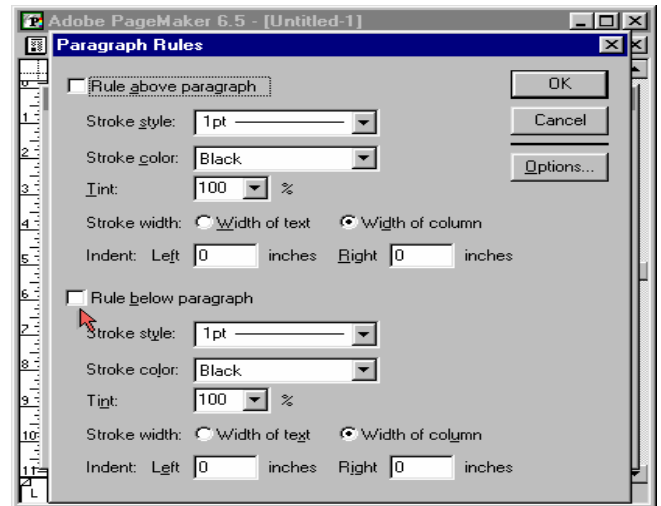
Select **Paragraph**.



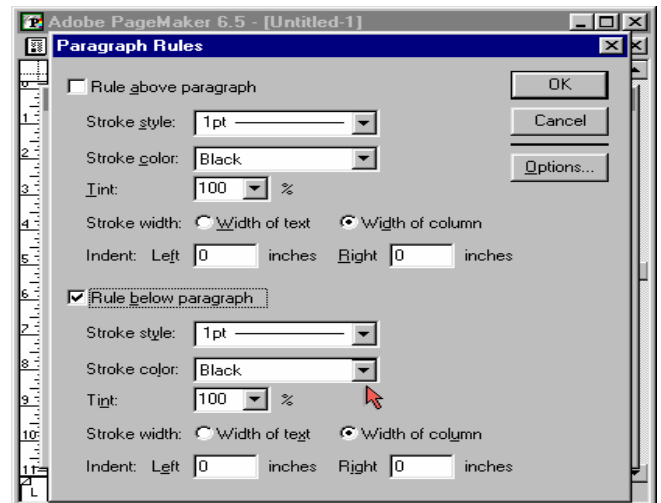
Click on the **Rules** button.



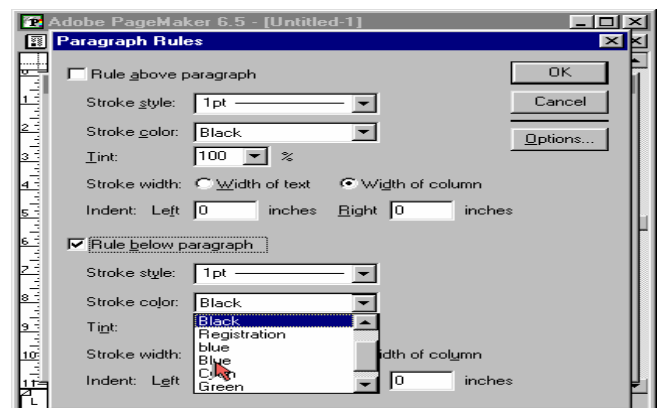
Select **Rules** below Paragraph check box.



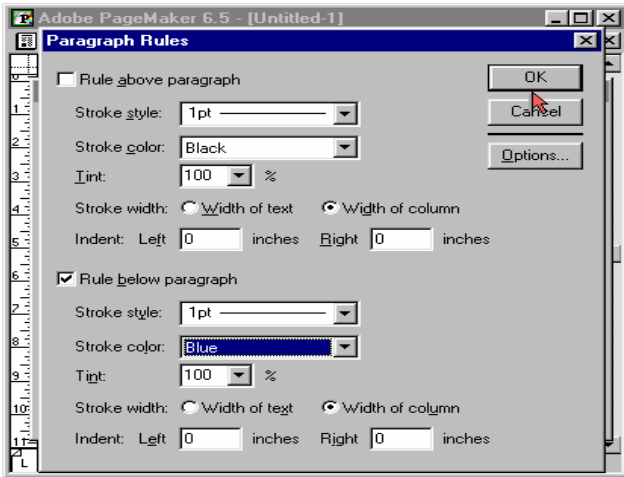
Click on the **Stroke Color** drop down menu.



Select **Blue** from the menu.



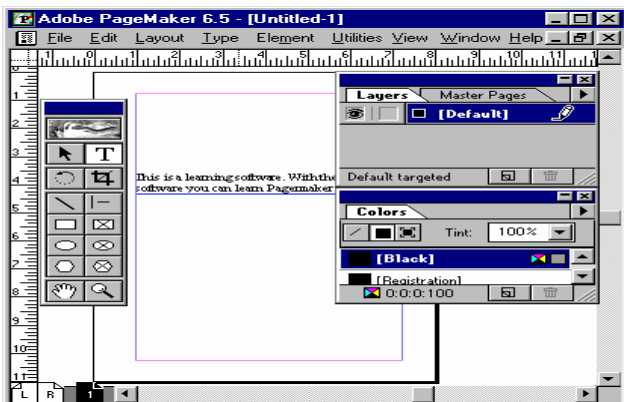
Click **OK** to close the **Paragraph Rules** dialog box.



Click **OK** to close the **Paragraph Specifications** dialog box.



You can now see a line below the paragraph.



SETTING TABS

In this exercise we shall see how to set tabs. Select the **Text** tool.



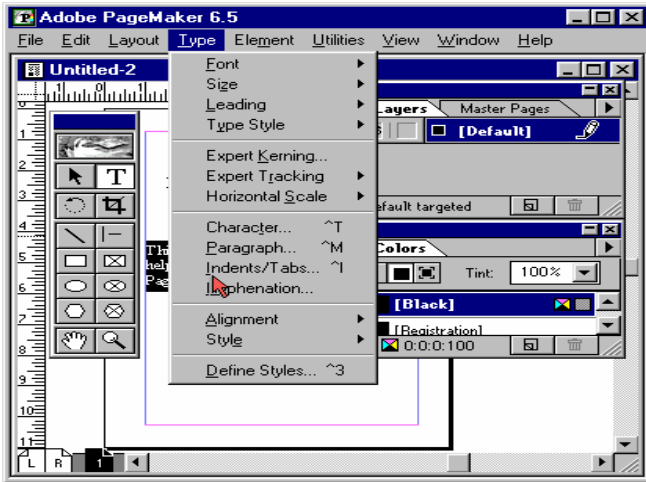
Select the text in which the **Tab** key is pressed once in-between each item.



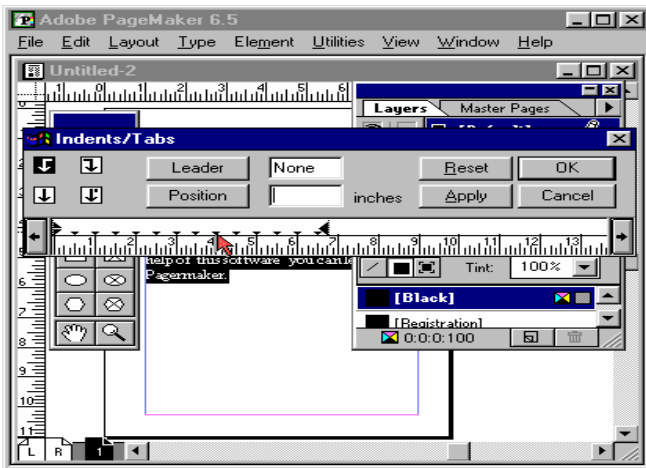
Click on the **Type** menu.



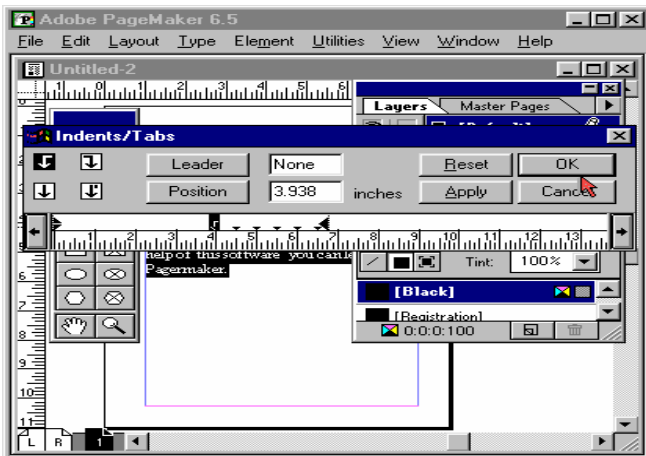
Select Indents/Tabs.



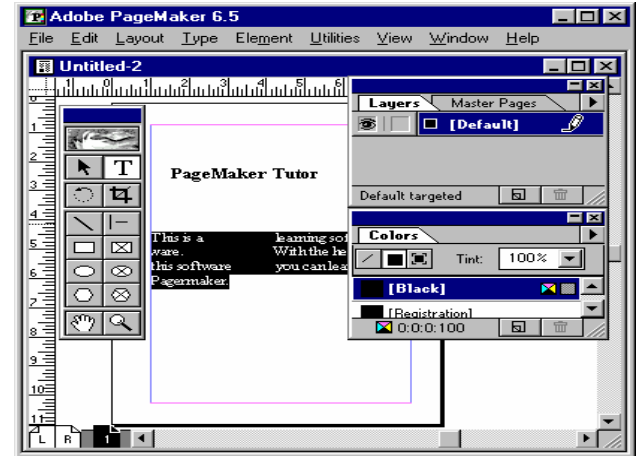
Click once above the ruler to create your own tab marker.



Click Ok.

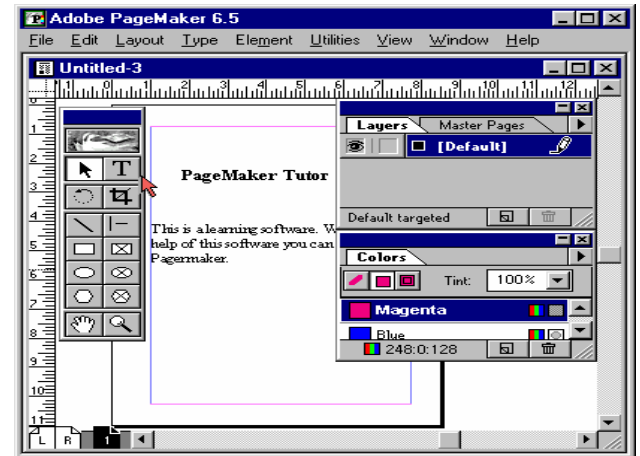


Now you can see the text being aligned according to the tab marker.



INDENTS SETTING

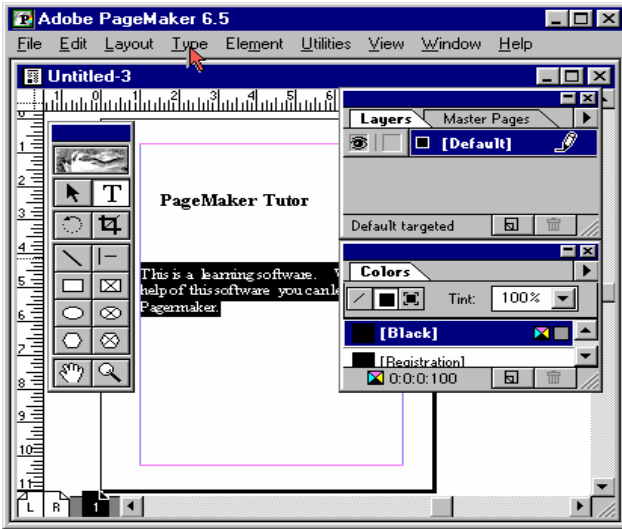
In this exercise, we shall see how to set Indents. Click the Text tool.



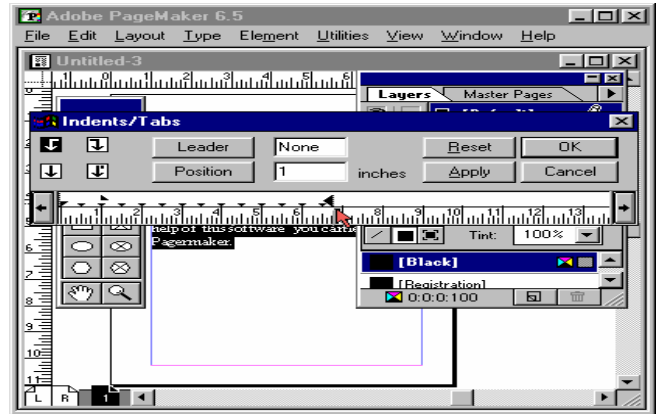
Select the paragraph.



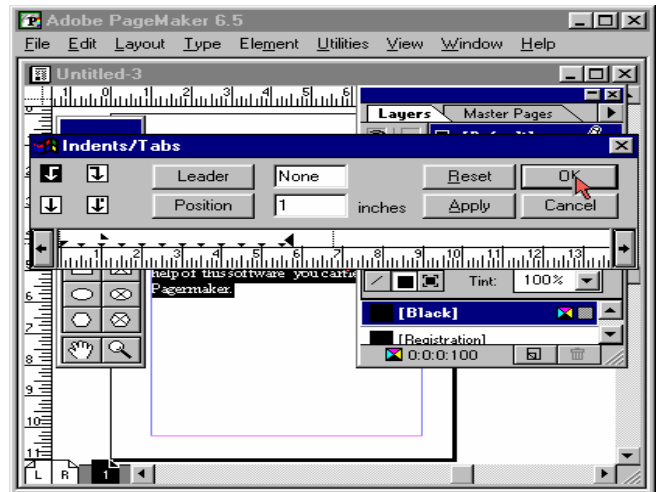
Click on the **Type** menu.



Drag the **right indent** by 1 inch.



Click **OK**.

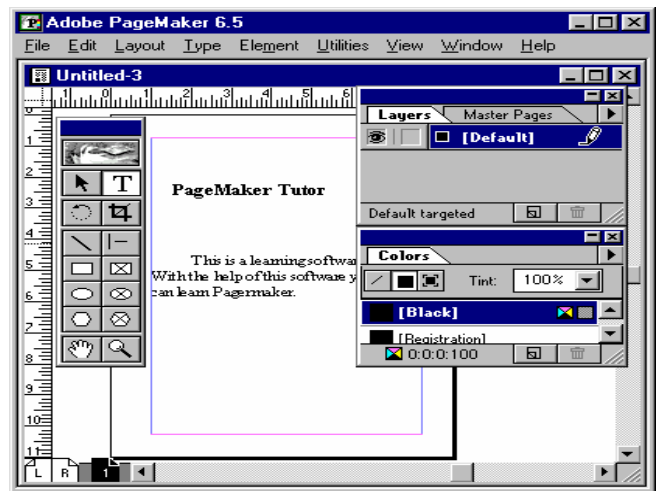
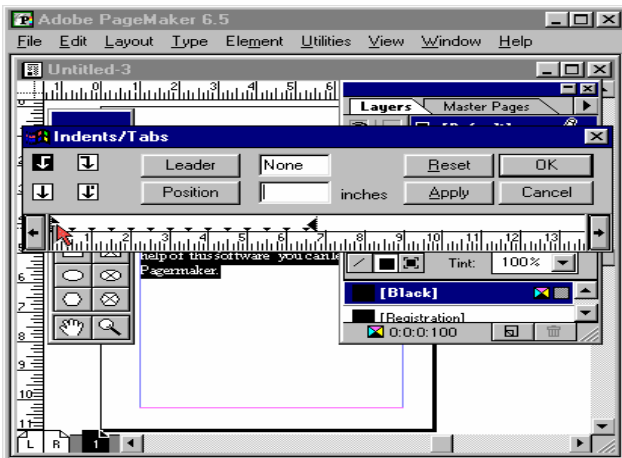


Select **Indents/Tabs**.



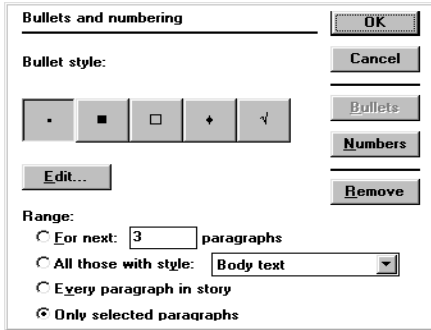
Thus the paragraph has been aligned according to the Indents set.

Drag the first half of the **left indent** to 1 inch.



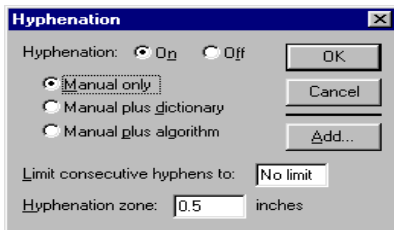
BULLETS AND NUMBERING

The Bullets and Numbering option automatically adds bullets or numbers to the paragraph in the text block. To edit bullets or to add numbers you can click the Edit or Numbers button respectively.

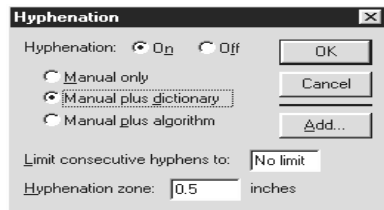


HYPHENATION SETTING

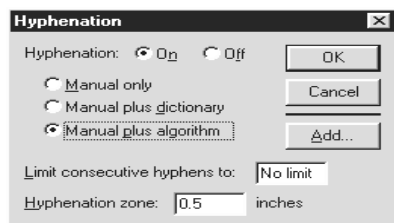
PageMaker hyphenates words to reduce the spacing between them in a justified text. Hyphenation is controlled with the hyphenation dialog box. The Manual only option hyphenates only the words that you have marked to hyphenate by inserting a discretionary hyphen in the word where it would normally break.



Manual plus dictionary option hyphenates the words to which you have added discretionary hyphens, as well as words hyphenated in the PageMaker dictionary.



In addition to using the dictionary, Manual plus algorithm option, uses a mathematical algorithm and your manually inserted hyphens to break words.



Hyphenation Setting

Let us see how to add a word to the user dictionary. Click on the **Type** menu.

Select **Hyphenation**.

Click the **Add** button in the **Hyphenation** dialog box.

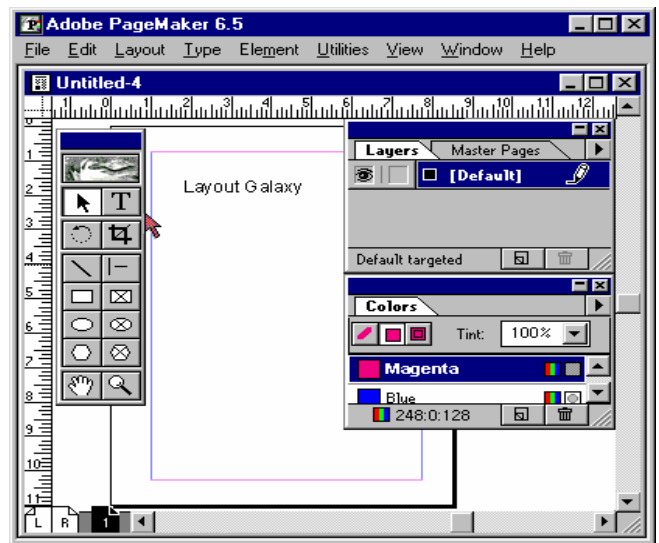
In the Add to **User Dictionary** dialog box type **Lay~out~Galaxy**. In this word, the most favorable break is marked by a **single tilde (~)** and the second most favorable break is marked by a **double tilde (~~)**. Click **OK** to close the Add to **User Dictionary** dialog box.

Click **OK** to close the **Hyphenation** dialog box.

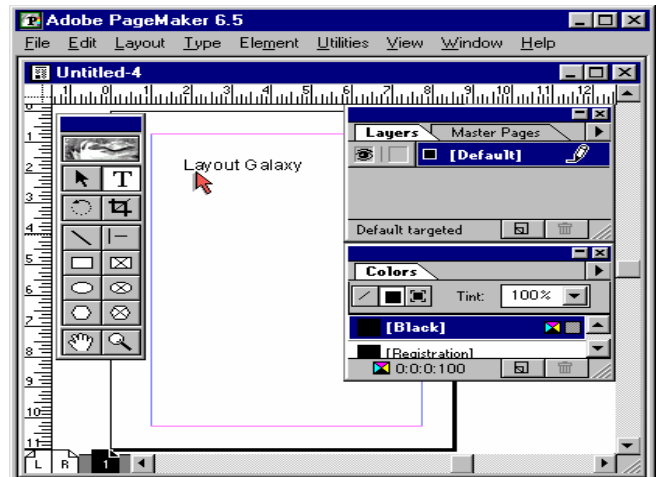
The word "**LayoutGalaxy**" has been added to the Dictionary.

Set Styles

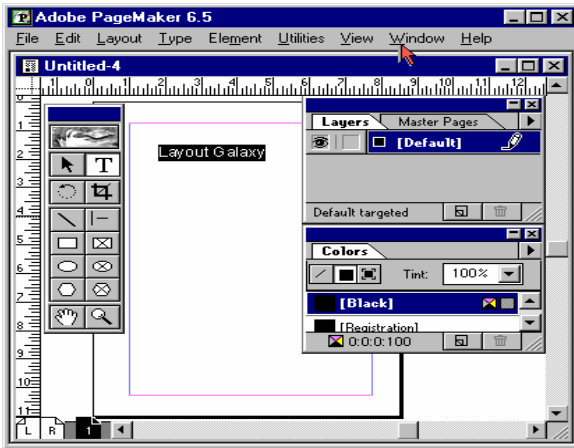
In this demo we shall see how set style. Select the **Text** tool.



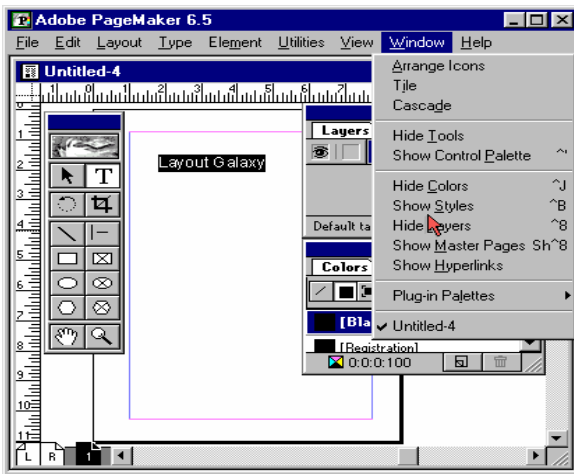
Click the insertion point anywhere in the text.



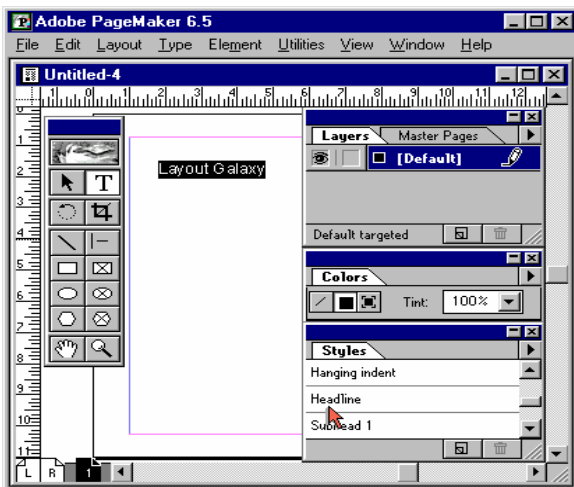
Click on the windows menu.



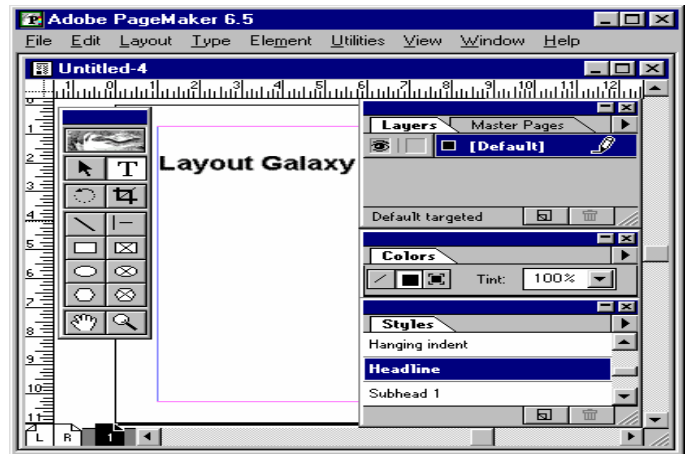
Select show styles.



In the style palette select Headline.



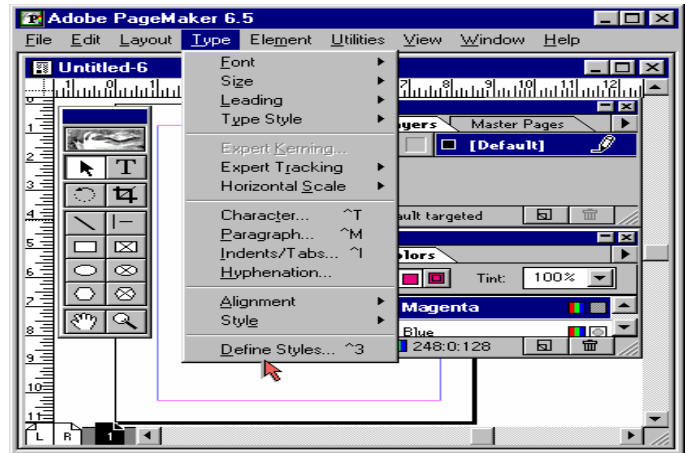
Thus the selected text has been changed to the Headline style.



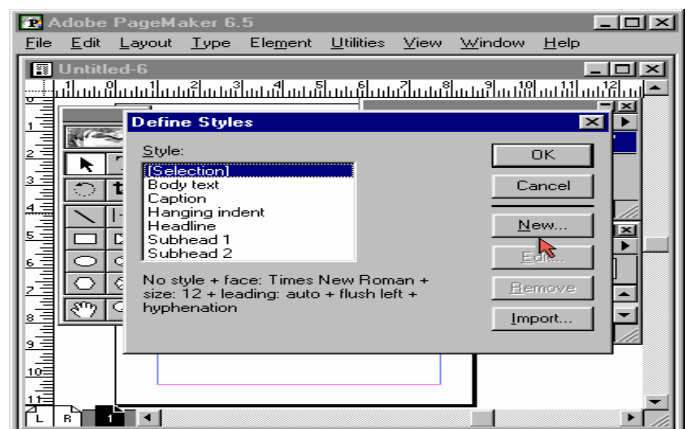
Creating Styles

To create a new style click on the Type menu.

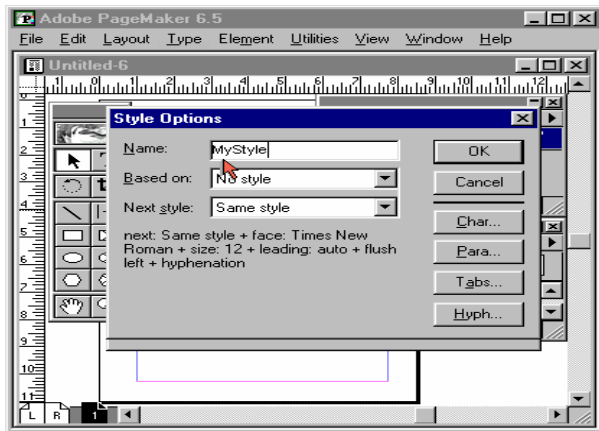
Select Define Styles.



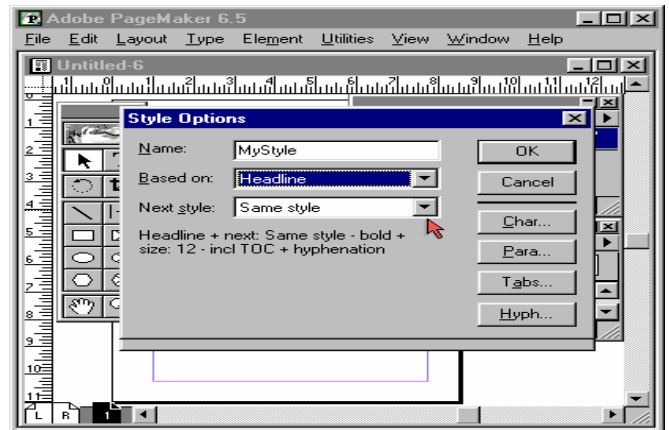
In the Define Styles dialog box, Click New button.



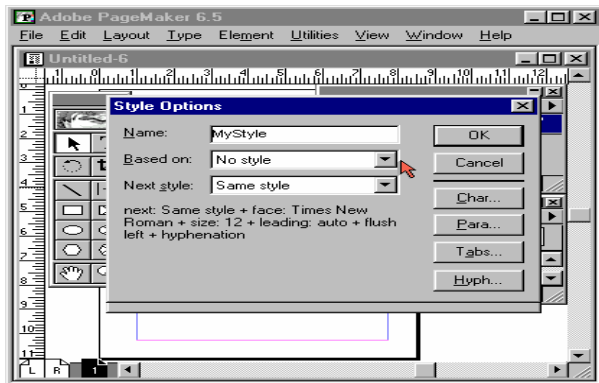
Style Options dialog box opens.
In the Name text box type "MyStyle".



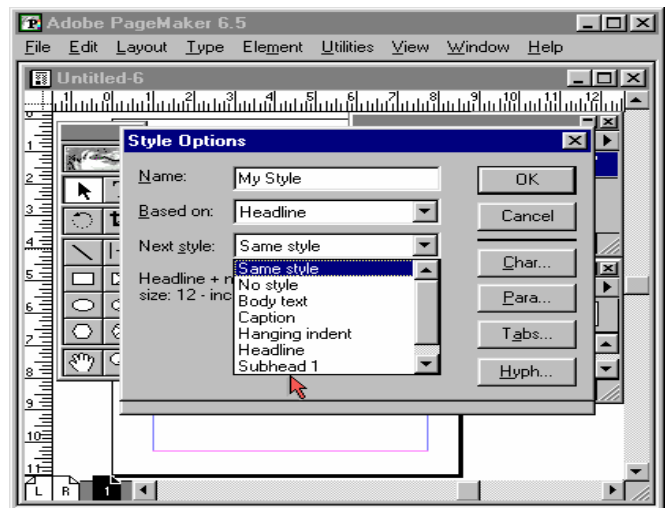
Click the **Next Style** drop down menu.



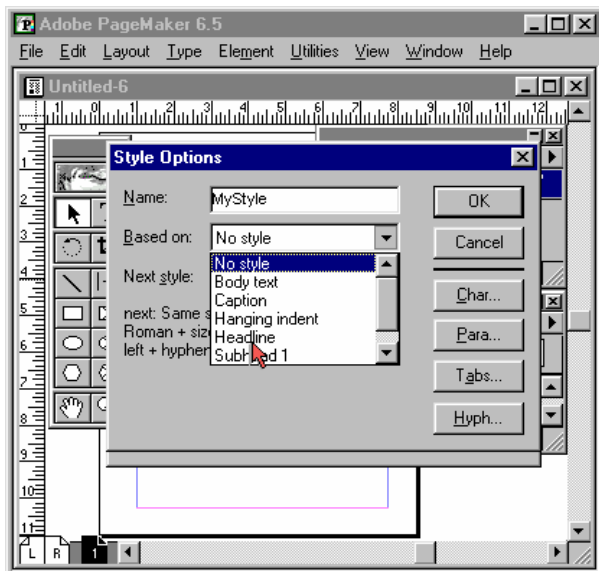
Click the **Based on** drop down menu.



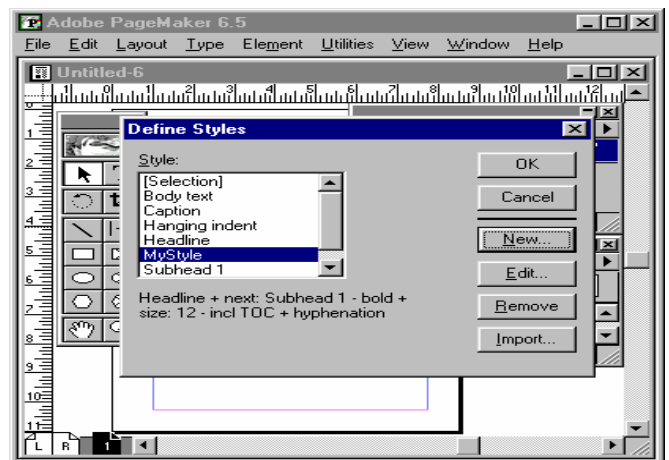
Select **Subhead 1**.



Select **Headline**.

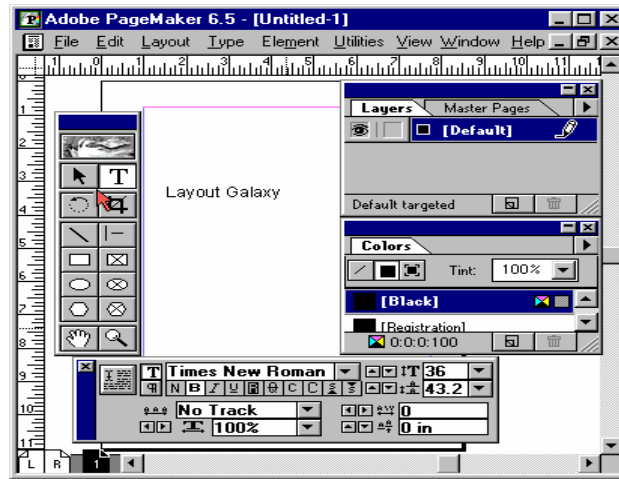


Click **OK** to close the **Style Options** dialog box. The new style has been created.

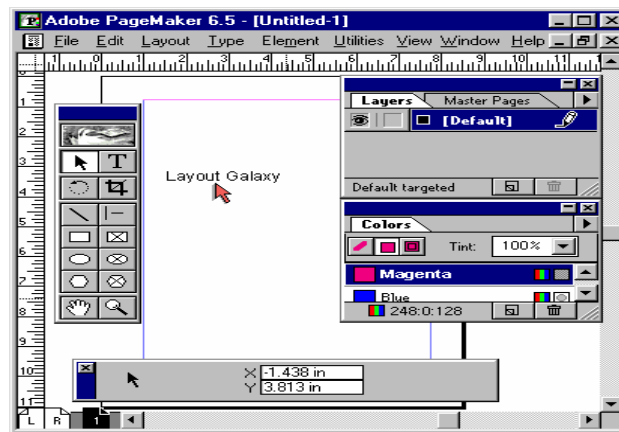


ROTATING TEXT

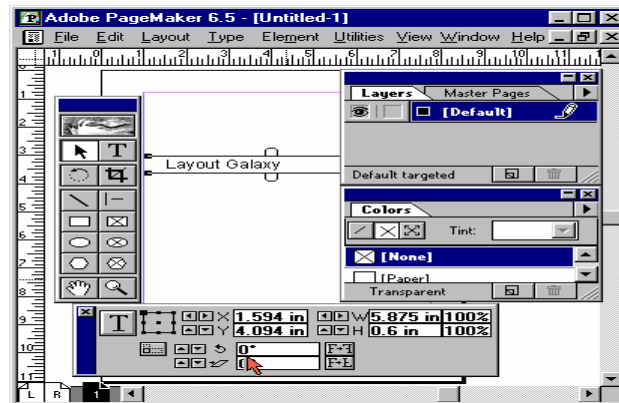
Let us see how to rotate a text frame. Click the **arrow tool**.



Select the text "Layout Galaxy".



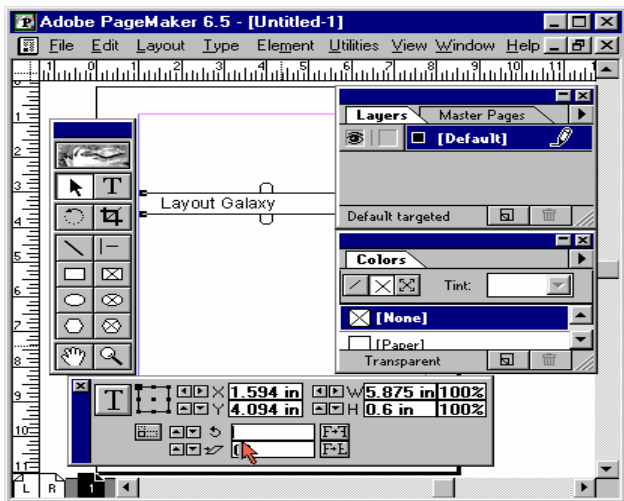
Delete the **current value** in the rotation angle text box of the **control palette**.



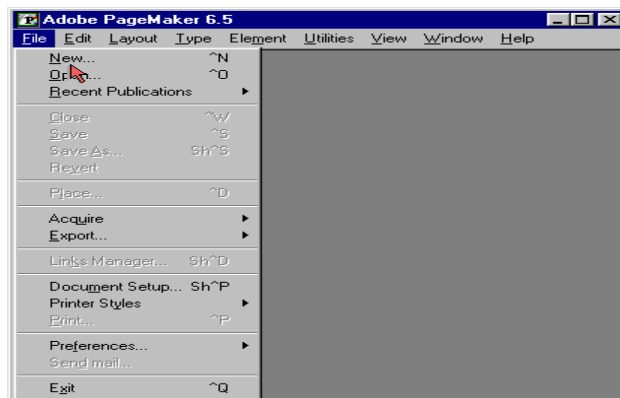
Type **45 degrees** and press Enter.

CREATING HYPERLINKS

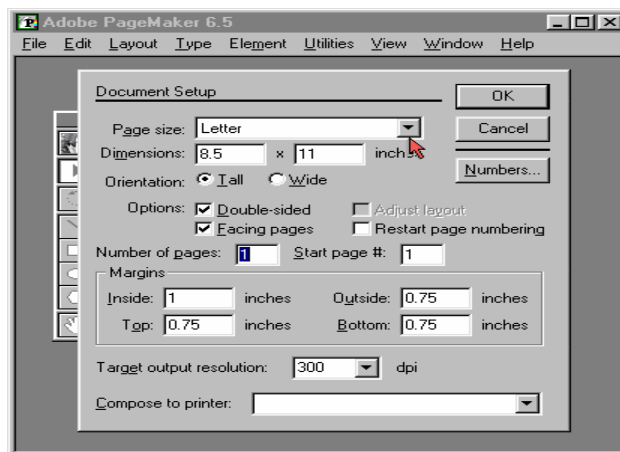
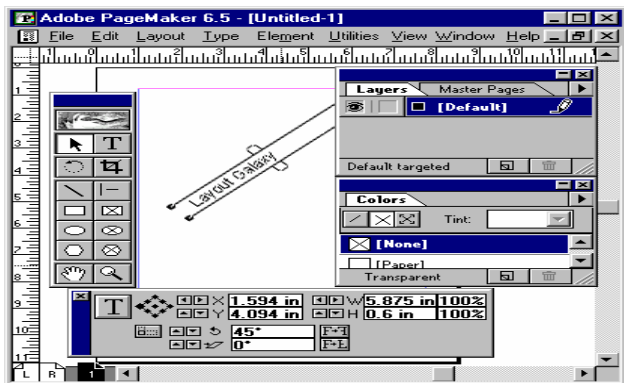
Let us create a **hyperlink**. Click on the **File** menu. Select **New**.



The frame has been rotated by **45 degrees**.



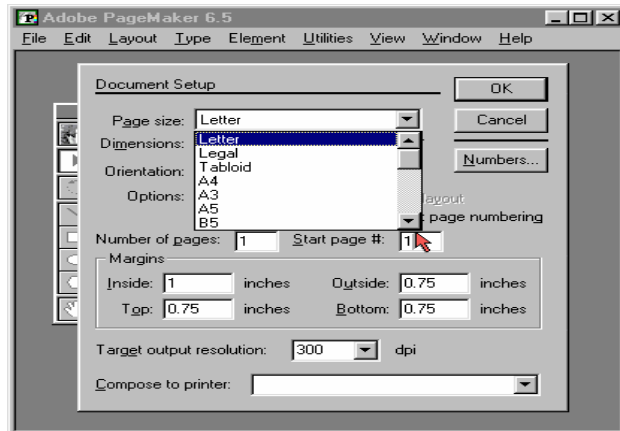
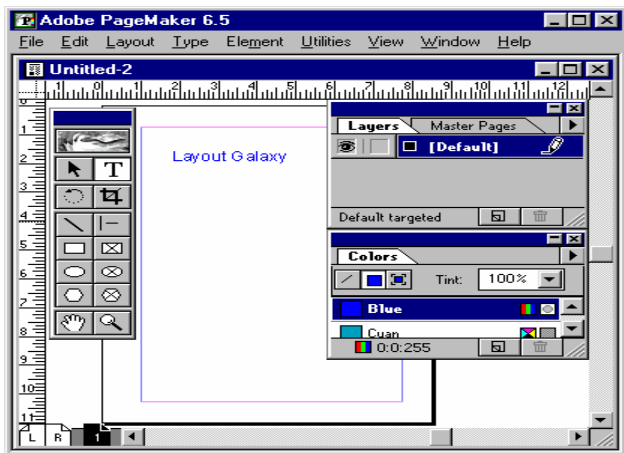
Document Setup dialog box opens. Click the **Page size** pop-up menu.



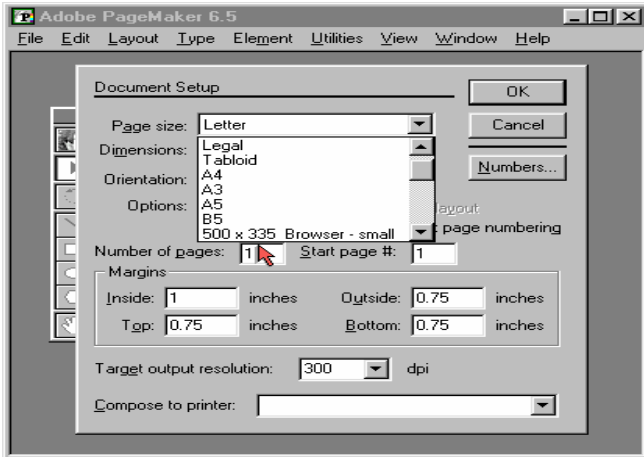
ADDING COLOR TO TEXT

Select the text. Click on the **Window** menu. Select **Show Colors**. Select blue from the **Colors Palette**. Click anywhere on the page. The text color has been changed to blue.

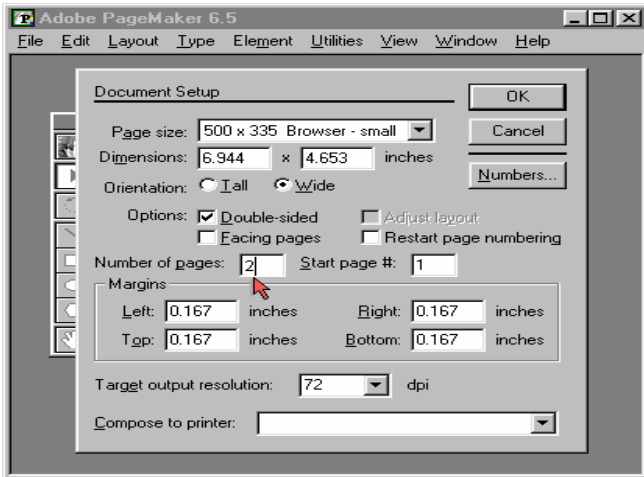
Advanced Topics



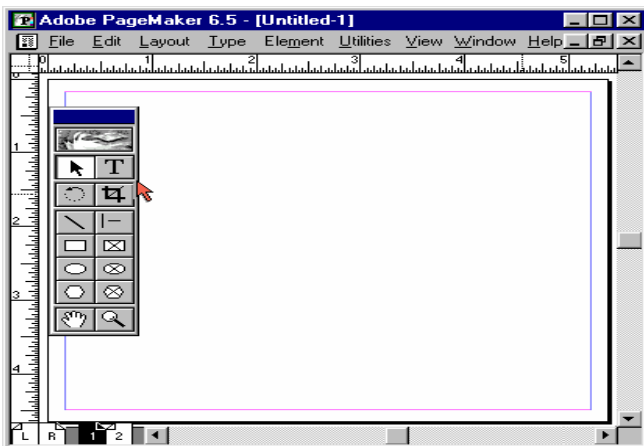
Select **500x335 Browser-small**.



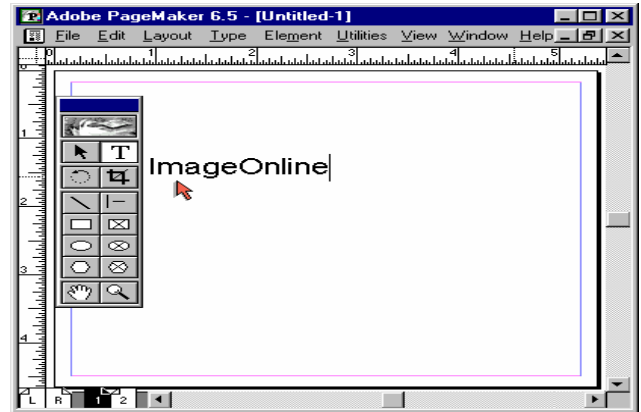
Type **2** in the **Number of pages** textbox.



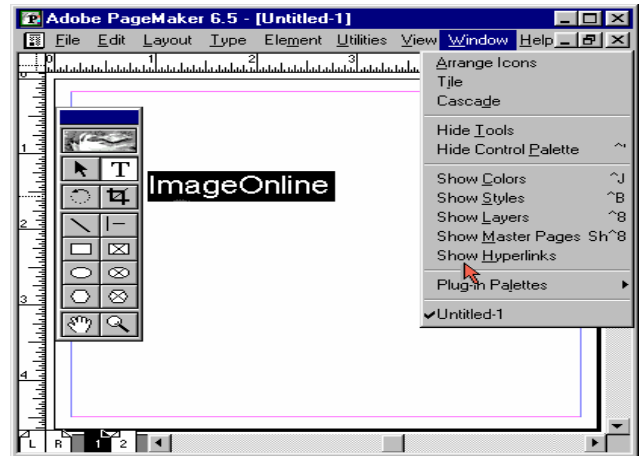
Click **OK** to close the dialog box.
Select the **text tool**. Click on the page.



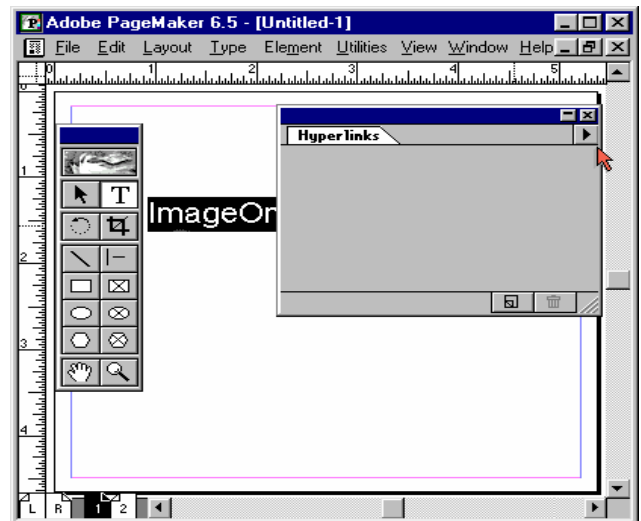
Type **"ImageOnline"**. Select the text.



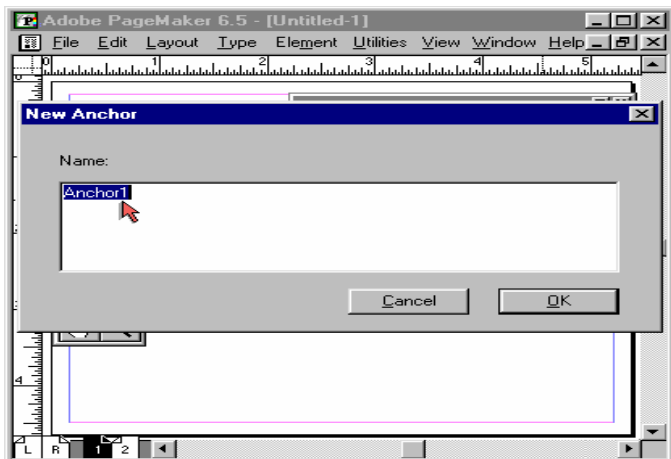
Click on the **Windows** menu. Select **Show Hyperlinks**.



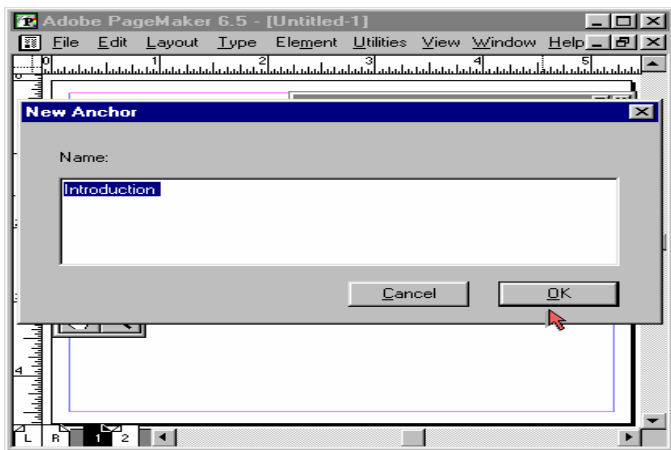
Click on the pop-up menu of the **Hyperlinks** palette.



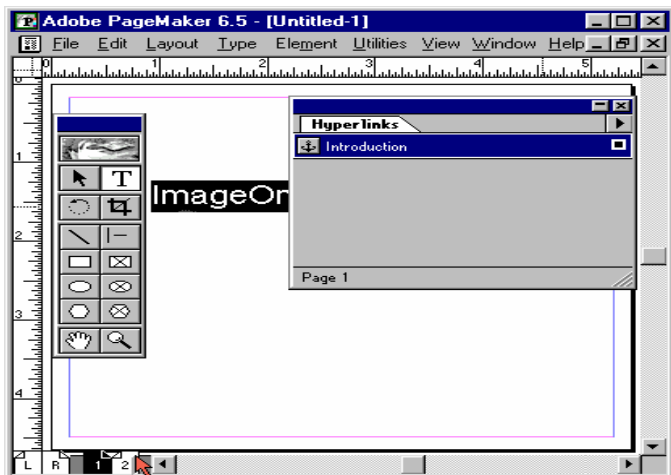
Select **New Anchor**. Click **Anchor1**.



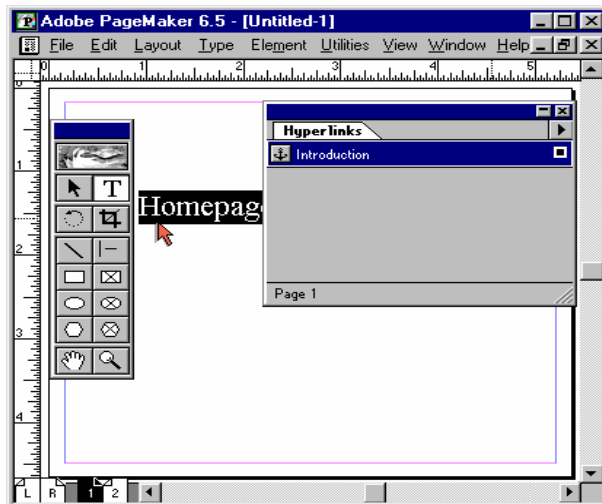
Type "Introduction" for the anchor name in the dialog box, which appears. Click **OK**.



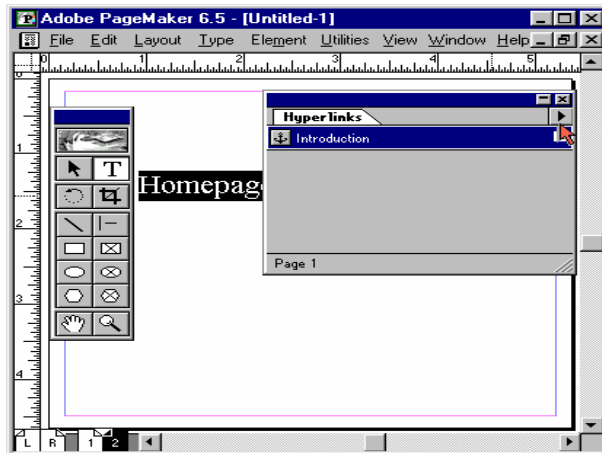
Click the second page's icon.



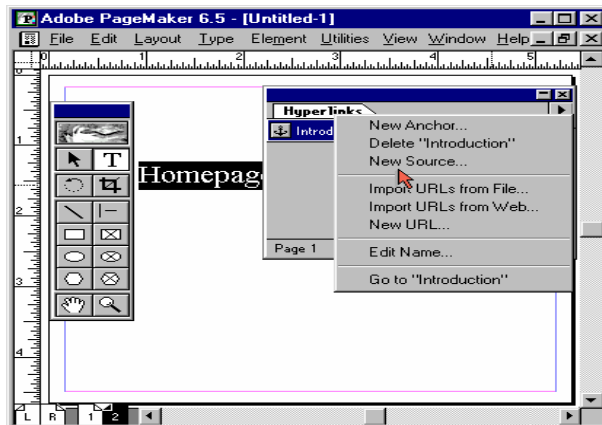
Type "**Homepage**". Select the text.



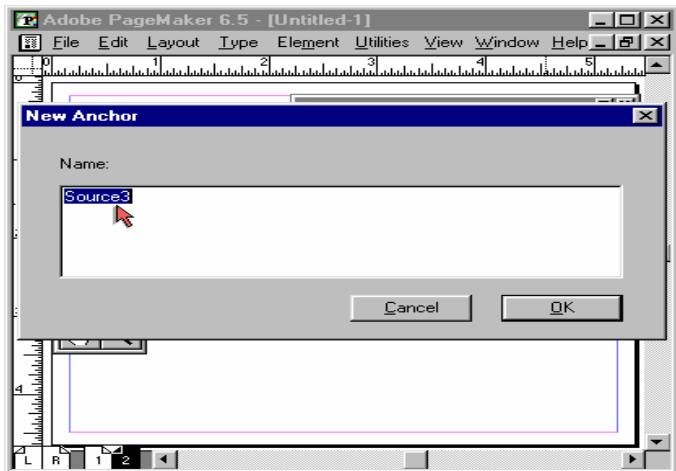
Select the target anchor i.e. the anchor named "**Introduction**". Click on the pop-up menu of the **Hyperlinks** palette.



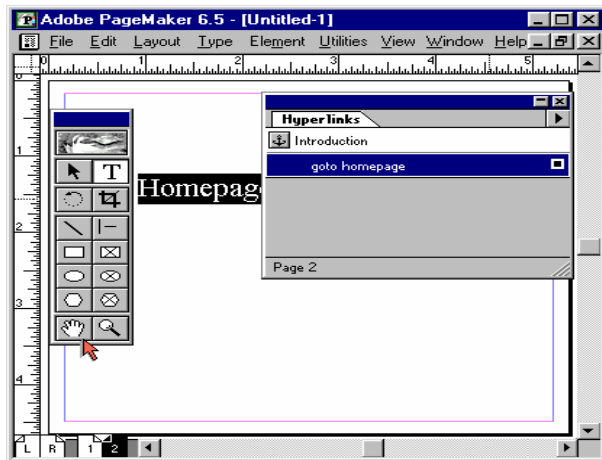
Select **New Source**.



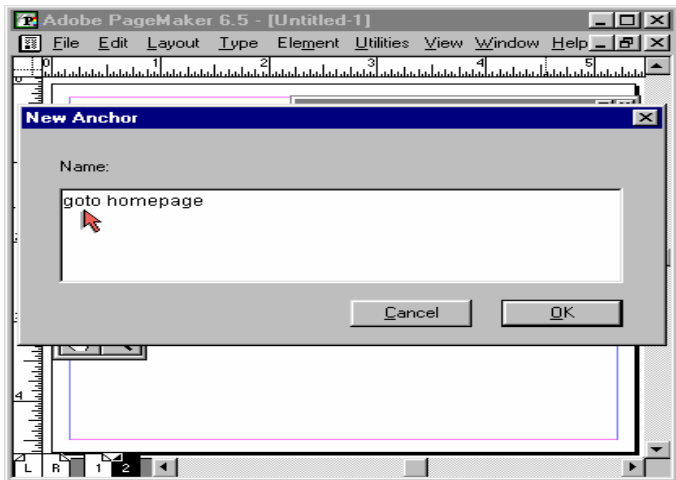
Click **Source3**.



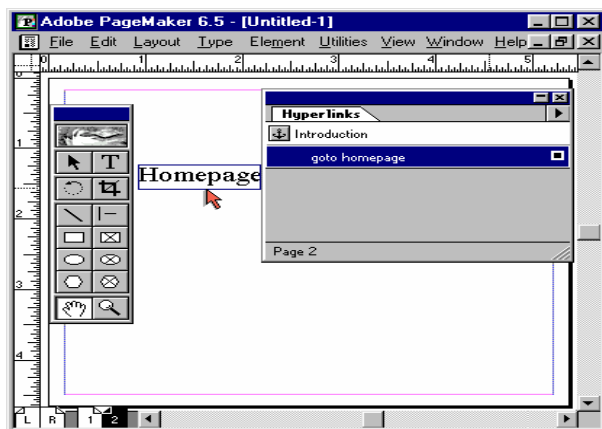
Select the **hand tool**.



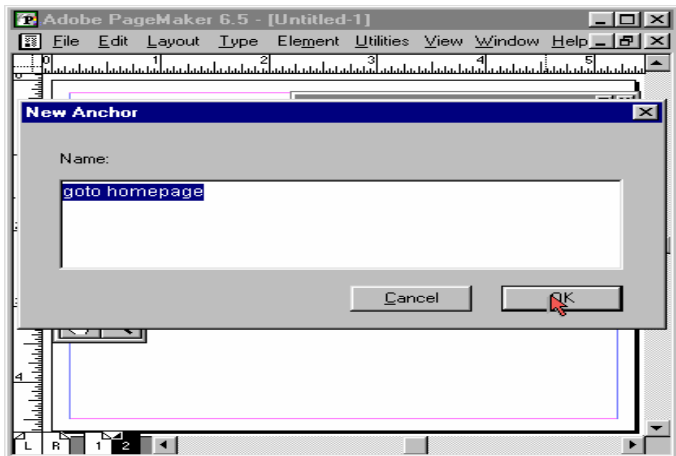
Type **"goto homepage"** in the dialog box.



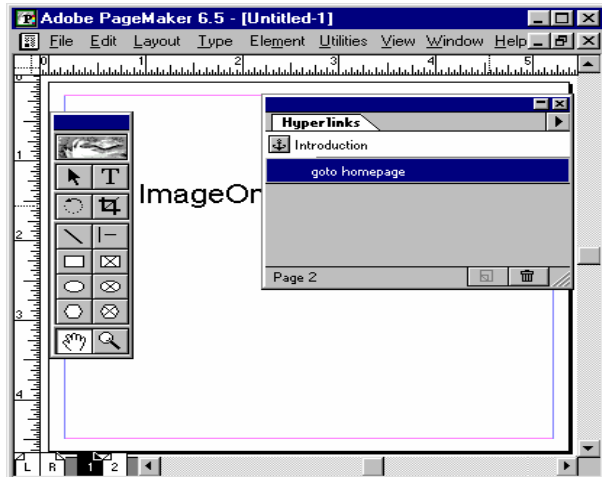
The new active link is outlined with a blue box. Click on the **link**.



Click **OK**.

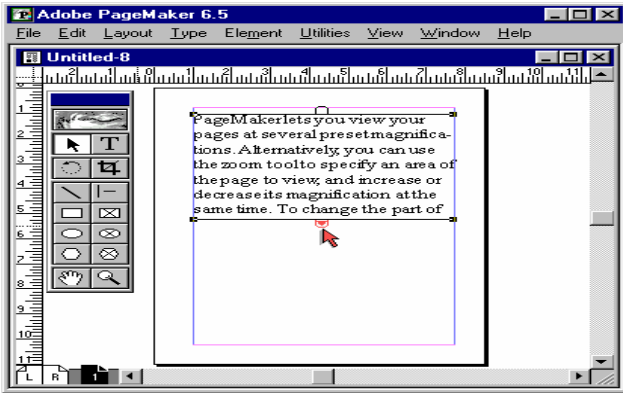


You can see a link being created.

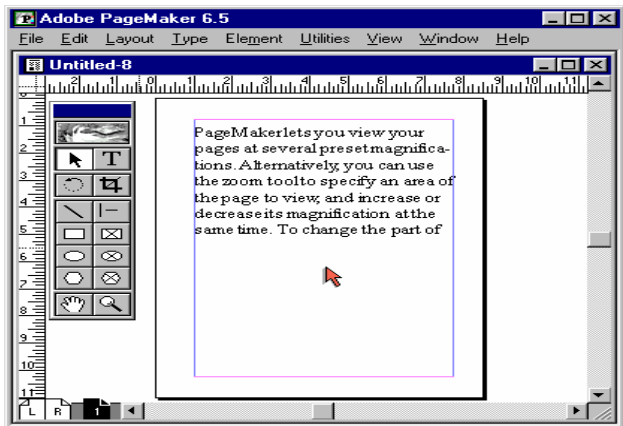


THREADING

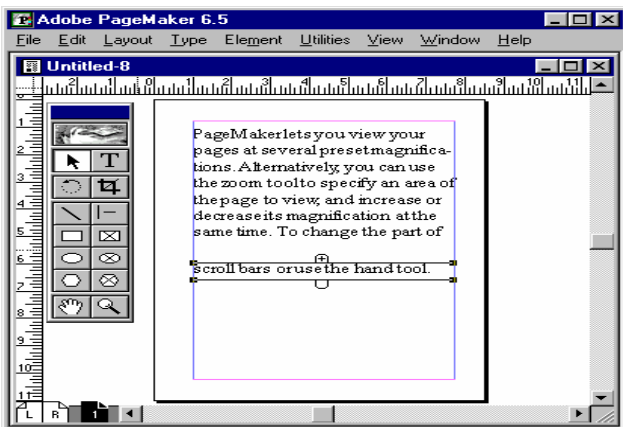
When a story in a text block extends to the next or subsequent pages, it is broken up into individual page text blocks. A small Red triangle in the lower window shade handle indicates that there is more text that can be currently displayed in the text box. Click on the Red triangle to display the second block of the text.



The pointer will turn into a loaded text icon. Click to place the second block.

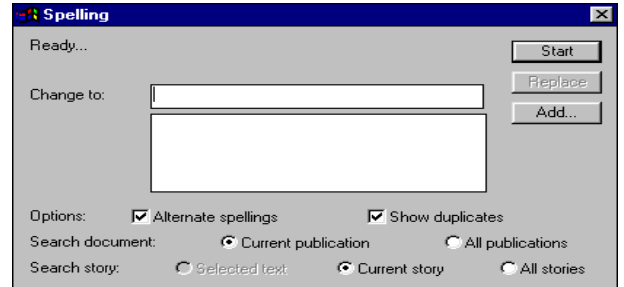


The small + symbol in the top window shade indicates that the story has been continued from a previous block text. An empty handle in the bottom window shade indicates the end of the Story.



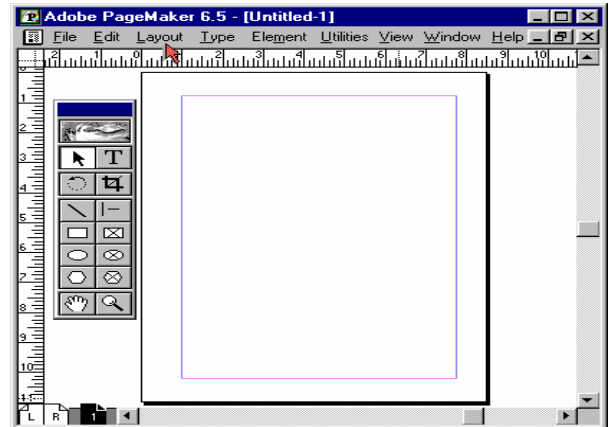
SPELL CHECK

PageMaker helps you in proof-reading your text by providing a 'Spelling Checker', which can be used to check the spelling for a selected range of text or for all the text in the active story or all stories in all open publications. PageMaker will warn you of any words it cannot locate in its dictionary. If any word is misspelled then you have the choice to re-enter it or choose from a selection of closest matches in the dictionary. The Spelling dialog box can be activated from the Utilities menu.

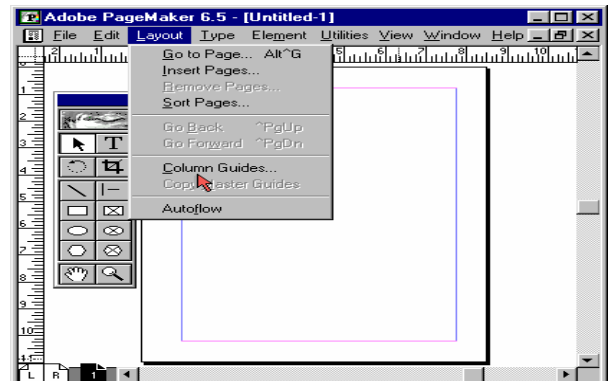


Working with Columns

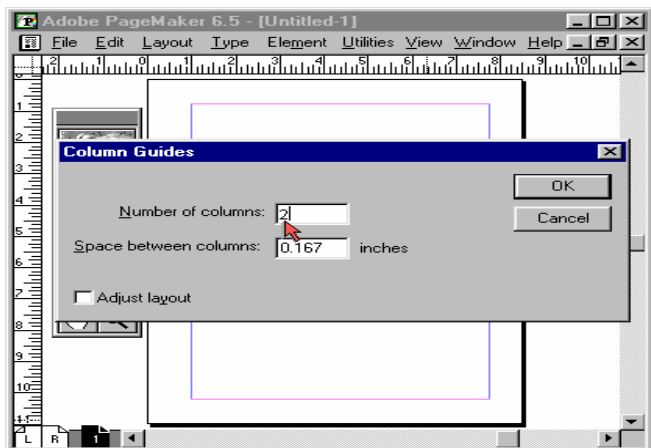
PageMaker allows you to divide any page into columns. In this exercise we shall split a page into Columns. Click on the Layout menu.



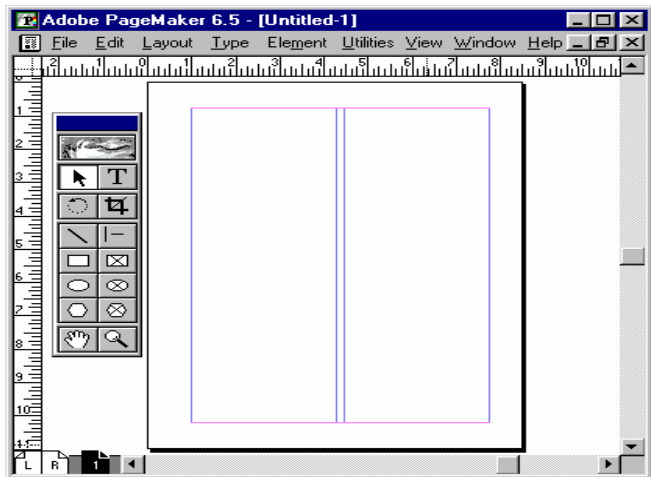
Select Column Guides.



A **Columns Guide** dialog box appears.
In the **Number of columns** dialog box, type 2.

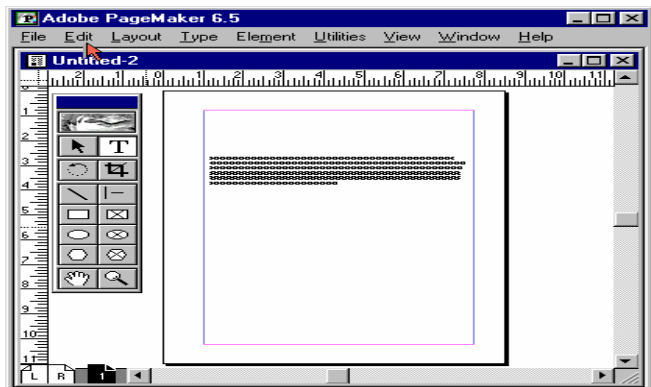


Click **OK** to close the dialog box.
We can now see the pages split into columns.

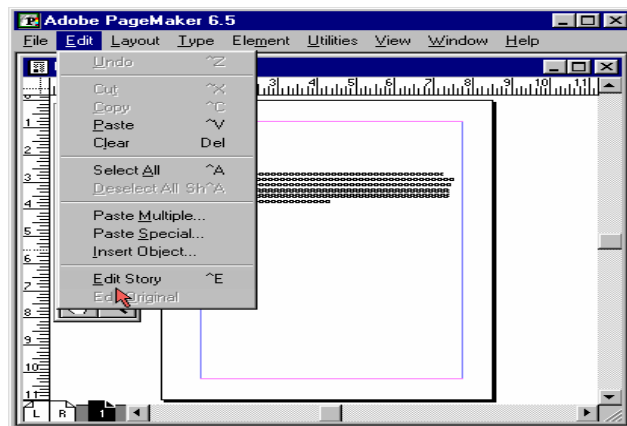


Indexes and Pagination

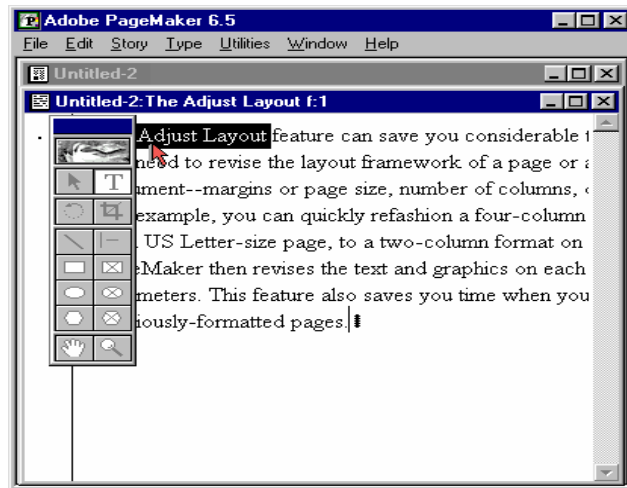
To create an **Index**, Click on the **Edit** menu.



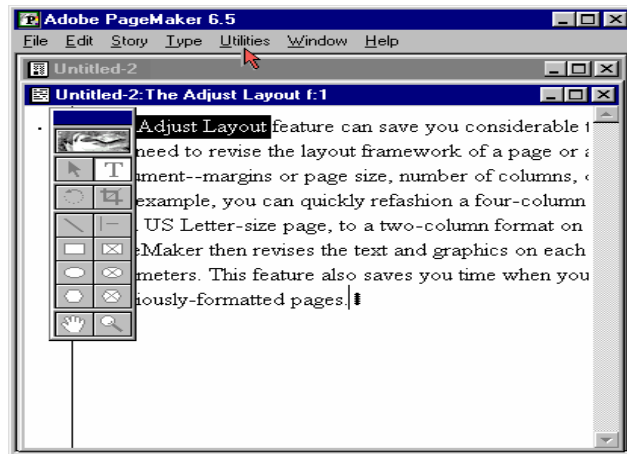
Select **Edit Story**.



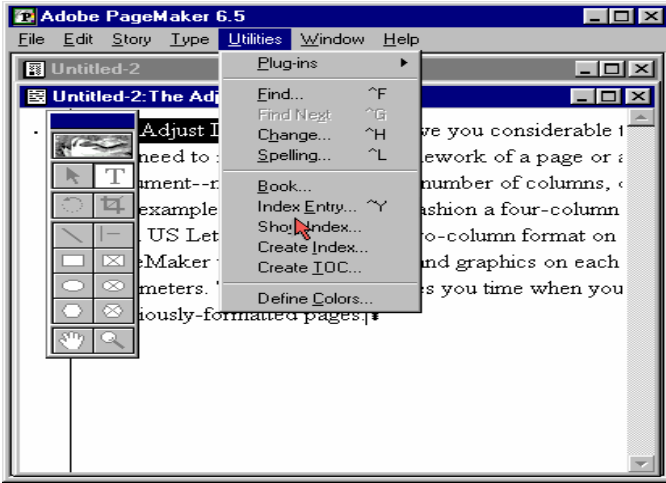
Select the text "**adjust layout**".



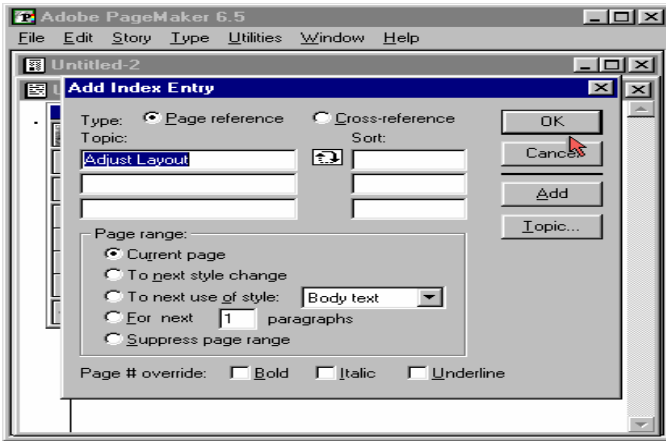
Click on the **Utilities** menu.



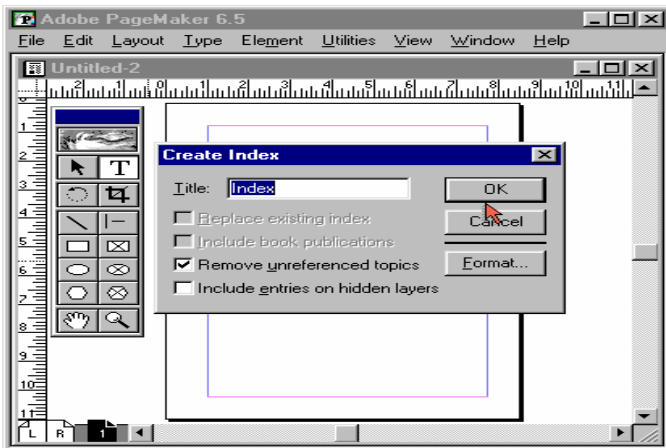
Select **Index Entry**.



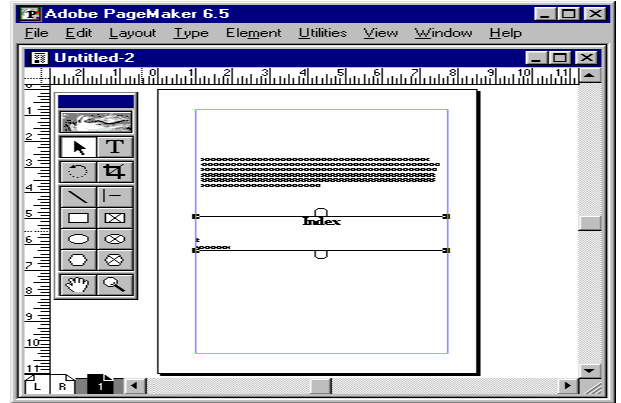
Click **OK** to close the dialog box.



Click on the **story** menu & Select the **Close Story**.
Click on the **Utilities** menu & Select **Create Index** & Click **OK**.

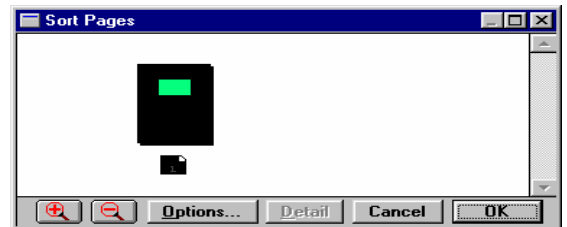


Click the loaded text icon anywhere on the page. Now you have added, "adjust layout" to your Index. Similarly you can add other words.



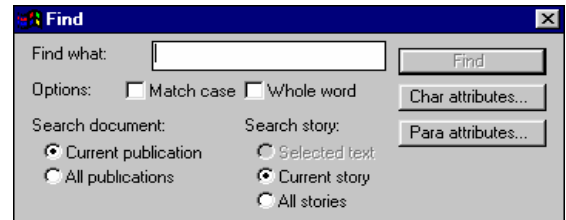
INDEXES AND PAGINATION

The Sort Pages feature can be activated from the Layout menu. This feature allows you to re-order the pages in your document. This can be easily done by dragging the page thumbnail images around, within the window. Changing the order of pages does not alter the text in a story. The story remains intact even though text objects may have moved to different pages.



USING THE FIND FEATURE

Using the find and change feature, you can search for specific occurrences of a word or group of words. Once you find what you're looking for, then PageMaker automatically changes it to the selected option. The find and the change dialog boxes can be activated from the Utilities menu.

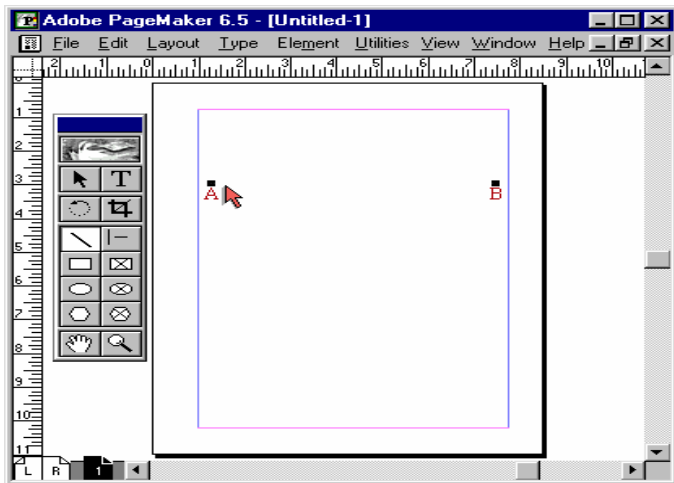


GRAPHICS

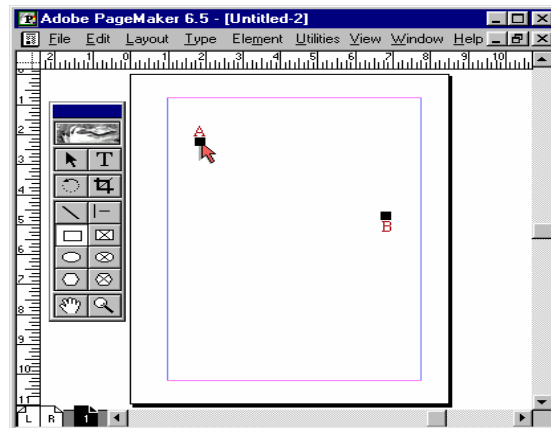
Line Tool

In this exercise, you will learn to use the Line Tool. Select the Line Tool from the Tool Box.

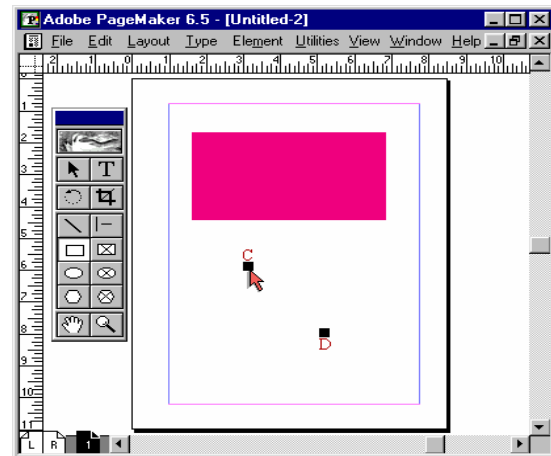
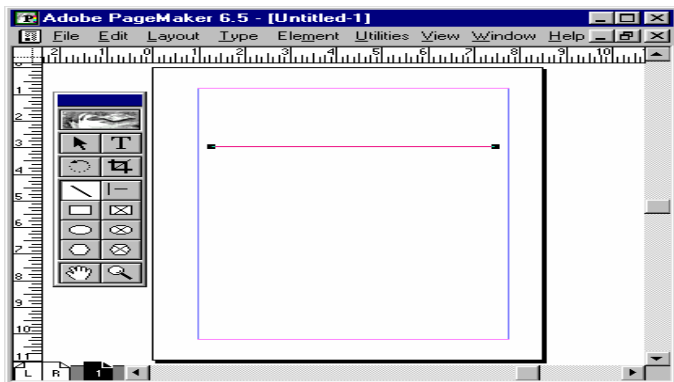
Point the Cursor on "A" and hold down the mouse Button and drag it to Point "B" and then release the mouse Button.



Point the Cursor on **A** and hold down the mouse Button and drag it to Point **B** and release the mouse button to draw a Rectangle. Now Draw a **Square** using the **Box Tool**. Point the Cursor on **C** and hold down the **Shift Key** and drag the mouse button down to Point **D** to draw a **Square**.

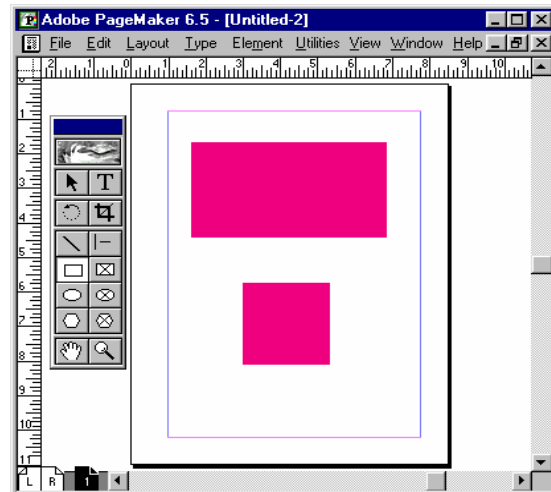
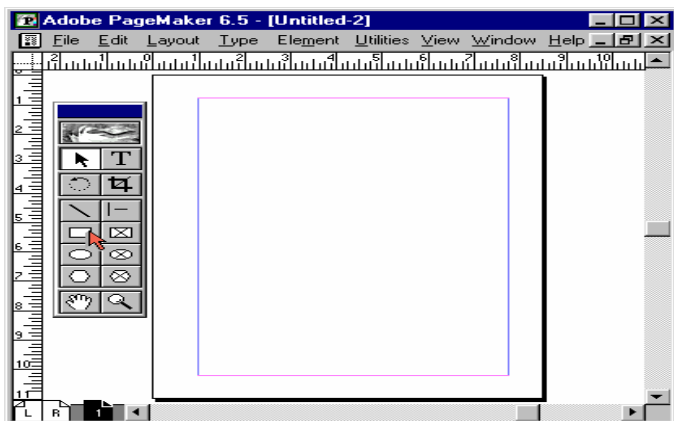


Now you can see a **line** drawn on the Screen.



Box Tool

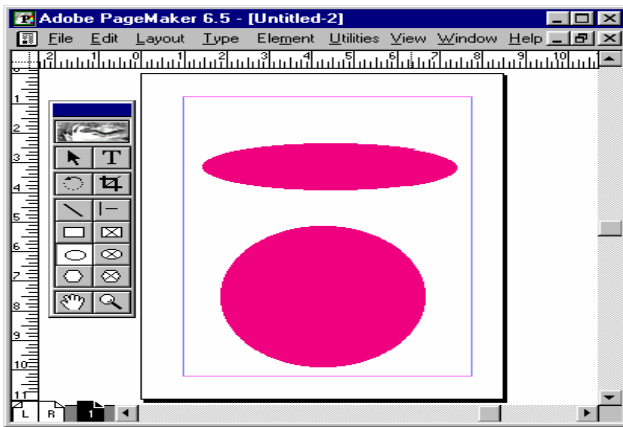
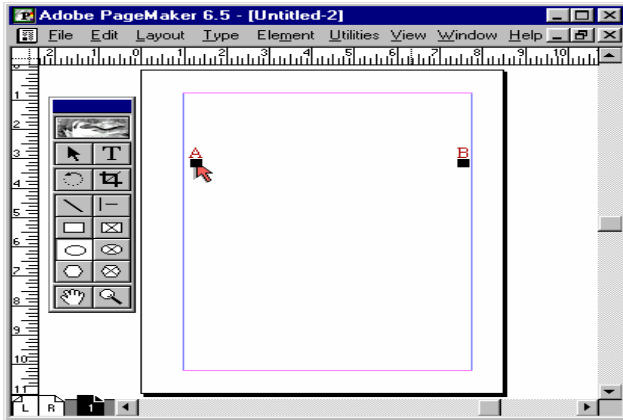
Box tool is used to draw both rectangles and squares. In this exercise you will learn to use the Box Tool. Select the **Box Tool**.



Ellipse Tool

Ellipse tool is used to draw both Ovals and Circles. In this exercise, you will learn to use Ellipse Tool.

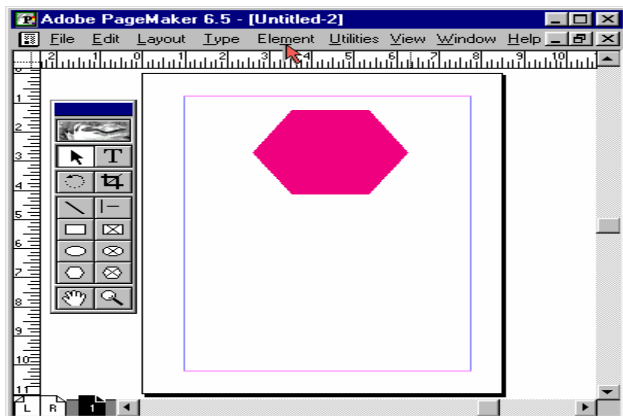
Select **Ellipse Tool**. Point the Cursor on **A** and hold the mouse button down. Drag it to Point **B** to draw an **Oval**.



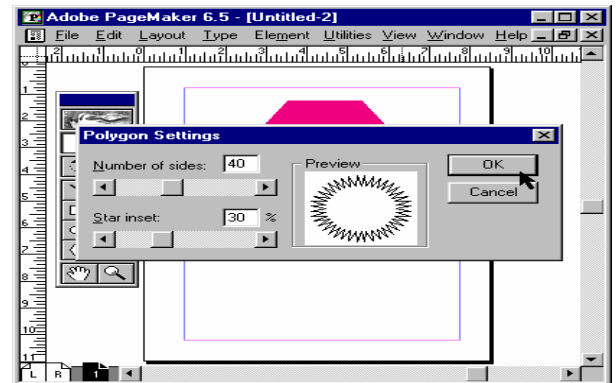
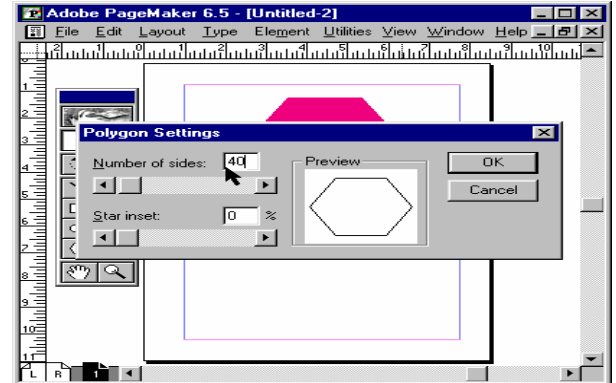
Polygon Tool

In this exercise, you will learn to use the Polygon Tool.

Select the **Polygon Tool**.



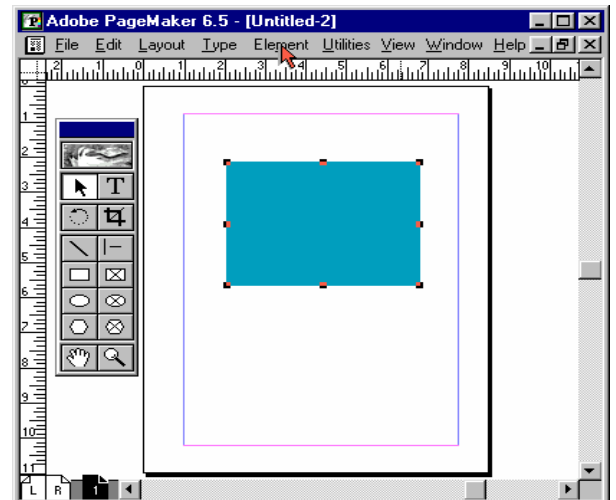
In the **Polygon Settings** dialog box, enter **40** for the number of **Sides** and press the **Tab Key**.

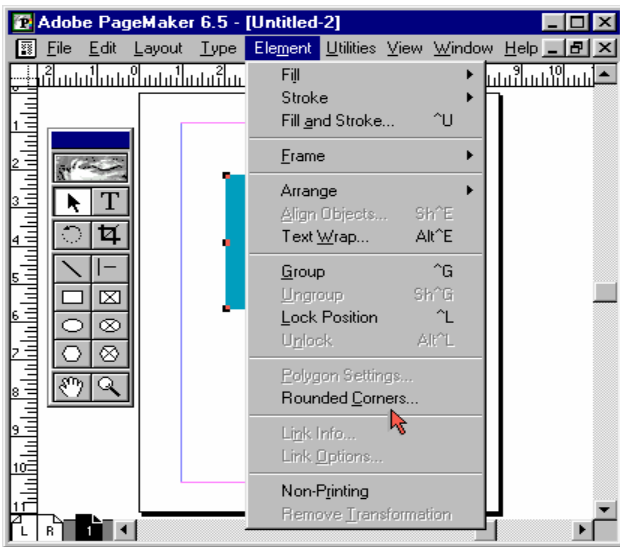


Click **Ok**. In this way you can modify a **Polygon** in to a star having **40 Sides** and **30% Star inset**.

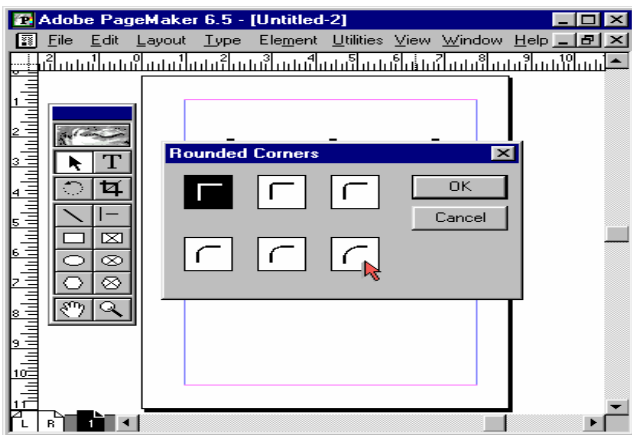
Rounded Corners

In this exercise you will learn how to round the corners of a rectangle using "Rounded Corners" option. Select the **Pointer Tool**.

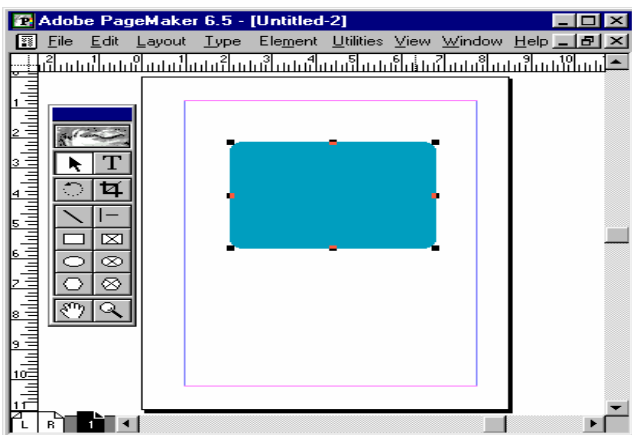




The **Rounded Corners** dialog box appears on the Screen. From this dialog box select the last Option.



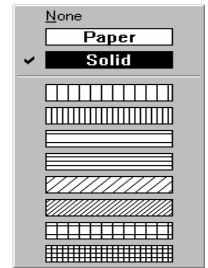
Click anywhere outside the rectangle on the screen.



Fill

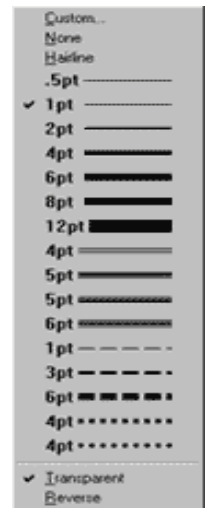
The Fill command is used to fill the box or circle with the options available under this command, which consists of various types of lines along with the options like paper and solid.

If you choose the paper option, the object fill changes to the background paper color and when the solid option is chosen, the object gets completely filled.



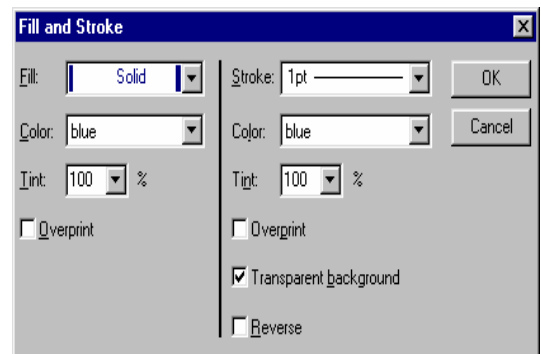
Stroke

You can use the stroke command to select the lines of different sizes and styles or choose the option called custom to create the line of your own style. Besides these, you have two more options called Transparent and Reverse. Use Transparent Background option if you want the objects placed behind a patterned stroke to be shown through the spaces in the pattern otherwise the spaces in the pattern are opaque. Reverse Stroke option is used to draw a paper-colored stroke or outline of a shape on a contrasting black, shaded, or colored background.



Fill and stroke

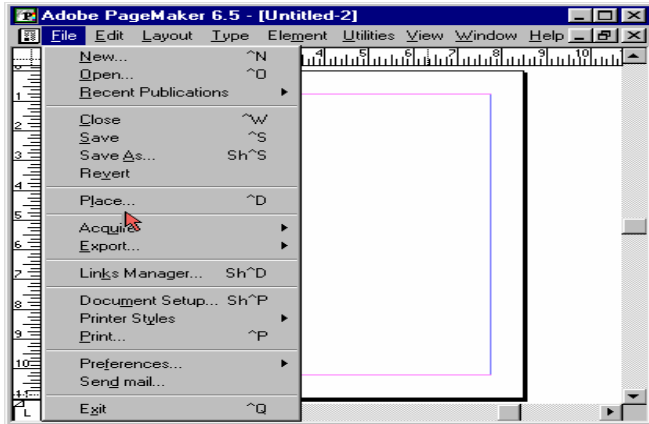
This is the combination of the above two commands. Instead of selecting them one by one, you can select them together with this command.



Placing Graphics

The Place command is used to **Import Graphics**. In this exercise you will learn placing a Graphic.

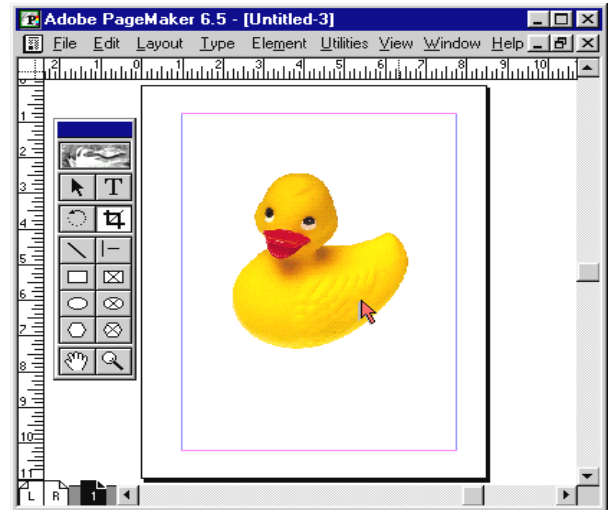
To do this you first click the **File menu**. Select **Place** from the drop down menu.



Cropping an Image

Cropping trims away a portion of the graphic, rather than reducing the size of the graphic. In this exercise you will learn to Crop a Graphic.

Select the **Cropping** tool.

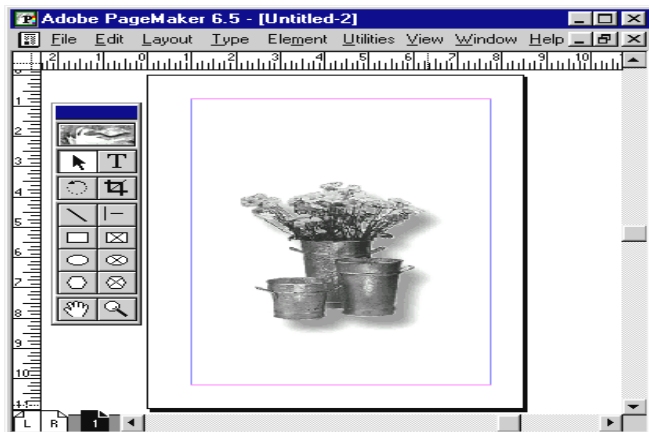
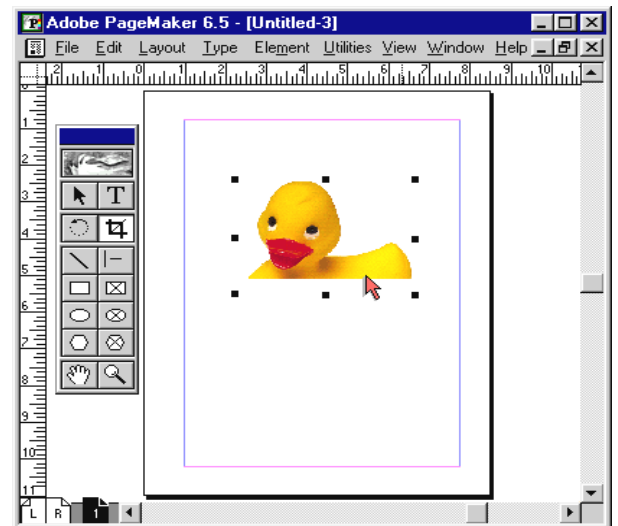


The **Place Dialog Box** opens up. Double Click "Bouquet.tif".



Click the **handle** shown and **drag** towards the center to crop the graphic. Now click on the center of the graphic, notice that the cropping tool changes to a hand tool. Hold down the mouse button and move the graphic downwards.

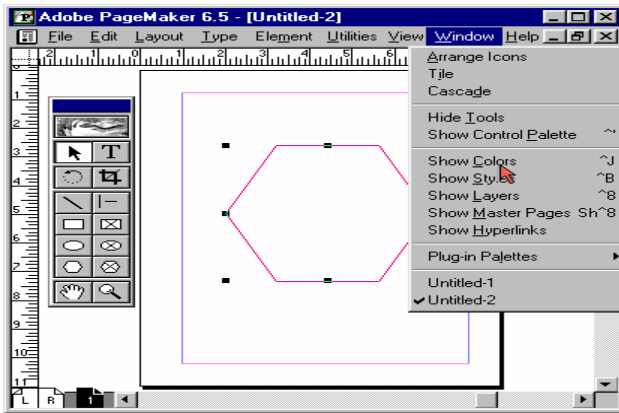
Move the Pointer to the Work area and Click it. You can now see the imported image on your screen.



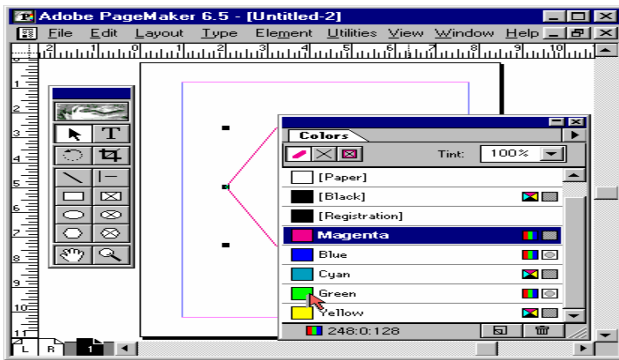
Adding Color to a Graphic Shape

In this exercise you will learn to add Color to a Graphic Shape.

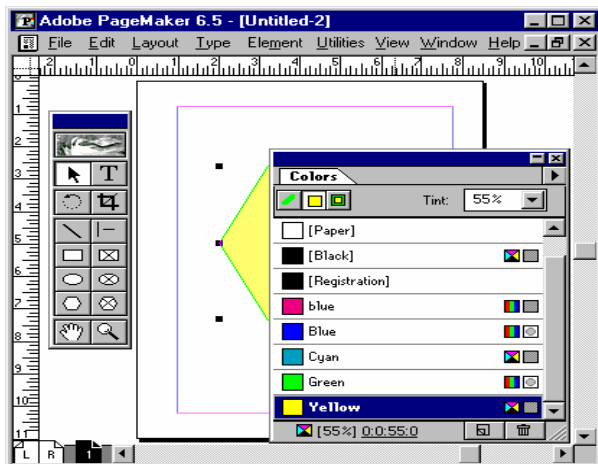
Select the **Pointer Tool**. Click **Window** menu. Select **Show Colors** to open the **Colors Palette**.



While the Outline of the **Polygon** is still selected, click the **stroke** Button. Click **Green** color in the **colors palette**.



You can see that the Outline of the polygon is changed to **Green color**. To Fill the Polygon with **Yellow Color**, Click the **Fill** button in the **Color Palette**. Click **Yellow Color** in the **Color Palette**. Now you can see that the Polygon is filled with **Yellow Color**. Click the **Tint** button to display the drop-down Tint list. **Tint** the fill Color to **55%** by selecting it from the drop-down Tint list. In this way you can easily add color to the **Squares, Rectangles, Ovals and Circles** in **PageMaker**.

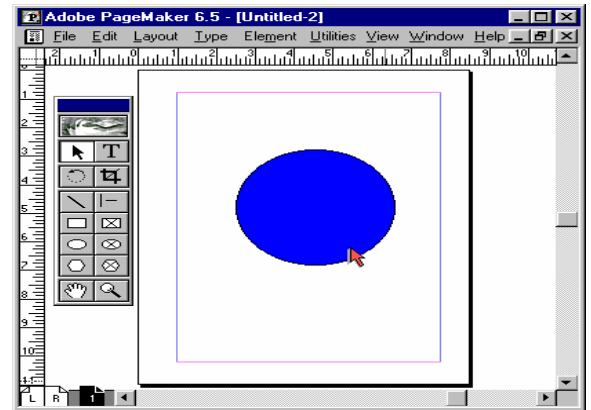


Locking Objects

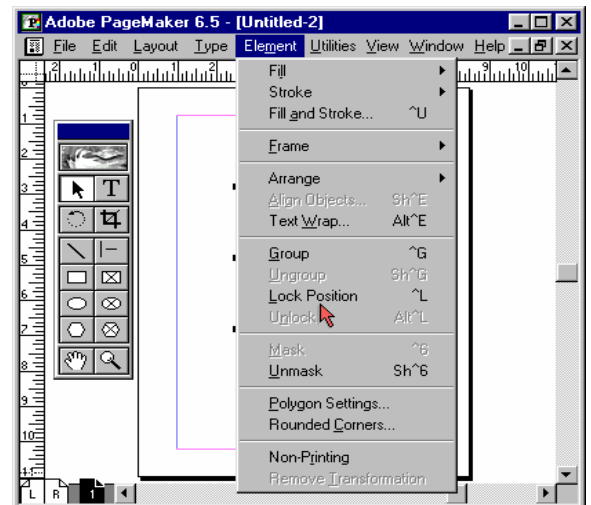
You can lock individual objects in place in order to help preserve the design of your pages through all stages of your production. You can change a color or fill applied to a locked object, but not its degree of rotation or its skewing angle. You cannot cut or delete a locked object without unlocking it first, but you can copy a locked object; it will be pasted as an unlocked object. The Apply button in the Control Palette appears gray when the selected object is locked. The cursor changes to a lock icon when you try to move a locked item.

Element	
Fill	▶
Stroke	▶
Fill and Stroke...	^U
Frame	
▶	
Arrange	
Align Objects...	SH^E
Text Wrap...	Alt^E
Group	
Ungroup	SH^G
Lock Position	^L
Unlock	Alt^L
Mask	
Umask	Sh^6

Click the **Circle** drawn on the Work area to select it. Click **Element** menu.

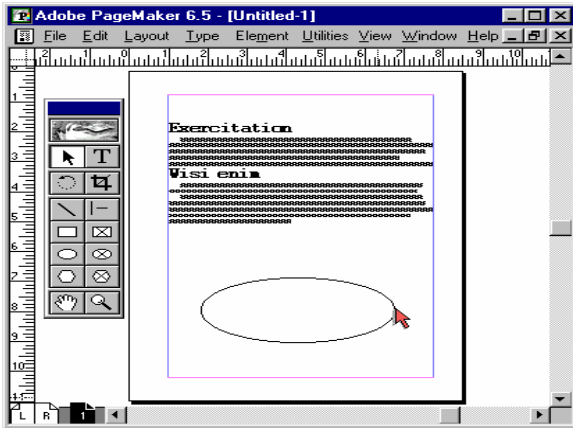


Select **Lock Position**.

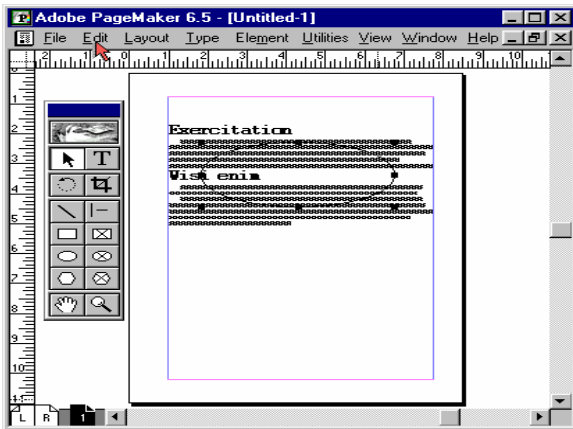


Masking Objects

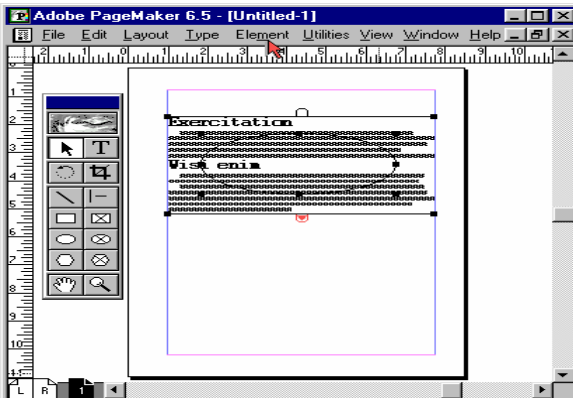
Masking is a way of covering part of an object so that only a portion of it appears through a shape drawn with the rectangle, ellipse, or polygon tool. In this exercise you will learn how to mask objects. Select the **Pointer Tool**. Click the **oval** drawn on the work area using the **Pointer Tool** to select it.



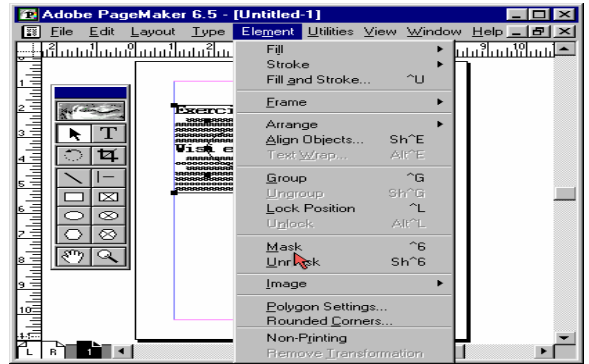
Drag it and place it on the text, which is already there on the work area. Select both the **text** and the **object**. To do this click **Edit** menu.



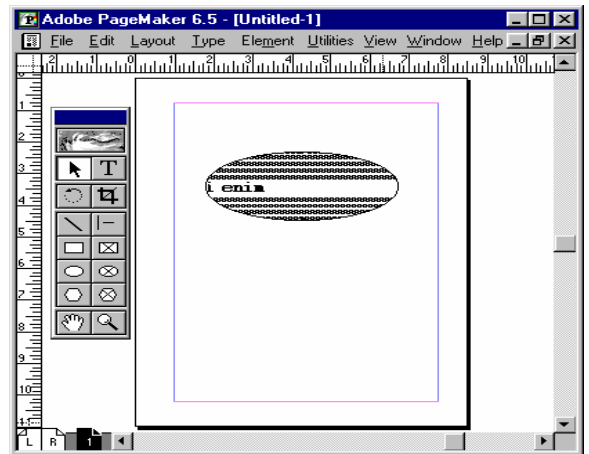
Select **"Select All"**. Now you can see that both the text and the object are selected. Click the **Element** menu.



Select **"Mask"** option.



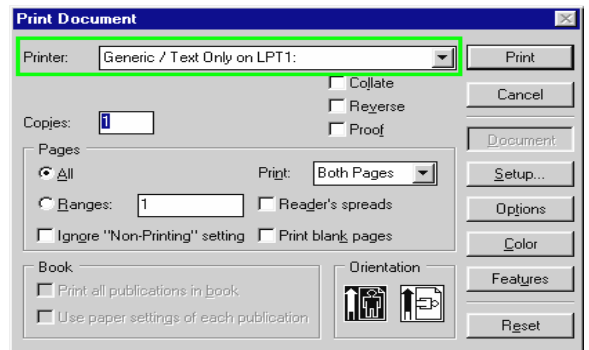
Click anywhere outside the object in the work area. You can now see that only the text inside the oval is visible and that around the oval has disappeared. Actually this command creates a window sort of effect to see the text through the graphic. You can also adjust what part of the text has to appear through the object by moving the text with the **Pointer Tool**



PRINTING YOUR DOCUMENT

Printer

Here choose your printer type if you have loaded the drivers for more than one printer, otherwise the default printer, which you have selected is shown.



No of Copies: Choose the number of copies of each page you want to print.

Collate: This option collates the printed output. If you want to make 2 copies of pages 1-5 then this command will print page number 1to5, 2 times over in a collated form.

Reverse order: This is used to print in reverse order that is while printing 1 to 5 pages, it will print 5 to 1.

Proof: by choosing this option you can print the pages as lower quality proofs.

Pages: All' will print the entire document and if you select Ranges, you can specify the range of pages to be printed.

Book: This command is valid if you have the publications lined up in Book. The options here are that you can print all the pages of all the publications in the book or choose otherwise.

Print drop down list: 'Both Pages' is used for printing a document on the front and back at a time. 'Odd pages' is normally used to print all odd-numbered pages first. Then these printed pages can be printed on the other side also by putting them back in the tray and giving 'Even Pages' option.

Orientation: This has two icons for Portrait and Landscape. Select the appropriate icon.

Ignore 'Non-Printing': Click this if you want to print the non-printing characters too.

Reader's spreads: It allows for the evaluation of two-page spreads

Percentage: Print Options can be opened by clicking options button in printing your document dialog box you can scale the pages to any size before printing.

Reduce to fit: While printing if the paper size is smaller than the page designed by you, the Reduce to fit command enables you to print the document on the paper even when the paper size is small. While printing if the paper size is smaller than the page designed by you, the Reduce to fit command enables you to print the document on the paper even when the paper size is small.

Duplex: Duplex can be used to print on both sides of the page during one pass through the printer. This is a very handy feature if you need to print front and back originals. The various options here are None, Short edge and Long edge.

Options: Here are the various options, which can be printed on the page itself that is the Printer's marks and Page information. Tiling breaks up the ultimate size into smaller pieces that fit on the page size specified in the page Setup dialog box. PageMaker sets an automatic overlap of the tiles that takes into account the unprintable margin around the edge of the page or you can manually set the overlap, if you wish.

Color Options: Color Options can be selected by clicking the Color button in printing your document dialog box. This gives control over handling color separations and printing color.

Composite: Composite is opposite of separations. When this option is selected colors will not be separated instead they will be printed in place as either shades of gray or as close approximations of the colors. To print colors on a color printer, click the Composite button. If you are using a laser printer then, using this option you get shades of gray.

Print Colors in Black button: Makes all the colors print in shades of black in the same-screened percentages acquired with process and spot separations.

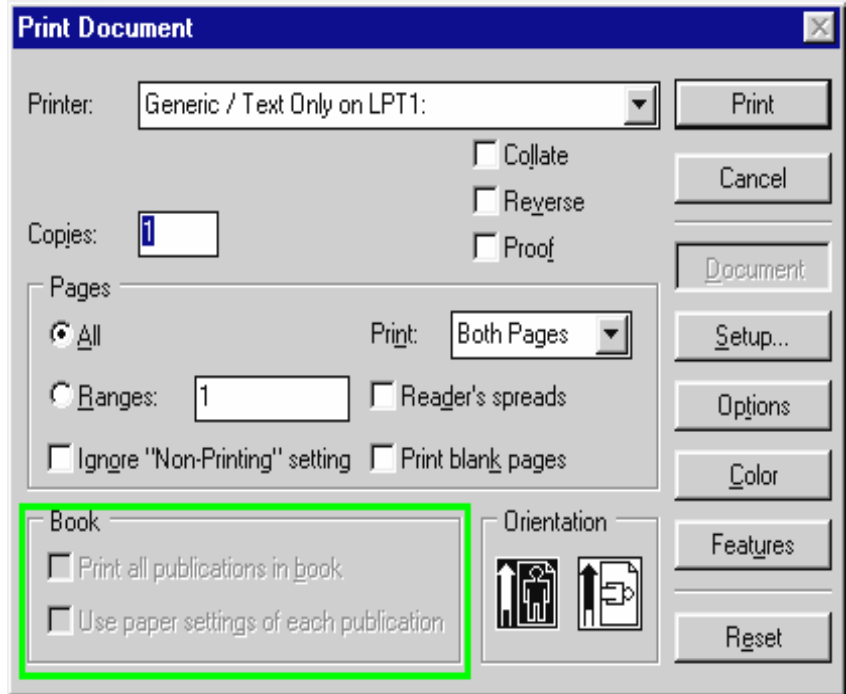
Separations: When you select the separations button, the separations pop-up list becomes active. This contains the process colors and any spot colors you have defined for this document. From this, select the colors whose separations you want to print and click 'Print This Ink' check box to add an X in the pop-up list. PageMaker only prints separations for the colors with X's in the Print column.

Print All Inks: This command is used to mark all the colors with X's.

Print No Ink: This command is used to remove all the X's in the list of colors.

All to Process: This command is used to convert all spot color separations temporarily to process separations.

Printing Your Document: This exercise will teach you how to print a document. Click **File** menu.



Unit-II

CorelDraw 12

INTRODUCTION

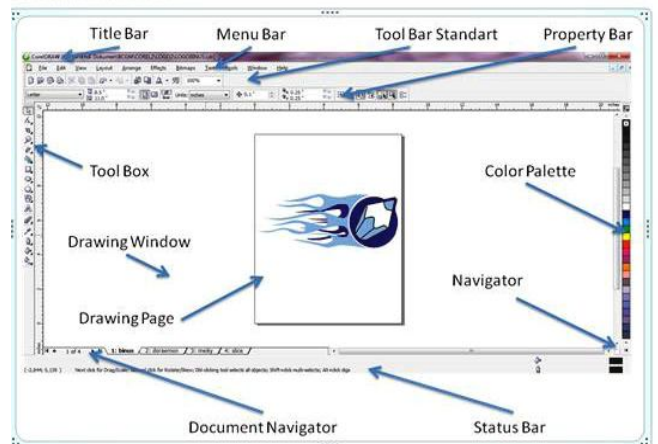
CorelDRAW is a vector illustration program. Images are displayed on the computer screen as pixels. How the program treats the pixels is determined by whether the image is defined as a vector or a bitmap. A bitmap file defines the position, color and size of each pixel. A vector program defines a line of pixels and treats them as a single object. To change an object in a bitmap, you must change all the pixels, so if a red box on a blue background needs to be smaller, you have to re-create a smaller red box and change the pixels where the box was to the blue background. When you have a vector image, you redefine the size and location of the lines. Each object is independent of the others and can be manipulated as needed. To make your work easier, Corel Corporation has added a few bitmap manipulation tools in DRAW and includes its bitmap manipulation program, CorelPhotoPaint, when you purchase CorelDRAW.

GETTING TO KNOW CORELDRAW

Opening CorelDRAW

- When **CorelDRAW** is loaded, a new section is created on the **Start Menu**. To open DRAW, click the Start button from the **Taskbar**.
This opens the Windows Start menu.
- Select **Programs** from the list. This activates the Programs panel. Programs are contained in groups, but rather than being initially displayed in a group window, each group is listed.
- Find the **Corel** section and select **CorelDRAW 12**. This opens up the program with the CorelDRAW welcome screen. If you have used the program before, you may have turned off this screen.
- Choose **Open Graphic** or use the **Open** command on the **File menu**.
New Graphic creates a new, one page document. *Open Last Edited* opens the last document you had open. The splash screen will show the names of the files over the icon. *The Template* icon allows you to access many professionally created templates you can then modify for your own projects. If you clear the check from the box in the lower left corner, you will not see this graphic but will open a new file when you open the program.
- Direct the **Explorer** to your hard drive and the folder where you saved the class files.
- Choose the file **Open 1st.cdr**. If the Panose Screen appears listing fonts that are not loaded, click the **OK** button. This utility allows you to load fonts for a document when you open the document. You must have the Font Navigator utility loaded and active for the fonts to install automatically.
















Window Components	
A - Standard Toolbar	You can customize this or any other Toolbar or create additional Toolbars.
B - Property Bar	The Property Bar is dynamic. Property options change depending on what you are working on. This enables you to access commands that are specific to the current tool or feature you are using.
C - Main Tool Box	The main tools you will use are accessed from this bar.
D - Rulers	The Rulers show the current mouse cursor location as you move in the work area.
E - Color Palette	The Color Palette by default is located to the right of the work window. Like the Toolbars, it can also be relocated. You can choose from a preset palette of colors, or use a specific color system such as Pantone Spot Colors.
F - Status Bar	The Status Bar is used to give you information about cursor movements or symbol properties such as the fill or size.
G - Page Navigator	The Page Selector is used to add and move between pages. When a file contains multiple pages, individual page tabs appear to the right of the Page Selector bar.
H - Docker Tabs	Dockers allow access to effects, styles, colors, and many other features of CorelDRAW. They can be floated or "docked" at the side of the window. When closed, they are accessible through a vertical tab.



TOOL OVERVIEW

The Toolbox is located in the left portion of the window and contains all the drawing and editing tools necessary to create objects for an illustration.



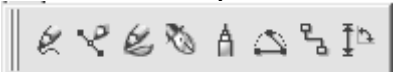






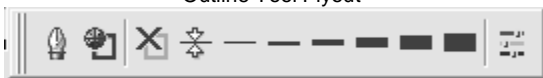


Tools containing a small triangle in the corner produce a Flyout. Flyouts contain additional tools, or tool options and are explained below in the order they appear on the default screen. Flyouts are described following the Tool Overview.

<p>Pick Tool</p> 	<p>Selects objects or groups of objects. Once selected, you can use the Pick Tool of move, stretch, scale, rotate, and skew objects.</p>
<p>Shape Tool</p> 	<p>Reshapes objects. Objects are reshaped by moving nodes, lines, and control points.</p>
<p>Zoom Tool</p> 	<p>Changes the current view of the drawing. You can also select magnification options from the Property Bar in the Zoom mode.</p>
<p>Freehand Tool</p> 	<p>Draws lines and curves. You can also use this tool to trace bitmaps.</p>
<p>Smart Drawing Tool</p> 	<p>Converts the freehand strokes you draw to basic shapes and smoothed curves.</p>
<p>Rectangle Tool</p> 	<p>Draws rectangles and squares. Squares are created by using the Control key while drawing.</p>
<p>Ellipse Tool</p> 	<p>Draws ellipses and circles. Circles are created by holding down the Control key as you draw.</p>
<p>Graph Paper Tool</p> 	<p>Draws a collection of boxes that simulates a sheet of graph paper.</p>
<p>Perfect Shapes Tool</p> 	<p>A collection of objects which you can add to your drawing. They include such things as arrows, stars, talk bubbles, and flow chart symbols.</p>
<p>Text Tool</p> 	<p>Adds either Artistic or Paragraph text to your drawing.</p>
<p>Interactive Blend Tool</p> 	<p>The Blend Tool allows you to merger objects together through a series of steps. The flyout gives access to several more interactive tools that are described on the following pages.</p>
<p>Eyedropper Tool</p> 	<p>The Eyedropper Tool allows you to select a color within an object, especially a bitmap, and allows you to apply that color to another object. You can also capture the color for a customized palette. The flyout gives access to the paint bucket that applies the color.</p>
<p>Outline Tool</p> 	<p>Sets the outline style of an object or a line. This includes the line type, ends, color, and weight. The flyout gives quick access to some changes.</p>
<p>Fill Tool</p> 	<p>Assigns the fill style of any object. Fills are only visible on closed objects. The flyout gives access to control dialogs for each type of fill.</p>
<p>Interactive Fill Tool</p> 	<p>Allows you to apply Fountain fills (gradients) using the mouse. The flyout gives access to the Mesh fill Tool.</p>

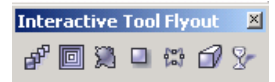
FLYOUTS

Tool buttons containing a small triangle in the lower right corner display Flyouts. Flyouts are used by CorelDRAW to display additional tools. They are activated by holding down the tool button with the mouse.

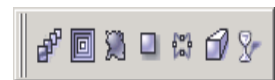
The table below is not meant to be a comprehensive look at each tool Flyout, but rather a reference.

Flyouts	
Shape Edit Flyout 	Holds Shape Edit, Knife, Smudge, Roughen, Free Transform and Virtual Segment Delete Tools.
Zoom Tool Flyout 	Holds the Zoom Tool, which is used for changing the view magnification, and the Pan Tool, which is used for moving the drawing page around the display area.
Curve Flyout 	Holds the Bezier Tool, Artistic Media Tool, Dimension Tool and the Connector Tool. Each tool is used to create specific types of lines.
Rectangle Tool Flyout 	Holds the Rectangle tool and the 3-point Rectangle tool.
Ellipse Tool Flyout 	Holds the Ellipse Tool and the 3-point Ellipse Tool.
Object Flyout 	Holds the Polygon Tool for creating multi-sided objects, the Spiral Tool and the Graph Paper tool.
Perfect Shape Flyout 	Accesses the collection of shapes you can add to your drawing .
Interactive Tool Flyout 	Holds the Interactive Blend, Contour, Distortion, Drop Shadow, Envelope, Extrude, and Transparency Tools.
Eyedropper Tool Flyout 	Holds the Eyedropper Tool and the Apply Tool for the color, effect, or property selected by the eyedropper.
Outline Tool Flyout 	Displays options for changing line color, styles, weights, and ends.
Fill Tool Flyout 	Displays options for changing fill color, styles, creating custom colors, and removing fills.
Interactive Fill Flyout 	Holds the Interactive Fountain Fill Tool and the Mesh Fill Tool.

Toolbars and Flyouts can be made to float. Once floating, you can dock them to any part of the window. To float a Toolbar or a Flyout, place your cursor over the area at the end of the bar that resembles two ribbed bumps or gray lines. Hold down the left mouse button and drag the bar out to the main window of the program. All tools on the Flyout will be displayed so you can easily access them.



To dock the Flyout or return the toolbar to its original location, double click on the title bar of the floating Flyout. To return the Flyout to its original location, click on the closing X in the upper right-hand corner. Below is the Interactive Tool Flyout in floating mode and in Flyout mode.



PAGE NAVIGATION WITH THE PAGE SELECTOR

A CorelDRAW file can have as many as 999 pages. A document of that length, however, might be created more easily in CorelVentura. To navigate a multi-page document you use the Page Navigator bar at the bottom left of the work window. From this bar you can add or move from one page to another. To delete pages you need to use the Delete Page command under the Layout menu.




1. Click on the Page 2 Tab.

The Page 2 tab should be white. You can also use the Page Up and Page Down keys on the keyboard.


2. Select the **Page Tab** for page 3. The Add Page button should appear as this is the last page for this file.
3. Select the **First Page arrow button** to go back to page 1
4. Click on the **1 of 3** space.
5. Enter a **3** in the **Go to box** and click **OK**.

THE PROPERTY BAR

The Property Bar is located just under the Standard Toolbar. It is an interactive command center. Being interactive means that the options on the Property Bar change depending on the current task or command. It is designed to save time by interactively displaying commands as you work. You will work more with the Property bar as you progress. This section is meant only as an introduction.

1. Select the **Pick Tool** 
2. Place the cursor indicator on top of the **purple rectangle** and click.
Small black handles appear designating a selection. You will learn about these later in the class. Notice the Property Bar changed to display a new set of options.
3. Select the text.
Again, new options display for working with text.

DOCKERS

Twenty-four functions of CorelDRAW 12 display in a dialog window called a Docker. Dockers are placed into the interface or “docked” as are Tool Bars or the Property Bar. They are accessed by clicking on the tabs at the right of the working window. Dockers can also float or be closed so only the tabs show. Dockers replaced Roll-Ups from earlier version of DRAW. To access the Dockers, go to the Windows menu  Dockers.

Docker	Function
Properties	Displays the characteristics of the object selected including any Web assignments such as links or hot spots. Allows access to the function that changes that characteristic.
Object Manager	Shows the hierarchical structure of objects, layers, and pages within a document including the stacking order of the objects. Allows you to move objects from one layer to another.
Object Data Manager	Sets up a spreadsheet-like document recording information about an object.
View Manager	Allows you to change the view without using the menu or the drop down list on the Standard Toolbar.
Link Manager	Allows you to create HTML links within your documents.
Undo Docker	Lists all the moves you have made so you can reverse them. The default is 99 steps. You can change this to a smaller number if you wish.
Internet Bookmark Manager	Organizes bookmarks you have assigned within a Web project in DRAW.
Symbol Manager	Allows you to set up libraries of objects you use frequently and convert them to symbols.
Artistic Media	This tool acts as an calligraphy pen, a paint brush or an image sprayer.
Blend	Gives all the controls for the Blend effect.
Contour	Gives all the controls for the Contour effect.
Envelope	Gives all the controls for the Envelope effect
Extrude	Gives all the controls for the Extrude effect

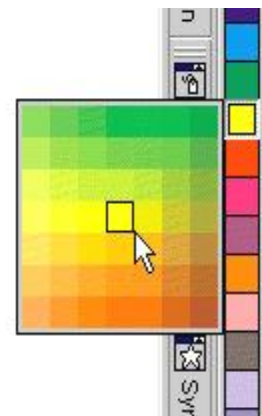
Lens	Gives all the settings for the Lens effect.
Bitmap Color Mask	This CorelPhotoPaint feature allows you to mask all pixels of a certain color in a bitmapped image.
Transformations	Allows access to all the Transform tools, Position, Rotation, Scale & Mirror, Size, and Skew.
Shaping	Allows access to the Weld, Intersect, Trim, Simplify, Front minus Back, and Back minus Front operations.
Color	Allow you to create custom colors in each color palette.
Color Palette Browser	Lists all color palettes available on the system and allows quick loading and changing of the palettes.
Color Styles	Sets color palette styles just as you set graphics and text styles for consistency within a project.
Graphics and Text Styles	Sets styles just as you can within a word processor. Allows you to keep text and objects consistent throughout a project.
Scrapbook	A storage area for frequently used clipart, text files and many other file types. Also allows quick access to sites on the Web or other networked machines.
Web Connector	Allows you to connect to Corel.com.

COLOR PALETTES

The colorful row of boxes on the right of the screen is the Color Palette. DRAW comes with 18 color systems and gives you the ability to create your own palette. The palette can be floated or parked. The type of palette can be changed with the Windows menu, or the Color Palette Browser Docker. You may have several palettes open at once.

The main color palettes include HKS® Colors, Trumatch Colors, Uniform Colors, Web Safe Colors, and the complete Pantone® Matching System including the system that was shipped with CorelDRAW 8. (The Pantone system is updated by the company on a regular basis and a major change was made in 1998. Pantone numbers assigned in DRAW 8 will not match the system in DRAW 9 or DRAW 10.) In addition, the Color Palette Browser Docker includes some specific color systems such as human skin colors and natural color systems. Here is also where any custom palettes you build will be stored.

Note: When you hold down a chip on the color palette, a box with shades of that color displays. (Shown below.) By dragging to one of the shades of the first color, you can choose a shade of a color quickly and apply it to a line or fill an object.



CHANGING AN OPTION

The Options dialog allows for extensive customizing of CorelDRAW 12. To make this curriculum easier for you, one of the default settings for CorelDRAW 12 needs to be changed before we continue.

1. Go to the Tools menu **Options, Workspace, General**
Or (Ctrl+J), Workspace, General.
2. Change the Regular Undo setting from **99** to **15**.
Each time you make a change in a document, CorelDRAW 12, makes a full copy of that document so it can reverse your steps if you use the Undo command. A level of 99 quickly uses up all the resources of your machine even if you are using a very powerful machine. In my opinion, more than 15 undo's constitutes "Start over".
3. Click OK.

CHANGING THE VIEW





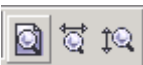
Often, when working on an image, you want to see it with out the clutter of the screen or the image has become so complex that you only want to see the outlines of the object. These are the View options.

1. Go to the **View menu** and select the **Wireframe**.
The various view qualities are designed to save screen redraw time for complex drawings.
2. Change back to the **Normal View** option.
The other View options are described below.

Views	View descriptions
Simple Wireframe	Black and white outlines of the objects. Bitmaps are shown as monochrome grayed areas. Does not show blended objects or some other effects.
Wireframe	Black and white outlines of all objects including blend groups.
Draft	Displays most items as they will be printed but uses patterns to represent certain fills. A checkerboard pattern is displayed for the two-color fills. Two-headed arrows display for full color fills. Hatched line patterns display in place of bitmap fills. A pattern of repeated PS displays for the PostScript fills. Screen redraw time is much faster in Draft mode.
Normal	Displays all object, high resolution bitmaps and all fills except PostScript.
Enhanced	Displays the best possible quality for your monitor and shows all PostScript fills.
Full screen preview	Removes all the DRAW elements from the screen and shows the image at the best possible resolution and against a white background.
Preview Selected only	Shows the selected object at the best possible resolution and separates it from the other objects.
Page Sorter View	This allows you to rearrange the pages of a multi-page document and to view all the pages of a multi-page document in thumbnails format.

THE ZOOM PROPERTY BAR

As you work on an image, you may want to get closer to see detail or make small adjustments. DRAW gives you several options for zooming into your object or out. When the Zoom Tool on the Toolbox is selected, the Property Bar displays the following options.

Zoom Commands	
Zoom In 	Allows you to get closer to your drawing and work on detail. You can drag a marquee box around a point and zoom into that point. Clicking with the cursor zooms you in to double the previously set view level.
Panning 	Allows you to move about the page with precision. With a work area of 250 feet (yes that is feet!), it is easy to get lost. This allows you to move the page as if you could use your hand.
Zoom in and out 	Clicking with the plus Tool zooms you in double the last view setting, for example, if you are at 100%, you will go to 200%. Clicking with the minus Tool zooms you out to the last setting. Using the example in the previous sentence, it would put you back to 100%
Zoom To Selected Zoom To All Objects 	Changes the display to show only selected objects (Shift+F2). Changes the view to display all objects (F4). This will include objects located outside of the page.
Zoom To Full Page, Page Width, or Page Height 	Allows you to see the entire page (Shift+F4). Changes the current magnification to include the left and right edges of the page. Changes the current magnification to include the top and bottom edges of the page. All three cause the page to be shown at less than 100% magnification.

Zooming

- Go to the **Toolbox** and select the **Zoom Tool** (F2). The mouse cursor changes to the magnifying glass with the plus sign. The Property Bar also displays the tools described above.

2. Click in an area.
You have just gotten closer to the drawing. You can also zoom in by dragging the Zoom Tool around a specific area.
3. Press the **F3 key** on your keyboard.
This shortcut zooms out to the previous view each time you press it.
4. Place the tool icon to the upper right of the Bluebonnet.
5. Click and drag diagonally to create a zoom marquee.
6. Release the mouse.
By dragging the Zoom Tool around an area, you can enhance the magnification and be more precise by zooming to a specific area.
7. Go to the **Standard Toolbar** and select the **Zoom Levels** list (the box showing the % of magnifications).
Values for the magnification settings can be selected from the list, or typed in as needed.
8. Select **To Page (Shift + F4)**.
This will change the display to show you the whole page.

Changing preview settings

1. Go to the **View menu** and select the **Full Screen Preview (F9)**.
The window changes to display only the drawing. All window components are removed.
2. Press the **Escape key** on your keyboard.
This will take you back to a standard preview or you can use the right mouse button.

SELECTING OBJECTS

In order to change an object, it must first be selected.

To select an object you use the Pick Tool.



Each time you select an object, an invisible bounding box designated by eight selection handles is displayed around the object. An x appears at the exact center of the object or objects. This provides a point to grab when you want to move an object. Selection handles are also used to resize an object using the mouse. The smaller hollow points appearing on the object after selection are nodes. Nodes designate the start and stop points of line segments. Nodes and line segments are used to reshape an object. Once it is selected you can manipulate an object.

Selecting single objects

1. Go to the **Standard Toolbar** and select the **Open** button.
2. Go to the folder on the hard drive where you saved the class files.
3. Open the file **Open 2nd.cdr**
This is a multi-page file containing simple objects. You will learn how to properly select and perform basic editing techniques.
4. Go to the **Toolbox** and select the **Pick Tool**.
Remember to hold the mouse over a tool button if you do not remember the name of a tool. The small box will appear next to the mouse pointer displaying the name of the tool or other information about the button.
5. Place the **Pick Tool cursor icon** in the middle of the **blue square**.
6. Click to select the blue square.
The black squares are the selection handles. When you select an object, dimension information appears on the Property Bar at the top of the screen and descriptive information appears on the Status Bar at the bottom of the screen.
7. **Click and drag** to move the square downward into rectangle 2.
As you begin to drag, a 4-pointed arrow replaces the cursor. You will discover that the changes in the mouse cursor designate certain editing functions.

Marquee selecting

1. Place the **Pick Tool** cursor just **outside and above** the circle and hexagon.
2. Click and drag to surround the objects.
By dragging with no objects selected, you create a 'dotted line box'. All objects within this dotted line or marquee will be selected.
3. Release the mouse when they are surrounded.
Notice the Status Bar. It will help verify how many objects are selected.
4. Place the **cursor** over the center **X**.
5. Hold down the **mouse button** and **drag** both objects next to the square.
Objects act as one while they are group-selected.
6. Press the **Escape key** to deselect all objects.
You can also click in a blank area, but sometimes this may inadvertently select something else.

If you start out to select multiple objects and do not quite surround them all as you drag, hold down the Alt key while dragging, and any objects touched by the marquee will be selected.

Shift-Select

1. Select the square.
2. Hold down the **Shift key**.
3. Click on the circle.
The selection is extended to the circle. Notice the selection handles.
4. Click on the polygon.
5. **Release the Shift key.**
The selection handles surround all three objects. You should have all three objects selected. Check the Status Bar to be sure you have three objects.

You can also select all objects on a page and the desktop by double-clicking the Pick Tool.

Removing objects from a selection

1. Be sure the three objects are selected.
Check the Status Bar to be sure. If the Status Bar does not display the properties of the objects, right click on the Status Bar area and choose Refresh.
2. Hold down the **Shift key**.
3. Click on top of the circle.
Notice the Status bar. Even though the selection handles remain around all three, only 2 objects are selected. Check the Status Bar to be sure.
4. Place the cursor on the X.
5. Hold down the mouse button and drag the 2 objects up about one inch.
The circle remains in place.

Nudging Objects

Sometimes you only want to move an object a small distance or you want to move several objects the same distance. The arrow keys allow you to nudge an object. The default nudge is one tenth of an inch (0.10). You can change the distance in the Options Edit dialog or on the Property Bar with nothing selected.

1. Select the circle.
2. Push the **up arrow key** on the numeric key pad at the right of your keyboard.
3. Push the down arrow key.
4. Push the **right arrow key, then the left arrow key.**
Each time the object has been moved one tenth of an inch in the direction of the arrow.

Resizing objects with the selection handles

Scaling and resizing are essentially the same technique, except that scaling resizes both the height and width at the same time. Scaling an object means that the proportions (size relationships) between the height and width are maintained. For example, if a square is 1 inch by 1 inch and you scaled it 200 percent, it will become 2 inches by 2 inches.

1. Go to page 2.
2. Select the blue square.
3. Place the cursor on the lower right corner.
Your cursor should change to the double-headed arrow cursor. If it doesn't you missed the handle.
4. Click and drag downward along the red line.
Dragging a corner handle scales objects proportionally.
5. Release the mouse button.
6. Select the red square.
7. Place the pointer on the left middle selection handle.
8. Click and drag to the left. Repeat to the right.
Dragging any middle handle will allow you to resize along one side only. Notice the cursor shows which direction you may move using that selection handle.

Quick Copying

1. Go to **page 3**.

2. Select the kangaroo.
3. Click and drag to the end of the dotted line.
4. Do not let go of the left mouse button.
5. Click the right mouse button while you hold down the left button.
Right-clicking while an object is selected is a fast way to create a duplicate.
6. Release the left mouse button.
You should have a duplicate of the kangaroo.
7. Proportionally reduce the size about 50%.
Watch the Status Bar as you resize.
8. Place the smaller kangaroo at the end of the dotted line.
9. Create a few more copies and resize them just to get some practice.

Tip: You can also specify the resize percentage of an object by typing values in the Scale Factor text box on the Property Bar. The lock button next to the boxes controls how the changes will be applied. When the lock is closed, the changes will stay in proportion or when open, allow you to change one dimension without effecting the other.

Rotating and Skewing Objects

Special selection handles, called Rotate and Skew handles, are available to rotate and slant objects using the mouse. Objects are rotated around a pivot point. The pivot point can be relocated outside of the object. This is handy when you want to rotate one object around another.

Free rotation

1. **Go to page 4.**
2. Select the top rectangle.
3. Click on it a second time as if selecting it again. (**Do not double-click**).
Selecting an object twice activates the special rotate/skew handles. This is not the same as double-clicking, where you click rapidly. The circle in the middle is the pivot point.
4. Place the cursor on one of the corners.
The cursor icon changes indicating that you can rotate the object.
5. Click and drag the corner handle in a circular motion.
The cursor changes again to display the rotate cursor.
6. **Watch the Property Bar** to see the degree of rotation as you move.
Rotating objects counterclockwise produces a positive angle(+), while rotating clockwise produces a negative angle(-) of rotation.

Rotation with control

You can add precision to your rotation by using the Control key. This technique will restrict the rotation to 15-degree increments. Rotating clockwise will produce a negative value (-15 degrees), rotating counter clockwise will produce a positive value (15 degrees). The increment of rotation can be changed in the Options dialog.

1. **Go to page 5.**
2. Select the green circle.
3. Click the circle again to activate the Rotate and Skew handles.
4. Move the cursor over the target mark in the middle of the green circle. This is the pivot point.
5. Hold down the left mouse button and move the pivot point down to the center of the large yellow circle.
The position indicator on the Property Bar should read 4.25 and 5.5, the middle of the page. This will change the rotation and allow the green circle to rotate around the larger yellow circle.
6. Hold down the **Control key**.
7. Place the cursor on the upper right rotation handle of the green circle.
8. Move the handle clockwise.
As you rotate the green circle, the Property Bar shows you how far you have rotated. With the control key down, you will move in 15-degree increments. Because the pivot point has been moved in the center of the yellow circle, the green circle moves around the yellow one.
9. Release the mouse button.
10. Go to the **Edit menu** and select **Undo (Ctrl+Z)**.
By default, the Undo command will reverse the last action.

Copying while rotating

Remember to keep the left mouse button down until you are finished!

1. Select the green circle again and activate the Rotate and Skew handles.
2. Hold down the **Control key**.
The Control key constrains the movement of the object.
3. Click and drag to rotate -30 degrees (clockwise).
Remember to watch the Property Bar as you rotate. The Angle of Rotation section in the middle displays rotation angle as you rotate.
4. Before letting go of your left mouse button, right click.
This should produce a duplicate at the 1 o'clock position.
5. Release the left mouse button then the Control key.
6. Go to the **Edit menu** ➡ **Repeat Rotate**.
The Repeat command repeats the last action. The last command will follow the word Repeat on the menu. Another duplicate is created 30 degrees away from the second green circle.
7. Press **Ctrl+R**.
This is the Repeat command. A new green circle should be added to the drawing.
8. Keep using the Repeat command (Ctrl+R) until the circles form a clock similar to the one shown below.

Tip: You can also rotate objects by specifying an increment in the Angle Rotation section of the Property Bar. You cannot, however, create duplicates while rotating this way. If the object does not move after you change the parameters on the Property Bar, press the Enter key.

Skewing objects

Skewing slants an object along either the horizontal or vertical plane. This technique is used often to give the illusion of distance or movement.

1. **Go to page 6.**
2. Select the top gray text object.
3. Activate the Rotate and Skew handles.
4. Place the cursor on the **top middle Skew handle**.
5. Click and drag to the right about 1 inch.
6. Move the red text object on top of the gray text.
This combination produces a cast shadow.

Flipping objects

1. **Go to page 7.**
2. Select the blue triangle.
3. Place the cursor on the **middle left selection handle**.
4. Hold down the **Control key**.
5. Drag the handle over to the middle right selection handle.
As soon as you begin to drag, the cursor turns into a double-headed arrow.
6. **Release the mouse button.**
7. **Release the Control key.**
When using a combination of the mouse and keyboard, always let go of the mouse first.
8. Select the red triangle.
9. Place the cursor on the **middle top selection handle**.
10. Hold down the **Control key**.
11. Drag the handle over to the **bottom right selection handle**.
As soon as you begin to drag, the cursor turns into a double-headed arrow.
12. **Release the mouse button.**
13. **Release the Control key.**
14. Use a corner handle to flip the shapes diagonally.

Using the Property Bar to flip

You can also flip objects from the Property Bar. There are two buttons located to the right of the Angle Rotation portion that are used to flip objects.

1. Go to the **Standard Toolbar** and select the **Undo arrow twice**.

(Ctrl+Z or Edit ➡ Undo)



When you select the arrowheads, a drop down list shows you all the steps you have done since the last save. This allows you to

undo one particular step or a series of step. It is an advanced feature that you might find useful but will not be addressed in this class.













2. Select the blue triangle.
3. Go to the **Property Bar** and select the **top Mirror button**.



The object is flipped left/right.

4. Flip the red rectangle using the lower Mirror button.
Using the button makes the object flip in place so sometimes you can't really see what moved.

THE DRAWING TOOLS

Drawing Tools	
 <p>The Curves Flyout</p> <p>Freehand Tool </p>	<p>The first tool on the Curves flyout is used for creating freehand lines (similar to scribbling). While holding the Control key your lines are constrained to 15-degree angles. This helps you draw simple straight lines.</p>
<p>Bezier Tool </p>	<p>The second tool on the Curves flyout is used to create curved lines by using special control points. It is one of the more difficult tools to master.</p>
<p>Artistic Media Tool </p>	<p>The third tool on the Curves Flyout acts as an calligraphy pen, a paint brush or an image sprayer. We will not cover this tool in this class.</p>
<p>Pen Tool </p>	<p>The fourth tool on the Curves Flyout allows you to draw curves one segment at a time. It is similar to the Beziér tool.</p>
<p>Polyline Tool </p>	<p>The fifth tool on the Curves Flyout allows you to draw connected straight lines and curves one segment at a time without double clicking.</p>
<p>3-Point Curve Tool </p>	<p>The sixth tool on the Curves Flyout allows you to specify both the height and width of a curve as you draw it. It works very much like the 3-point ellipse tool. You will not cover this tool in this class.</p>
<p>Connector Line Tool </p>	<p>The seventh tool on the Curves Flyout creates dynamic connectors between shapes as in a flow chart.</p>
<p>Dimension Line Tool </p>	<p>The eighth tool on the Curves Flyout creates dimension lines for technical and architectural drawings. You will not cover this tool in this class.</p>
<p>Rectangle Tool </p>	<p>Used for creating basic rectangles and squares. Squares are created when holding down the Control key as you draw. The flyout gives you the three-point rectangle tool.</p>
<p>Ellipse Tool </p>	<p>Used for creating basic elliptical (oval) shapes and circles. If you need circles, hold down the Control key while drawing. The flyout give you the three-point ellipse tool.</p>
<p>Graph Paper Tool </p>	<p>The Graph Paper Tool is used to create a group of identical boxes that simulate at sheet of graph paper. When the Flyout is activated you can also select the Spiral and Polygon Tools.</p>

Drawing Rectangles

1. Go to the Standard Toolbar and select the Open button.
2. Go to the folder where you stored the class files and open **Open 3rd.cdr**.
This file contains templates for drawing basic shapes.
3. Go to Toolbox and select the Rectangle Tool.
Notice the cursor changes to indicate the tool you are using. Place the cursor in the upper-left corner of the top rectangle shape.

- Click and drag diagonally along the red line.
You can also draw a rectangle shape by drawing one dimension (height), then the other (width). Release the mouse button when finished.

Drawing squares

- Move to the square shape.
- Place the cursor on the upper left corner.
- Hold down the **Control key**.
Don't release it until you are finished. The Control key constrains the sides of the rectangle, forcing it to become a square.
- Click and drag diagonally along the **red line**.
- Release the mouse first**, then the **Control key**.
Since the keyboard is modifying the mouse, you must release the mouse first. If you do not, you will lose the modification – in this case the constraint for creating the square.
- Try redrawing the objects for practice.

Drawing from the center

- Go to **page 2**.
- Be sure the **Rectangle Tool** is selected.
- Place the Rectangle Tool in the center of the rectangle at the cross marks.
- Hold down the **Shift key**
The Shift key modifies drawing tools to draw objects from their centers.
- Click and drag down and to the right to create a rectangle.
- Release the mouse first**, then the Shift key.
- Move to the square shape.
- Hold down both the **Control key** and the **Shift key**.
- Click and drag to draw the square.
You can use both modifiers at the same time while drawing .
- Practice some more if you need to.

Drawing a 3-Point Rectangle

- Go to **page 3**.
- Choose the 3-point rectangle tool from the rectangle flyout.
- Click on the red dot marked 1 and hold down the mouse button.
- Drag to the red dot marked 2.
- Release the mouse button.
- Click on the red dot marked 3.
The tool allows you to establish the height and width of the rectangle as you draw. Practice by doing the second rectangle.

Note: If you have trouble making the first line of the rectangle straight, hold down the Control key as you draw the first line of the 3-Point Rectangle but let up after you release the mouse button. This insures your rectangle is straight but does not draw a square. The Control key will constrain your 3-Point rectangle to a square just like with the standard rectangle tool if you hold it down as you go to the third point.

Drawing Elliptical Shapes

Elliptical shapes are created using the same basic mouse movements as those used when creating rectangles and squares. By adding the Control key you can create circles while drawing with the Ellipse Tool.

- Go to **page 4**.
- Go to the **Toolbox** and select the **Ellipse Tool**.
Notice the cursor indicates which tool you are using.
- Place the cursor on the blue dot.
- Click and drag diagonally along the red line.
- Release the mouse button.
Notice that the selection indicators for the ellipse are showing a bounding box, not a bounding ellipse. The point where you began the ellipse is not where the line of the ellipse is drawn. This is a good reason to draw your ellipses from the center.
- Place the cursor on the red dot.
- Hold down the **Control key**

8. Repeat drawing as in step 4.
The Control key proportionally constrains the height and width to create a circle .
9. Release the mouse, then the **Control key**.

Drawing elliptical shapes from the center

1. Go to **page 5**.
2. Place the Ellipse Tool on the crossed lines in the dotted ellipse.
3. Hold down the **Shift key**.
4. Click and drag to create an ellipse.
5. Release the mouse, then the **Shift key**.
6. Move to the circle shape.
7. Hold down the **Control key** and the **Shift key**.
8. Repeat drawing as in step 4.
9. Release the mouse, then the keyboard keys.

Drawing a 3-Point Ellipse

1. Go to **page 6**.
2. Choose the 3-point ellipse tool from the Ellipse flyout.
3. Click on the red dot marked 1.
4. Drag to the red dot marked 2.
5. Let up on the mouse button.
6. Move the cursor to the the red dot marked 3.
The final movement sets the height or diameter of the ellipse. Notice it ends at the bounding box indicator.

Note: The Control Key constraint works here just as it does in the standard ellipse. Hold down the Control Key as you drag the line to establish the diameter of the circle and when you click on the outside of the circle for the third point, you will get a circular ellipse of exactly that diameter. The technique for drawing with the 3-Point Curve tool is the same as that for the 3-Point Ellipse. You establish the first point, drag to the end of the curve, then drag to establish the height of the curve.

Drawing Polygons

Polygons are multi-sided closed shapes. By default, the *Polygon Tool* is set to draw pentagons. By changing the tool properties, you can draw a polygon with up to 500 sides, which looks very much like a circle.

Drawing Spirals and Grids

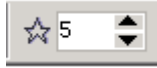
1. Go to **page 7**.
2. Hold down the **Graph Paper Tool** button to activate the Object Flyout.
3. Select the **Spiral Tool**.
4. Using click and drag, draw the spiral object.
5. Delete the object.
6. Repeat drawing while holding down the **Control key**.
Remember that the Control key keeps the proportion as you draw.
7. Hold down the **Spiral Tool button**.
After selecting a tool from the Flyout, it becomes an active tool button.
8. Select the **Graph Paper Tool**.
9. Draw a grid with the **Graph Paper Tool**.
10. Repeat using the **Control key**.

Note: The Graph Paper Tool creates the grid out of rectangles. You can ungroup them and resize them if needed.

Drawing Polygons

1. Go to **page 8**.
2. Go to the Toolbox and select the **Polygon Tool** from the Object Flyout.
Remember holding down a tool button that contains a triangle produces a Flyout.
Notice the change in the cursor.
3. Place the cursor at the start point for the triangle.

4. Click and drag along the red line.
As you can see, it does not draw a triangle. To draw a triangle the number of sides must be changed in the tool properties.
5. **Release** the mouse.
6. Go to **Standard Toolbar** and select the **Undo button**.
The drop down list on the Undo button allows you to undo several steps at a time.
7. **Go to the Property Bar**.




8. Change the **number of points/sides to 3**.
9. Hold down the **Control key**.
The Control key will keep all sides equal while drawing.
10. Redraw the triangle.
11. Change the number of sides to 6.
Refer to the previous steps if needed.
12. Draw the hexagon by following the red line.

The PerfectShapes Flyout




The Perfect Shapes tool allows you to draw several kinds of objects quickly. Perfect Shapes can be filled, resized, and effected just like any object you draw. The Perfect Shape displays a red diamond to show it is a Perfect Shape.

Basic Shapes	This is a collection of 15 basic shapes you can use as the foundation of an object. The example above is one of these shapes.
Arrow Shapes	This is a collection of 21 different types of arrows to use with a drawing.
Flowchart Shapes	This is a collection of 23 shapes commonly used in a flow chart.
Star Shapes	This is a collection of 12 stars and star bursts. The polygon tool will create a 5-pointed star but with internal lines. This tool creates a 5-pointed star without internal lines.
Callout Shapes	This is a collection of 6 text balloons for use as callouts in both cartooning and technical drawing.

1. Go to page 9.
2. Go to the Toolbox and select the PerfectShapes tool flyout.
3. Select the Star Shapes tool. 
4. Go to the Property Bar and drop down the options menu.
5. Choose the 5-pointed star.
The second option is the 5-pointed star.
6. Click and drag down the red line to form a star.
7. Go to the flyout and choose the PerfectShapes tool.
8. Go to the Property Bar and drop down the options menu.
Notice the menu button icon changes for each options.
9. Choose the smiley face object.
10. Click and drag to on the red guide line.
11. Go to the PerfectShapes flyout and select the Callout tool.
12. Go to the Property Bar and choose the option that matches the guide.
13. Click and drag in the direction of the arrow.
The beginning point sets the tail or narrow point of the text balloon.



Drawing Lines and Curves

1. Go to **page 10**.
2. Go to the **Toolbox** and select **the Freehand Tool**. 
3. **Click** to start the line (do not drag).
When you drag the tool it does not draw straight.
4. Move to the end of the line and **click again**.
Clicking a second time sets the line segment.

5. Draw another line while holding down the **Control key**.
The Control key is used to help draw straight by constraining the line to horizontal or vertical. It can be angled at 15 degree increments. The constraint value can be changed using the **Options, Workspace, Edit dialog box**.
6. Draw the diagonal line while holding down the **Control key**.
7. Place the tool on the left end of the curved line at the bottom of the page.
8. Click and drag to trace over the curved line.
9. Go to the **Edit menu** and choose **Select All**.
10. **Delete** the lines.
11. Take a moment to practice drawing more lines.

Creating polylines

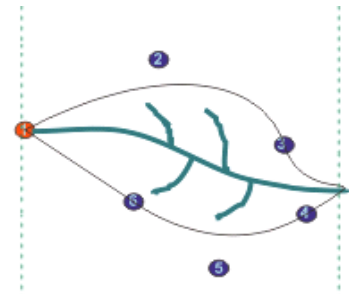
1. Go to **page 11**.
2. If needed, select the **Freehand Tool** again.
3. Place the Freehand Tool at the top left end of the object.
4. **Click** to start the first line segment.
5. Move down to the first dot. (**Do not drag!**)
6. **Double-click**.
This ends one line and begins the next line so they are connected.
7. Move to the second dot.
8. **Double-click**.
This ends one line and begins the next line so they are connected.
9. Repeat the previous steps.
10. Move to the last dot.
11. **Click once** to stop drawing.
Clicking only once will end the line.

Tip: If you stop prematurely, you can continue drawing on the same line by placing the Freehand Tool on the end and start drawing again. DRAW assumes you want to connect the lines if you begin again close to the end of another line.


The Beziér Tool

The *Beziér Tool* creates curves by adding *control points* to the line segments. These control points are used to bend the lines as you draw. It is one of the more difficult tools to use. If you do not get the hang of it right away, don't feel bad. It just takes practice. The next exercise uses the familiar connect-the-dots approach to help you learn the Beziér Tool. The Pen tool was added in Draw 11 and is a modified Beziér tool. You will draw with each.

Be sure to follow the steps closely. As you will find out, the tool works differently based on how you start and stop the curves. When you are finished you will have created a leaf that looks similar to the one below.




Tip: With the Beziér Tool, Click & Drag creates the curve reference point while Click makes the line.

1. Go to **page 12**.
2. Hold down the **Freehand Tool button**.
3. Go to the **Flyout** and select the **Beziér Tool**. 
4. Notice the cursor change.
5. Place the cursor on dot 1.
6. **Click and drag** to dot 2.
The small black squares at the end of the dotted line are the control points. They help shape the curve of the line while drawing. The control points work like magnets as they pull the line toward them.
7. **Release** the mouse button.
8. **Move** to dot 3 (**DO NOT DRAG**).
9. **Press and hold down** the left mouse button until the line appears.
10. **Drag** to dot 4.
Moving to a new spot before dragging sets the line first, then creates the curve.
11. **Release**, then **click and drag to dot 5**.
This combination starts a new line segment and allows the new curve to be independent of the previous one.
12. **Release** the mouse button.

12. **Move** to dot 6.
13. **Press and hold** down the mouse button until the line appears.
14. **Release** the mouse button.
15. Place the cursor on top of the start point on the red dot.
16. **Double click** and the line should appear.
17. The shape should close. It can now be filled with color.

The Pen tool

1. Go to **page 13**.
 2. Hold down the **Freehand Tool button**.
- 
3. Go to the **Flyout** and select the **Pen Tool**.
Notice the cursor change.
 4. Place the cursor on dot 1.
 5. **Click and drag** to dot 2.
The small black squares at the end of the dotted line are the control points. They help shape the curve of the line while drawing.
 6. **Release** the mouse button.
 7. **Move** to dot 3 (**DO NOT DRAG**).
Notice that unlike the Bezier tool, the line is drawn as you move the pen.
 8. **Press and hold down** then **Drag** to dot 4.
 9. **Release**, then **click and drag to dot 5**.
This combination starts a new line segment and allows the new curve to be independent of the previous one.
 10. **Release** the mouse button.
 11. **Move** to dot 6.
 12. **Release** the mouse button.
 13. Place the cursor on top of the start point on the red dot.
 14. **Single clicking ends the drawing**.

As you can see, the new Pen tool is somewhat easier to use. If you are going to draw many curves, it will be worth your time to master these tools as well as the 3-Point curve tool.

Applying Color

With the mouse

Although color can be applied using the Fill or Outline Tool, it is faster to apply color directly from the Color Palette.

1. Go to **page 14**.
2. Select the square.
3. Go to the **Color Palette** and select a color by clicking the **left mouse button**.
The square should fill with your selected color.
4. Look at the Status Bar in the far right lower corner. The Status Bar changes to give you the fill information on the selected object. You can enlarge the Status Bar height by dragging the top border.
5. **Right-click** on a different color.
The outline is now changed. The right mouse button assigns the outline color.
6. Change the fill and outline of the other objects.
7. Select the blue text.
8. Right-click on a different color.
The outline fill also works with text object.

Mixing colors








1. Select the square again.
2. Hold down the Control key and select another color on the color palette.
3. Click once on the other color.
CorelDRAW adds a 10 shading of that color to the square.
4. Click again on another color to mix it with the first.
You can see how you can manipulate the colors here to obtain a new shade for your drawings.

By dragging

1. Select the star.
2. Click on a color and drag that color to an arm of the star.
The cursor icon changes to show you are dragging a fill color. The color will be used to fill the star. Note that only parts of the star will be filled. The default setting in DRAW creates a six chambered object from the polygon. To create a star with one area, must use the Perfect Shapes tool.
3. Click on another color and drag that color to the line that creates the star.
The cursor icon changes to show you are dragging a line color.
4. Practice this function by changing the colors in the other two objects.

An Overview of Fills

All closed objects can contain fills. Fill styles range from a simple color to a complex bitmap pattern. Fill types are applied to objects through the Fill Tool. Once the object is selected you can choose a fill type from the Fill Tool Flyout. Each fill style has unique characteristics and editing options that are controlled through their respective dialog boxes.

Fill Tool Flyout	
Uniform Fill 	Opens a color dialog box that allows you to change palettes, mix colors, and apply solid colors to selected objects.
Fountain Fill 	Creates a gradient fill. Gradients are formed by merging multiple colors together.
Pattern Fill 	Fills the object by tiling the pattern. You can select from one of the standard fills or create custom fill patterns.
Texture Fill 	Applies a fractal fill. Textures are created using bitmap images. The texture can be edited extensively by the user. Many sample fills are provided as a starting point.
PostScript Fill 	Fills the object with a selected PostScript fill pattern. These will print only on a PostScript printer. Because of the complex nature of these fills, they only display in Enhanced View.
No Fill 	Removes the fill of selected objects. It is the same thing as selecting the invisible fill from the Color Palette.
Color Docker 	Used to create color and apply it to either the Fill or Outline of an object.

ALIGNING OBJECTS

When preparing to align objects the selection order is important. All selected objects will align to the last selected object.

- Go to **page 16**.
- Select the yellow 'X'.
- Hold** down the **Shift key**.
- Select the red circle, then the blue box.
Objects align with the last one selected.
- Go to the **Arrange menu, Align and Distribute**.
- Select the **Left Align** option.
- Click **OK**.
Changes do not take effect until you apply them. Notice how the objects all aligned with the blue box. That is because it was the last selected object. The Preview button allows you to move the dialog box and see if the resulting alignment is what you wanted.
- Activate the **Align and Distribute** dialog box.
- Select both the **Center** options.
Selecting both options at the same time will center objects on top of each other.
- Click **OK**.
A fast way to center objects on each other is to click the Center to Page box, then clear the Center to Page leaving the other two boxes checked.

Alignment Options	
A. Vertical Alignment Options	
B. Horizontal Alignment Options	
C. Page Alignment Options:	
Edge of Page...	Aligns objects on edge of drawing page along the parameter you select. For example, Right side, edge of page aligns all objects to the right edge of the page, along their right sides.
Center of Page...	Moves all objects to the center of the page. Ungrouped objects will stack.

Note: The Align and Distribute functions effect the objects according to the bounding box, or area of the object. When you select an object, the selection boxes are on the edges of this box. Keep this in mind when aligning irregularly shaped objects. To achieve an exact alignment, you may need to manually move an object.

Alignment shortcuts

DRAW provides some fast alignment options using the keyboard. At least two objects must be selected for this function to work.

- Select the yellow 'X'.
- Hold down the **Shift key**.
- Select the red circle, then the blue box.
- Press the **t** key.
Objects are aligned at the top of their bounding boxes.
- Practice using these short cuts.

Key	Function
e	Aligns selected objects by their horizontal centers.
c	Aligns selected objects by their vertical centers.
l	Aligns selected objects by their left sides.
r	Aligns selected objects by their right sides.
b	Aligns selected objects by their bottom edges.
t	Aligns selected objects by their top edges.
p	Aligns selected objects to the center of the page.

Distributing objects

- Go to page 16.
- Select all the objects on the page.
You can use the Select All command from the Edit menu, or double-click on the Pick Tool button.
- Go to the **Align and Distribute** dialog box and select the **Distribute tab**.
- Select the **vertical center option**.
- Click OK.
The objects are now evenly spaced out between the top and bottom.
- Go to the **Edit menu** select **Undo**.
- Go to the **Align and Distribute** dialog box and select the **Distribute tab**.
- Select **Vertical Center** option again.
- Select the **Align tab**.
- Select the **Horizontal Center** option.
As long as you do not click OK, options from one panel remain active allowing you to combine both align and distribute options. Adding the Center align option will align and distribute objects at the same time.
- Click OK.

Note: Attempting to distribute a large number of objects will sometimes result in odd, unexpected arrangements. When this occurs, a function of the way the program remembers where objects are, called stacking order, has interfered with the distribution. Try distributing a objects a few at a time.

Ordering Objects

1. Go to **page 17**.
2. **Select the red object.**
This object is actually the background and needs to move to the back.
3. Go to the **Arrange menu – Order - To Back** (Shift+Page Down).



Tip: You can also use the To Front and To Back buttons from the Property Bar.

4. Select the lemon.
Notice it is a group of two objects, the yellow lemon and the white light accent.
5. Go to the **Arrange menu - Order - In Front of**.
6. Click on the green leaves with the large black arrow.
The leaves are moved behind the lemon.

Note: Often, the Back One or Forward One commands don't seem to work. The computer creates a 'page' for each object. What you see as two objects next to each other, may be several 'pages' apart. This is why Corel added the In Front of command. This is called the stacking order of the objects.

CREATING DUPLICATES

The duplicate command

The Duplicate command creates a copy of the original and places it back into the drawing offset from the original.

1. Go to **page 18**.
2. Select the red box.
3. Go to the **Edit menu** and select **Duplicate (Ctrl+D)**.
The Duplicate command creates a copy and places it back into the drawing offset to the top and right of the original. This default placement can be changed from the Options dialog box or on the Property Bar when nothing is selected.
4. Go to the **Color Palette** and select a gray color.
5. Move the gray object to the back (**Shift + Page Down**).
This creates a drop shadow for the red box.

The copy command

The Copy command is great for duplicating objects when the object needs to stay in the same place on multiple pages – for example, a header or footer. You can also use the '+' on the number keypad to copy and paste objects but only on the same page.

1. Select the yellow circle.
2. Go to the **Edit menu** and select **Copy (Ctrl+C)**.
>A duplicate is made and placed on the Windows Clipboard.
3. Return to the **Edit menu** and select **Paste (Ctrl+V)**.
The copy is placed directly over the original.
4. Move the copy to the right.
5. You can also use the **Cut**, **Copy**, and **Paste** buttons pictured here.



Working with Object Groups

Often, when working with many groups, you want to insure the objects don't move in relation to each other. To keep objects in the same place, DRAW provides the Group function.

1. Go to **page 20**.
2. Go to the **Edit menu** and choose **Select All**.
Double clicking on the Pick Tool also selects all objects.
3. Go to the **Property Bar** and select the **Group button (Ctrl+G)**.
You can also find this command under the Arrange menu. Look at the Status Bar. When objects are grouped, the Status Bar tells you that you have selected a group and how many objects are in the group.
4. Move the group to a new location.
5. Go to the **Color Palette** and select any color.
The whole group changes. As long as they are grouped they will act as one object.

Editing within a group, child objects

Sometimes, you may want to change one object within a group but don't want it to move.

1. Place the pointer over the antelope.
2. Hold down the **Control key**.
3. Select the antelope.
Round selection handles appear. You can now make a change to the object. The text is on a separate layer and is locked.
4. Release the **Control key**.
5. Move the antelope down a bit.
6. Change the color of the antelope.
You can do almost any editing task without ungrouping.
7. Press the **Escape key** to finish.
8. Reselect the group of objects.
9. Go to the **Property Bar** and select the **Ungroup button (Ctrl+U)**.
This button acts as a toggle between grouping and ungrouping.
10. Press the **Escape key** to deselect the objects.
Even though the objects are now separated from the group, they remain group-selected. Deselect them first before selecting them individually.

Note: The Ungroup All command releases all groups within groups. For example, you have three groups of three objects grouped together. When you use the Ungroup command, the status bar will show three groups selected. When you use the Ungroup All command, the status



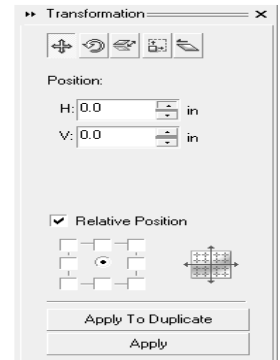
bar will show nine objects selected.

Placing Objects with Precision

1. Go to the class files folder and open the file **Open 4th.cdr**.
Remember you can open a file from the File Menu, from the Standard Toolbar, or using **Ctrl+O**.
2. Go to the **Windows menu → Docker → Transform → Position**.
This opens the Transform Docker with the Position function active.

Indicator grid on Transform Docker

CorelDRAW uses the terms Horizontal and Vertical to indicate which dimensions are changed on an object. Shown here are an indicator grid and properties you will see on many Dockers. The indicator grid, the nine boxes with the center box selected, show where the parameters you fill in will apply. For Position, DRAW moves the object so that the point on the grid is at the parameters you set or moves the object that distance in the direction given by the grid. For Rotate, it shows the point of rotation. For Scale, the grid gives the direction of the change. For Size, it will show the direction of the change and for Skew, the direction of the skew. You will practice each of these in the following exercises. The buttons at the top indicate Position, Rotation, Scale and Mirror, Size and Skew.



Position objects precisely

1. Select the rectangle at the top of page 1.
2. Go to the **Transform Docker → Position**.
Although we activated the Transform Docker using Position, once it is open we can also access all Transform commands.
3. **Deselect Relative Position** if necessary.
Relative position settings allow you to move an object in relation to its current position; as in, two inches to the right or down two inches.
4. In the **Horizontal box**, type: 5.5.
5. In the **Vertical box**, type: 7.
6. Click **Apply**.
The center of the rectangle moves to the specified positions. This can be verified by looking at the Status Bar at the bottom of the window. The rectangle should move down from the top edge of the page. The position of the center point of the object is also shown on the Property Bar. You can also move objects by changing the parameters on the Property Bar but you cannot apply to Duplicate as in the next exercise.

Placing duplicates

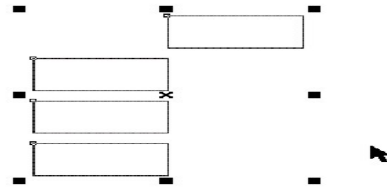
1. Be sure the rectangle is selected.
2. Go to the **Transform/Position Docker** and use the parameters below.
3. Click **Apply to Duplicate**.



A duplicate is now placed down and to the left of the original.

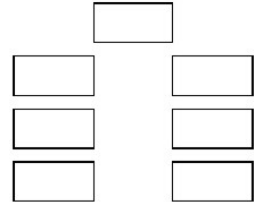
- Using the values below, create two more duplicates.
When finished, your drawing should look similar to the one below.

- H (4.0) and V (5.0) Apply to Duplicate**
- H (4.0) and V (4.0) Apply to Duplicate.**



Moving relative to position

- Select the three lower boxes.
The values change in the Transform/Position dialog box to reflect the selected objects.
- Select **Relative Position**.
- Select the bottom middle position box in the grid.
- Type in settings **V=0, H=3.0**
This will move the duplicates to the right 3 inches.
- Click **Apply to Duplicate**
Your graphics should look something like the one below.
- Save your file. If you want to preserve the original file, do a Save As and rename the file.
You will return to this page later to make other changes to the organizational chart.



Rotation

Remember the exercise in the first session where you created a clock? Here we will use a different approach to do the same thing.

- Go to **page 2**.
- Go to the **Transform Docker** ➔ **Rotation**.
The second button.
- Select the flower petal and move it until the pointed end touches the edge of the flower center.
- Change the point of rotation to the following settings:
 - H = 5.5**
 - V = 4.25**
- Change the rotation angle to **15 degrees**.
- Click the **Apply to Duplicate** button. Continue clicking until you have completed the wild flower, a Texas Indian Blanket.
Another way to complete the flower is to use Ctrl+R, the repeat last function short-cut, after you have moved the petal once.
- Save the file.

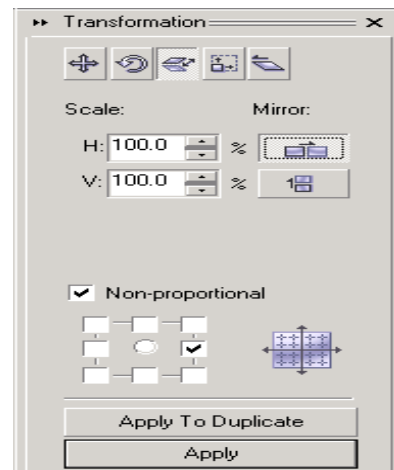
Scale

- Go to **page 3**.
- Select the first tree and place it at the edge of widest part of the road.
- Go to the **Transform Docker** ➔ **Scale and Mirror**.
- Be sure the Proportional setting is selected and the grid selection is the middle both directions.
- Change the **H setting to 125%**.
- Click on the **Apply** button.
Notice that the V setting changed to 125%
- Place another tree at the top or end of the road. Change its size to 25% of the original.
- Move the trees to the side of the road and scale them to give the illusion of a line of trees along a road.
- Save the file.

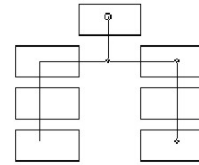
Mirror

In an earlier chapter, you mirrored objects by dragging a middle selection handle from one side to the other while holding down the Control key. Now you will flip an object using the Transform Docker.

- Return to **page 1**.
- Go to the **Toolbox** and select the **Freehand Tool**. Remember to use the Control key to draw straight lines.
- Draw lines to connect the boxes as in the example below.
- Select only the line.
- Go to the **Transform Docker** ➔ **Scale and Mirror**.
- Select the **left/right mirror** button.
- Click the **middle right relative position** box.
This will flip the object back to the right along the right selection handle.



8. Click **Apply to duplicate**.
Your drawing should look similar to the one below.
9. Select the lines and send them to the back with the button on the **Property Bar**.
Because the rectangles have a white fill, you will not see the lines behind them.
10. Save the file.



You will use this page again later.

Size

1. Go to **page 4**.
2. Select the upper right hand box.
3. Go to the **Transform Docker** ➔ **Size**.
4. Clear the box by Non-proportional.
5. Move the grid indicator to the upper right position.
6. Change the H setting to **3.5**.
The Proportional function changes the V setting automatically for you.
7. Click the **Apply button**.
The box resizes from the grid point toward the center.
8. Select each box and resize it, changing the grid point setting so the boxes resize to the center of the page.
The grid sets the direction of the increase or decrease in size. Selecting the center of the grid and proportional causes the object to increase equally on all sides.

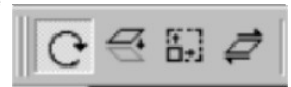
Skew

1. Go to **page 5**.
2. Select the box.
3. Go to the **Transform Docker** ➔ **Skew**.
4. Check the box by **Anchor Point**.
This functions like the grid point setting in the Size function. The anchor point will remain stationary and the object will distort from that point.
5. Choose the upper right corner on the grid as the anchor point.
6. Change the H skew angle to 15%.
7. Click **Apply to Duplicate**.
8. Repeat the process on each of the four boxes. Change the anchor point on each and see what results.
The resulting objects look like a stack of paper.
9. Save the file.

FREEHAND TRANSFORM TOOL

When you are manipulating objects, you often want to see the effect quickly and apply your ideas before they slip away.

1. Open a new drawing.
You can have more than one file open at a time in DRAW. In fact, the number of files you can have open at any one time is limited only by the resources of your machine
2. Go to the shape tools and draw a few shapes on the page.
3. Go to the **Shape Edit Tool Flyout** and select the **Freehand Transform Tool**.
4. Click on one of the objects you have created.
A dotted blue line appears from that point on the object. The default mode for the Free Transform Tool is rotate.
5. Move the object around.
The point where you first selected the object is the center of the rotation.
6. Notice the Property Bar has changed to reflect the tool and the direction of rotation. At the left side of the Property Bar are the icons for the other Freehand Tools, Skew, Angle Reflection, and Size.
7. Experiment with each tool on the objects you have created.
These could become very useful for you. Remember, the point of action is the point where you click on the object.
8. You will not use these images again in this class, but you may want to save them. If not, just close the document without saving.



MANIPULATING OBJECTS

The basic element of a CorelDRAW illustration is the vector object. Objects can be manipulated in a number of ways to create different elements in your drawing. The lines that form an object are called vectors and those vectors are connected with nodes. Vector drawing applications create objects mathematically. Predefined objects include rectangles, ellipses, polygons, and curves. Each vector of the image is defined by the nodes. These react in set ways to changes. Some manipulations cannot be applied to defined shapes. To change predefined objects, the objects must be changed to a series of lines or curves. You will cover this under the command **Convert to Curves**.

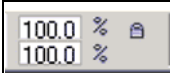
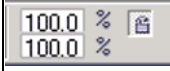
CorelDRAW creates two basic types of objects – open and closed. Open objects include straight lines and curved lines. Closed objects include *circles, rectangles, squares, polygons, and freehand drawings*. All objects can be 'filled' with an interior fill style, however, unless the object is closed, the fill will not appear.

Transform Docker and Property Bar

Two of the main tools for manipulation of objects are the Transform Docker that you covered in Chapter 5 and the Shape Tool. Many of the elements of these functions are also found on the Property Bar. As with all CorelDRAW operations, functions are accessed many different ways.

Proportional vs. non-proportional buttons

One of the more confusing elements of CorelDRAW are the locks for proportional and non-proportional changes. These button are found on the Property Bar. Proportional changes keep the width and height of an object in direct relation to each other as they were in the original object. In other words, if you make a square an inch larger, it will remain a square, not become a rectangle. Non-proportional allows you to change one direction's dimension without affecting the other dimension.






Button	Definition
	When the lock is closed (default, button raised), all changes will be proportional. A change to the width (H) will always change the height (V).
	When the lock is open (button depressed), all changes will be non-proportional. A change to the width (H) will NOT change the height (V).


Note: Size changes made with the selection boxes is not affected by the proportional button on the Property Bar. Only the size indicator boxes on the Property Bar are effected.



Reshaping objects using Nodes



The most basic editing of objects is moving and changing the nodes. This is done with the Shape Tool. The various elements of the shape tool are shown in the table below.

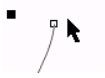
Button Name and Icon	Function
<p>Add</p> 	Adds nodes where you clicked on the line. When you select a node and click this button, it adds a node half way between the selected node and the nodes to either side.
<p>Delete</p> 	Deletes selected node. Double clicking on a node will also delete the node.
<p>Join</p> 	Connects two selected end nodes on two connected lines. Moves each node an equal distance to meet in the middle.
<p>Break apart</p> 	Breaks a line at the selected node and adds an additional node. The nodes will be on top of each other.
<p>To Line</p> 	Changes a curved line into a straight line segment.

<p>To Curve</p> 	<p>Changes a straight line segment into a curved line and adds control handles.</p>
<p>Cusp</p> 	<p>Changes the node property so the curve control handles can be moved independent of each other.</p>
<p>Smooth</p> 	<p>Changes the node property so the curve control handles stay in a straight line. The curves form compliments to each other.</p>
<p>Symmetrical</p> 	<p>Each side of the curve mimics the other as in you move one control handle and the other moves in the opposite direction.</p>
<p>Reverse ends</p> 	<p>Reverses the end nodes on a line or curve. This is useful when you are putting arrowheads or other special endings on lines.</p>
<p>Extend</p> 	<p>Creates a new line segment between two unconnected nodes of an object.</p>
<p>Extract Subpath</p> 	<p>Removes nodes and line segments from within an object.</p>
<p>Auto Close</p> 	<p>Draws a line from the first to the last node of a line segment.</p>
<p>Stretch and Scale</p> 	<p>Allows you to make an object larger or smaller by dragging the nodes.</p>
<p>Rotate</p> 	<p>Allows you to rotate or skew selected parts of an object using the nodes.</p>
<p>Align</p> 	<p>Places the nodes in line with each other either horizontally or vertically.</p>
<p>Select All</p> 	<p>Selects all the nodes in the active object.</p>

<p>Elastic Mode</p> 	<p>Alters the way nodes are moved by proportionally maintaining the distance between nodes as they are moved.</p>
<p>Auto Reduce</p> 	<p>A slider that allows you to simplify an object by having DRAW remove nodes that are unnecessary to maintain the shape. Can be used for the entire object or selected nodes.</p>

In certain situations, when you select a line or an object, the program will change from the Pick tool to the Shape tool. When this happens, you will be manipulating nodes rather than just moving the object. The shift will be indicated by the cursor icon and the appearance of nodes on the lines in your drawing.

This is the Pick tool cursor next to a node in a selected object.



This is the Shape tool cursor next to the same node.



You will find your work moves faster and you will be less frustrated if you learn to recognize the cursor icons of the various tools.

Working with Nodes on lines

1. Reopen **Open 4th.cdr**
2. Go to **page 7**.
3. Select the **blue line**.
4. Go to the **Toolbox** and select the **Shape Tool**.
When you select an object with the Shape Tool, the nodes display.
5. Select the starting node (first on the left).
The first node will always be larger than the others. It will be at one end of a line but can be at any point on a closed object.
6. Click and drag to move it around.
This will change the length and position of the line segment.
7. Hold down the **Shift key**.
8. Select the second node point.
9. Place the cursor on either node.
10. Move the nodes.
Just as objects work together when selected, so do nodes.
11. Group-select two other nodes.
The same techniques used for selecting multiple objects are also used for selecting multiple nodes. Drag the Shape Tool to surround the nodes. You can also use the **Shift+Click** to select multiple node points.
12. Place the cursor on one of the selected nodes.
13. Move them.
The line segment in-between the selected nodes remains the same, while adjacent line segments are reshaped.

Adding nodes

1. Click on a portion of the blue line that has no node.
A small black circle appears on the line.



2. Go to the **Property Bar** and select the **Add node button**.
A new node appears on the line .
3. Select another node.



4. **Delete** it with the delete node button.
Double clicking on a node will also delete the node. Deleting nodes can be a fast way to straighten out lines.

Tip: If you need a new node precisely in the middle of two other nodes, select an existing node, then click the Add node button. A new node will appear centered between it and the next node on the line towards the beginning of the line. The largest node is the first node of a line.

Aligning nodes on straight lines

1. Select the red line.
You are automatically in reshape mode when you select objects with the Shape Tool.
2. Select the bottom middle node.
3. Hold down the **Shift key**.
4. Select one of the top nodes.



5. Go to the **Property Bar** and select the **Align button**.
This activates the Node Align dialog box.
6. Select **Horizontal** to deactivate that option.
This will align the nodes vertically. Aligning the Control Points aligns the control handles of the nodes on curves. The option is grayed out when aligning nodes on lines. You saw the control handles when you drew with the Beziér Tool.
7. Click **OK**.
The nodes align and by doing so, reshape the object.

Moving nodes on curved lines

1. Select the curved line at the bottom of the page.
2. Select a node.
The Status bar will display the characteristics of the node. If necessary, right click on the Status Bar and choose Refresh.
3. Select one of the control points and move it.
The control points are the blue dotted lines that extend from the node. You used them when you created an object with the Beziér Tool.
4. Move other control points and notice what happens.
5. Place the cursor over the line and move it.

Note: Working with curved lines takes a bit more care than working with line segments. Not only can you reshape them with the nodes, you can move the lines as well. The Control handles will move to match your changes to the line segments.

Converting line segments

Objects created with straight lines do not have control points. To change a line to a curve, you will use the node at the end of the line. This will add control points along the lines. Once they are activated you can create a curve by moving them.

1. Select the **red line**.
Be sure you still have the Shape Tool selected.



2. Select all the nodes with the Select all button.



3. Go to the **Property Bar** and select the **To Curve button**.

This converts all selected lines to curves.

4. Press the **Escape key** to deselect the nodes.
5. Select only one node.
The control points follow the lines because this object was created with straight lines
6. Move a control point.
Notice that you may also grab the line when the control points are close to the line.
7. Group-select all the nodes.



8. Go to the **Property Bar** and select the **Smooth button**.

Smoothing bends straight lines by averaging out the distance between node points. This is a great technique to create curved polylines.

Connecting and disconnecting nodes

1. Select the **blue line**.
2. Select the two end nodes.
Each segment has two nodes.
3. Go to the **Property Bar** and select the **Extend button**.



A line is drawn to connect the selected points together.

4. Go to the **Standard Toolbar** and select the **Undo button**.
Or use Ctrl+Z.
5. Select one of the other node points.



6. Go to the Property Bar and select **Break Path button**.
This command is used to split the line at the selected node.
7. Move one of the disconnected nodes.
The nodes are on top of each other. Zooming in helps to move one or the other.



8. With both nodes selected, click on the **Join node button**.
The nodes move and are joined in the middle of the space between them. If you want the nodes to combine at a particular place, drag both nodes to that point and have them touching. The Join function will combine the two nodes into one.
9. Select the **curved line** at the bottom of the page.



10. Click on the AutoClose button on the Property Bar.
As you can see, this can create some very unusual results. Use the same command on the other lines to see how the results vary.
11. Go to **page 8**.

Cusping node points

1. Zoom in close to the lower fish.
Make him look like the top shark. Use the Zoom level list on the Property Bar, the Zoom Tool from the F2 button, or the Zoom Tool from the Toolbar.
2. Select the top fin of the fish with the Shape Tool.
Use the **Ungroup All button** if necessary. You cannot use the Shape Tool on a grouped object. Notice the control points are already there. That is because this line was created using curved line segments.
3. Select the top node point.
4. Move one of the control points.
Notice how difficult it is to get the proper shape.
5. Go to the **Standard Toolbar** and select the **Undo button**.
6. Be sure the top node point is still selected.



7. Go to the **Property Bar** and select the **Cusp button**.
Be sure the node is still selected since changes will only apply to selected nodes.
8. Move the lower (right) control point to edit the curve of the fin.
9. Reshape the fish to match the shark.
Remember to Cusp the points if necessary.

Reshaping Closed Objects

Reshaping rectangular objects

1. Go to **page 9**.

- Select the blue rectangle.
Notice the nodes in each corner. This is a defined, closed object.

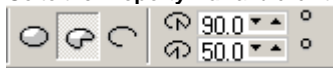


- Go to the **Property Bar** and click the **Round Corners Together lock**.
With the lock open, the corners can be rounded one at a time. With the lock closed, the corners will round together.
- Click on one corner node.
Be sure only one node is selected. Notice the mouse cursor icon changes to the Shape Edit Tool cursor.
- Round the corner by pulling the node along the line that makes up the side of the rectangle.
Notice that the number of degrees in the arc is shown on the Property Bar. You can also enter the number in and change the corners so several rectangles match. Press the Enter key to apply the changes.
- Select the red rectangle.
- Go to the **Property Bar** and depress the Round Corners Together lock.
- Click on one corner node.
- Round the corners by pulling the node along the line that makes up the side of the rectangle.
All four corners round together in the same amount. As with the individual corner rounding, you can enter the arc measurement and press the Enter key to apply these change.

RESHAPING ELLIPTICAL OBJECTS

Elliptical objects can be used to create arcs, pie shapes for graphs, and pie wedges.

- Select the **blue circle**.
Notice an elliptical shape contains only one node point.
- Keeping the cursor **outside of the circle**, click and drag the node point.
This produces arcs. Once the object is reshaped a second node appears.
- Return the node to the original position.
- Repeat step 2, keeping the cursor **inside the circle**.
This will produce a pie-shaped object that shows the fill. Moving the pointer outside the circle creates an arc that does not show the fill. The fill is defined for the circle.
- Select the **red circle**.
- Go to the **Property Bar** and click the middle button of the three shown here.



- The circle becomes a three-quarter pie shape.
A 270 degree arc is the default.
- Click on the third arc icon.
The object becomes a 270 degree arc.
- Click the Reverse button.
The arc reverses to the smaller portion of the circle. This works on the pie shape also.



- Arc and pie shapes can be set using the Property Bar parameters.
This allows you to create duplicate arcs and pies for charts and technical drawings.

Virtual Segment Delete Tool

- Go to **page 9**.
- Select the clip art image.
Remember to use the Pick tool to select.
- Check the information on the status bar.
- Ungroup the image and notice the number of objects that make up the picture.
- Press the Esc key to de-select all the objects.
- Select the words For Sale.
Notice the selection indicator boxes and nodes.
- Press the delete key.
Notice that much more than the words For Sale are removed!
- Undo your last action.
- Go to the Shape Edit Flyout and choose the last tool.
This is the Virtual Segment Delete tool.
- Go to the View menu and choose Wire Frame.
This allows you to look at the basic structure of the clip art.

11. Zoom in and click on the letter S.
12. Continue removing the letters and shading in the box.
13. Go to the View Menu and choose Normal .
Notice that the yellow color is not displaying.
14. Go back to Wire Frame.
15. Choose the Shape edit tool.
16. Select the edge of the yellow area.
Remember it is the front of the house.
17. Choose the Auto-Close button.
18. Check the drawing in Normal view.

COMBINING AND SHAPING

Problem: Applying the Break Apart command to merged objects may not return them to their original condition. Some alterations cannot be reversed. This is not predictable. Plan before you combine.

Combining closed objects

1. Go to **page 10**.
2. **Group-select** all the **red circles**.
Probably the best way is to marquee select. The text is on another layer. You cannot select it from the current layer.
3. Go to the **Arrange menu** and select **Combine (Ctrl+L)**
Every other circle is knocked out. A new object is now formed. The fill for the new object is determined by the fill of the first object chosen. Because all of our objects were filled with red, the final object has a red fill. If the resulting object does not have the fill you anticipated, select the objects in the reverse order.

Combining open objects

1. Go to **page 11**.
2. Group-select the two blue line objects.
3. Go to the **Arrange menu** and select **Combine (Ctrl+L)**.
Open objects will react differently than closed objects when combined. When they are combined, they create one object giving you reshaping control over both simultaneously.
4. Go to the **Toolbox** and select the **Shape Tool**.
Notice there are node points on both lines. The Shape Tool is not available for Grouped objects.
5. Select the leftmost end nodes on both blue lines.
6. Go to the **Property Bar** and select the **Extend button**.



- Remember that the extend button joins nodes by adding a line that connects them together.
7. Repeat to connect the right end nodes.
With both sides connected, you now have a closed object.
 8. Give the new object yellow colors fill.
Because it is now closed, the fill will display.
 9. Go to **page 12**.

Note: You will see buttons on the Property Bar to apply all three of the following functions. While these button apply the effect, they do not allow for the options seen in the Docker. Once you have become familiar with the functions, you may find it easier to use the buttons.

Welding objects

1. Select the **blue diagonal** line.
Notice it overlaps the circle. You can see the outlines of both shapes.
2. Go to the **Window Dockers Shaping**.
This will activate the Shaping Docker.
3. Click the **Weld To button**.
4. Select the **red circle** (this is the target object).
The two are welded together and form a new object.
5. Go to the **Standard Toolbar - Undo Button**.

6. Go to the **Weld Docker - Leave Original Target Object**.
This is the object you weld to. It is the one you select when you weld. Notice the window in the Docker. This is a visual cue.
7. Select **Other Object(s)**.
8. Click the **Weld To button**.
9. Select the circle.
When you leave the original objects they remain along with the welded object, which is below the originals.
10. Drag the weld off the page.
The originals may be on top. The blue rectangle turns red because it is welded to the red circle. The target object determines the fill and outline of the final object.

TRIMMING OBJECTS

1. Go to **page 13**.
2. Select the large black arrow.
The selection order is important. The last selected will be the object trimmed.
3. Go to the **Shaping Docker - Trim**.
4. Deselect **Source Objects** and **Target Objects**.
5. Click on the **Trim button**.
6. Click on the **red rectangle with the special cursor**.
A notch is created using the overlapping areas of the objects and the arrow is discarded.
7. Go to the Arrange menu **Order** **To the Back**.
This moves the red object back behind the text. Objects that are being affected will be moved to the front layer by the program so you must change the stacking order.
8. Save the file.

Intersecting objects

1. Go to **page 14**.
2. Select the **yellow rectangle**.
3. Go to the **Shaping Docker - Intersect**.
Once you activate the **Docker** you can select the Intersect command because these are all part of a Docker group.
4. **Turn off** Leave Original Target and Source Objects.
5. Click the **Intersection With button**.
6. Select the **red circle**.
The remaining object looks like a red pie slice.
7. Place the red object on the gauge.
8. Move the arrow on top.
9. Rearrange the Order (from the Arrange menu) if needed.

Three other options are available on the drop down menu of the Shaping Docker. These are versions of the first three tools that provide shortcuts. As you become more familiar with the program, you may find them very helpful.

Tool	Characteristics
Weld	Creates one object from two or more. Target object, last object chosen, determines the fill and outline of the final object.
Trim	Uses one object to alter the outline of a second object. Acts like a die cut or a cookie cutter. First object chosen alters the target object.
Intersect	Creates a new object from the area of where two objects overlap.
Simplify	Trims overlapping areas of objects. This tool will work on several objects. The overlapping areas are discarded.
Back minus front	Removes overlap by discarding the front object.
Front minus back	Removes the overlap by discarding the back object.

Simplify

This tool allows you to remove parts of an image that are not visible. It will cause the file to print faster since the printer driver will have to parse less code. All code in a file must be parsed even if the object will not show.

1. Go to page 15.
2. Select the graphic.
3. Ungroup it.
Always use the Ungroup All function before you Simplify.
4. Select the black out line and move it off to one side.
Notice it is a solid black box.
5. Undo the move.
6. Select all the objects again.
7. Go to the Shaping Docker and select Simplify.
8. Click the Apply button.
Because this image only has 20 objects in it, it will simplify quickly. If you have an image with hundreds of parts, do it incrementally. This is a very complex process and takes lots of resources to accomplish. **You can crash the program!**
9. Select the black outline and move it off to the side.
Notice how the other objects have now been used as templates to put holes in the black background.
10. Undo the move.

Back Minus Front — Front Minus Back

These two functions expand the trim function to several objects at one time. They are faster than the trim but do not have the same controls or parameters as the Trim tool. You cannot save the object you cut.

1. Go to page 16.
2. Select the green circle and the blue polygon.
3. Go to the Shaping Docker and select Back minus Front.
4. Click Apply.
5. Undo the effect.
6. Select the triangle and the red square.
7. Go to the Shaping Docker and select Front minus Back.
8. Click Apply.

Experiment with the four shapes and the two functions.

The Eraser and Knife Tool




The Eraser Tool disconnects line segments or parts of an object by removing them. The Knife Tool slices a line between two points across a line or a closed object. Each tool creates two sections, but handles them differently.





1. Go to **page 17**.
2. Select the **yellow box**.
An object must be selected first.
3. Hold down the **Shape Tool button** to produce the **Flyout**.
4. Select the **Eraser Tool**.
Notice the cursor looks like a pencil eraser. In the Tool properties dialog you can set the width of the eraser. When used on a closed object, the sections remain connected as two new closed sections. The option to reduce the number of nodes on the object selected is very helpful and should not be turned off.
5. Click and Drag across the box.
The tool functions just like an eraser. Notice the line color on the sections created by the Eraser Tool. This indicates you have created two objects with the same properties as the original. These shapes are still combined into one object.
6. Experiment with each shape but use the Undo button or Ctrl+Z to return each to their original look.
7. Hold down the **Eraser Tool** to produce the **Flyout**.
8. Select the **Knife Tool**.
Notice the cursor looks like an graphic artist's knife. In the Tool properties dialog, you can choose to leave the cut object as one or have it create two separate, disconnected objects.
9. Select the polyline.
10. Place the knife on a line segment and click.
The icon changes to an upright position indicating you can now cut the object.
11. Click on another segment.
A new line segment is drawn from the first point to the second and the other lines erased.
12. Experiment by cutting the other shapes. Notice the unusual effect on the polygon.
13. Save the file.

The Smudge and Roughen tools are also found on the Shape Edit flyout. These two tools allow you to change the textures and appearance of curved lines. They are not covered in this class.







INTERACTIVE TOOLS FOR FAST CHANGES

The Interactive Tools Flyout contains five tools. You will work with two of them in this class. Each applies an effect or modifies the object as you manipulate it. You can watch the effect as you do it which give you more control over the manipulation.

Tool	Description
Interactive Bend 	Creates a series of shapes that gradually change from the beginning shape to the ending shape. Can be adjusted for speed of change, direction of change, color, and path of change.
Interactive Contour 	Creates a blend using the outline of the selected object. Much improved over previous versions of the effect.
Interactive Distort 	Changes an object based on the nodes that created the object. Default mode is called Push-Pull, others are zipper and twister. The pattern and amount of distortion is determined by the direction of drag, distance of drag and original location of the nodes.



<p>Interactive Envelope</p> 	<p>Allows you to distort an object by placing a container or envelope around the object to constrain the distortion. Distortions can be mirrored on the object and the direction of distortion is controlled.</p>
<p>Interactive Extrude</p> 	<p>Allow you to extend an object as if it were three dimensional. You can control the fills, light source, and beveling of the surfaces.</p>
<p>Interactive Drop Shadow</p> 	<p>Allows you to create the illusion of a shadow for an object. Text will remain editable and the shadow will reform as the text is edited. You can change the color, edge feathering, and opacity of the shadow.</p>
<p>Interactive Tranparancy</p> 	<p>Allows you to create a screening effect over an image. You can cange the color, percent of cover, direction of the gradient, and type of gradient.</p>



Using the Interactive tools

- Go to **page 18**.
- Select the **green pentagon**.
An object must be selected first.
- Hold down the **Interactive Blend button** to produce the **Flyout**.

- Select the Interactive Distortion Tool.

- Click in the middle of the pentagon and drag to the right.
The pentagon is distorted with spikes from each node. Dragging to the left produces rounded spikes.
- Experiment with each option and shape but use the **Undo button** or **Ctrl+Z** to return each to their original look.
Change the type of distortion with the buttons on the Property Bar.
- Hold down the Interactive Distortion Tool to produce the Flyout.

- Select the Interactive Envelope Tool.

- Select the phrase "The Hump".
A red-dotted line with nodes appears around the word. This is the envelope.

- Go to the **Property Bar** and choose the **Double Arc mode**.

- Click on the top center node and drag it up.
The words are distorted into a humped sign. The other modes change the direction of the distortion.
- Save the file and close it.

SETTING UP A PAGE

Pages in a CorelDRAW document can have mixed orientation. Some can be portrait and some can be landscape. In these exercises, you will explore the various options on the Page setup up dialog. When you print the document, DRAW will adjust the orientation so the page prints properly, in other words, you will see the pages as mixed orientation but they will print with the all pages rotated to either landscape or portrait.

- Go to the **Standard Toolbar** and select the **New button**.
Or use (Ctrl+N) or the button on the Standard toolbar.

- Go to the **Property Bar** and choose the **Landscape button**.

Notice the two button to the right of the Landscape button. When the icon at the top is pressed, the page orientation change applies to all pages of the document. When the lower icon is depressed, the change applied only to the active page. In other words, if you add a page when the bottom icon is depressed, that page will be portrait, not landscape.

3. Go to the **Layout menu** and select **Page Setup**.
This activates the Page Size dialog box within the Options dialog. You can also double-click on the page border in the drawing area to activate the Page Size dialog box.
4. Change the orientation to Portrait.
Notice the preview window that shows your changes.
5. Drop down the Paper menu and explore the various sizes of paper available. If you choose the Custom size, you can set a specific page size then save that size for future projects. Notice the option to apply the change only to the current page of the document.
6. Go to the dialog window on the left and change to the Page option.
7. Clear the box in front of **Show page border**.
This is the default parameter. *Show printable area* puts a dotted line on your page based on the currently selected default printer.
8. Click **OK**.
Notice the page is no longer visible. The Show page border gives the illusion that the page is floating above the Desktop.
9. Go to the Tools  Options  Page and turn the *Show page border* back on.
This is a third way of accessing the Page Setup dialog.
10. Change to the Layout dialog window under Page.
This allows you to set up publications such as newsletters, two sided documents or other page arrangements. Leave the parameters at default.
11. Change to the Label dialog.
Templates for almost every type of label stock available world wide are accessible on this dialog. CoreIDRAW opens the page with only one label showing, then prints as the labels are located on the page. It also has templates for such things as perforated business cards and CD labels.
12. Change to the Background dialog window.
Leave the parameters at default but look at the possibilities, not only can you change the color of the page, you can assign a bitmap as a background. This is a Web friendly feature to assist you in designing graphics that are compatible with your background on a Web site.
13. Click **OK** to return to the page.

USING GUIDELINES

Guidelines provide assistance for placing and aligning objects or dividing pages into columns. For example, they can be used to create columns for text layouts, baselines for newsletter headers and footers, or just align objects as you draw. There are three types of guidelines; vertical, horizontal and slanted guidelines.

Placing guidelines

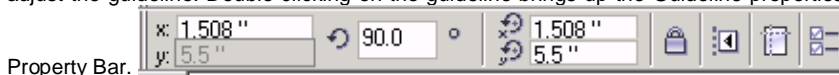
1. Go to the **View menu** and select **Guidelines Setup**.
This will activate the Guidelines Setup dialog box.
2. Type: **0.5 (½ inch)** in the **Horizontal parameters box**.
3. Click the **Add button**.
A dotted guideline is placed at the bottom of the page. Remember that the ruler origins start at the bottom left corner of the page, so 0.50 is ½ inch from the bottom edge.
4. Type: **10.5 (10 ½ inches)** in the Horizontal position text box.
Notice that the position of the guidelines displays as you place them. If you want to change the position of a guideline, highlight it, change the measurement, then click Move.
5. Click **Add**.
Do not use the Return (Enter) key. This will close the box without adding the guideline.
6. Click on the **Vertical tab** and set two guidelines at one half inch from the sides of the page.
Hint: 0.5 and 8.0.
7. Activate the **Snap to Guidelines**.
If you click on a guideline then when in the Pick tool'



you can turn the snap to off with a button on the Property Bar.

8. Click **OK**.
9. After you have added the guidelines click **OK**.

Tip: You can also place guidelines into a drawing by dragging them from either ruler. Place the cursor on top of the ruler, hold down the left mouse button, and drag into the drawing. When you release the mouse, a double-headed arrow will appear indicating which direction you can adjust the guideline. Double clicking on the guideline brings up the Guideline properties dialog or you can use the parameter settings on the



Drawing objects using guidelines

Guidelines are very useful in dividing a page into smaller sections. They provide good visual clues when designing layouts.

1. Go to the **Toolbox** and select the **Rectangle Tool**.
2. Place the mouse cursor close to top left corner where the guidelines meet.
3. **Click and drag** to the lower right corner.
Notice how the rectangle snaps to the guides.
4. **Press the Spacebar**.
5. Go to the **View menu** and select **Guidelines Setup**.
Or double click on the guideline.
6. **Deselect Show guidelines** located in the lower left corner.
7. Click **OK**.

Tip: Although the guidelines are off, they remain in position and active. If you need them again simply turn them on. They remain set within the file. Snap to Guidelines is not the default setting however, and will need to be turned back on each time you open a new file.

8. Close the file without saving.

INTRODUCING THE TEXT TOOLS

One of the strongest features of CorelDRAW is its text capabilities. There are two types of text in CorelDRAW: **Artistic Text** and **Paragraph Text**. Artistic Text allows you to enter single lines of text—for example, callouts, titles, or labels in a drawing. To create a second line, you will have to manually end the line by using the Enter key.

CorelDRAW treats Artistic Text as an object and allows you to apply many of the graphic effects to that text while it retains its ability to be edited as text.

Paragraph Text is used for larger portions of text requiring word processing-type capabilities, such as indents and tabbing. Paragraph Text works within a user-defined area.


For example, if you were creating a brochure and you needed a text area of about 3 inches by 5 inches you would create a Text Frame. The Paragraph Text would then wrap within the frame.

Both types of text can be formatted to include bold, underline, and other text styles normally associated with typesetting. In addition, the Paragraph Text can be further enhanced by using various paragraph formatting such as indentation, tabs, and line spacing. While you can assign basic changes from the Property Bar, you will have to go to the Format Text dialog box for extensive text editing.

Another feature of the Text Tool is the real-time spell checking utility. It functions very similarly to that in most word processors. There is also a Grammar checker available but it is not turned on as a default. If there is a spelling error you will see a red line appear under the text as you type.

This means that the word is misspelled according to the default dictionary. A blue line indicates a word not in the dictionary but you have told the program to ignore. You can add technical words to the dictionary using the Spell Check dialog box.

Adding artistic text

1. Go to the **File menu** and choose **Open 4th at the bottom of the menu**.
The most recent files you have worked on will be listed at the end of this menu. You can change the number of files listed in the Options dialog.
2. Select all the boxes.
3. Go to the **Property Bar - Ungroup All**.
4. Go to the **Toolbox -Text Tool**. 
5. **Click** in the blank area to the left of the page.
This places an insertion point where the text will be placed.
6. Go to the **Text menu - Format Text**.
Or the F on the Property Bar or (Ctrl+T). This activates the Format Text dialog box used for setting text options.
7. **Scroll** down in the **Font list - Times New Roman**.
If you know the name of the font you are looking for, highlight the first font name, then type the first letter of the font you want. The list will automatically scroll to the fonts that begin with that letter.
8. Replace the current font size value with 14.
9. Go to the **Weight drop-down list** and select **Bold**.
As you make changes they appear in the sample window at the bottom of the dialog box It will display the first few word of anything you have typed or the first few letters of the alphabet.
10. Click **OK**.
If you have not set an insertion point, the change default dialog box will appear. If you click OK at this point, the next time you access the Text tool, it will have these settings.

Creating labels

1. **Type:** *Organization Chart for LaSalle Produce Company.*
2. **Right click on the word LaSalle and choose Ignore All.**
The red underline turns to blue. You can add to your dictionary any words you know you will be using often.
3. Press **Enter**.
4. Use the following list to complete the titles for the left

group.

Press the Enter key after each to place each title on a new line.

Corporate

Sales

Marketing

Advertising.

5. Go to the **Toolbox** and select the **Pick Tool**.
This will end the typing mode. The text will become selected. To toggle to the Pick Tool, use Ctrl+Space bar.
6. Go to the **Arrange menu** and select **Break Apart**.
This will split the text into individual text lines. They can now be moved into position.

Copying text properties

1. Go to the **Toolbox** and select the **Text Tool**.
Notice the Property Bar. The text settings reverted back to the default parameter.
2. **Click** in a blank area below the text you just typed.
3. Use the following list to complete the titles for the right group.
Press the Enter key after each to place each title on a new line.
Orchard Mgmt.
Quality Control
Shipping
4. Go to the **Toolbox** and select the **Pick Tool**.
Selection handles appear.
5. Go to the **Edit menu** and select **Copy Properties From**.
This activates the Copy Properties dialog box.
6. **Select Text Properties**.
7. Click **OK**.
8. Click on any text object from the previous text list with the large black arrow.
The fonts should be updated to match the first list.
9. Go to the **Arrange menu** and select **Break Apart** (Ctrl+K).
10. Place the title of the chart on top and a division title in each box.
11. Drag one of the corner handles to resize the text.
Artistic Text can be proportionally resized just like other objects. While this is quicker, it is not as precise as using the Text Format dialog box or the Property Bar.
12. Reposition the title in the middle over the top of the chart.
Hint: Use the aligning shortcuts, c for vertical center with two objects selected.
13. **Save** your work (Ctrl+S).

Tip: A faster way to copy the properties is the Drag and Copy mentioned earlier. Select the object you wish to copy properties from.

With the Right Mouse button, drag the object to the object you wish to change.

A target helps you select the object to be changed. Release the Mouse.

A dialog allows you to choose which properties you want to apply. The original object remains in place, unchanged.

Aligning text within an object

The most important thing to remember when aligning objects is the selection order. Remember that alignment is based on the last object selected.

1. Select the text in the top box (Corporate).
Check the Status Bar to ensure that you have the text.
2. Hold down the **Shift key**.
3. Select the white box below the text.
The Status Bar should read that you have two objects.
4. Release the **Shift key**.
5. Press the e key and then the c key.
The short cut will center the two objects vertically and horizontally with each other. Two or more objects must be selected.
Or, Go to the Arrange menu and select Align and distribute . Select both the Center options. Selecting the Center of the Page option, then deselecting it accomplishes the same thing. Click OK.
This will place the text in the center of the boxes.
6. Repeat these steps to align the rest of the text with the boxes as needed.
Remember to select the text first.
7. Save your work (Ctrl+S).

Adding paragraph text

Paragraph Text is created by drawing an area for the text. The technique is similar to drawing a rectangle. The area used by Paragraph Text is referred to as a Text Frame. It acts like a small page.

1. Go to the Toolbox and select the Text Tool.
2. Click and drag in a blank area of the page to create a Text Frame approximately **3 inches wide and 3.5 inches tall**. As you drag, watch the Status Bar for dimensions. Text Frames can be resized after they are created so you don't have to be exact.
3. Release the mouse button.
4. Go to the **Text menu** and select **Format Text**.
Or use the Property Bar.
5. Set the Font to **Arial** and the Size to **14 points**.
One point is equal to 1/72 inch.
6. Click **OK**.
7. **Type:**
The LaSalle Citrus organization was established in 1915 by its owner, Lee Mone Peel. A French immigrant, Mr. Peel purchased a tract of land in south Texas and began growing citrus produce. It has since grown to be the

nation's thirtieth largest grower.

Click Ignore All for both LaSalle and Mone when the spelling checker underlines them.

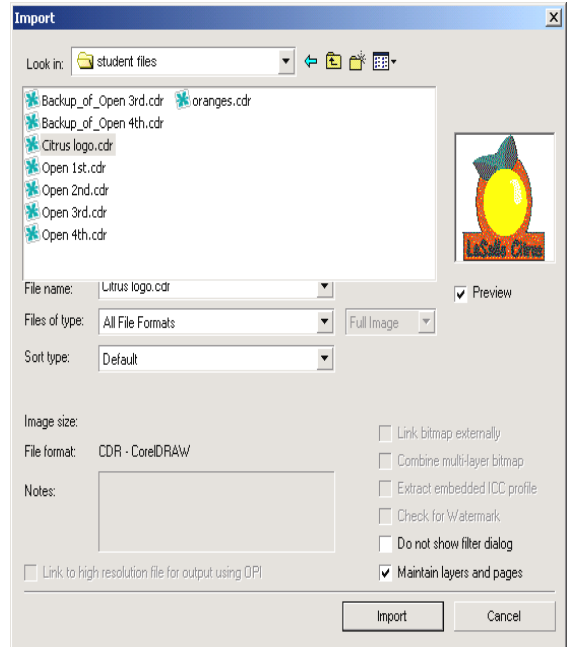
8. Go to the **Toolbox** and select the **Pick Tool**.
Selection handles should appear around the Paragraph Text. If they do not, then select the Text Frame.
9. Move the text under the right side column of boxes.
10. Save the file.

IMPORTING FILES

Many file types can be opened within CorelDRAW. When you open the Import dialog, the Files of Type drop down list will show you all of the various kinds. The filters to import these files are installed with DRAW. If you do not see a file type you need, do a custom install from the CD-ROM. Check the list of files to see if a filter is available and follow the directions to install it.

Importing files makes a copy of the file within DRAW. It does not affect the original file.

1. Go to the **File menu Import**.
This activates the Import dialog box. The screen capture below shows the dialog with the Options button clicked. You can also use the Import button from the Standard Toolbar.
2. Go to the **Files of Type** drop-down list, scroll down ➡ CorelDRAW (.cdr).
Only files created in CorelDRAW will be shown in the file list.
3. Go to the **class files folder** ➡ CITRUS LOGO.
4. Click on the **Preview** checkbox.
With the Preview active you can view the files before importing them.
5. Click on the **Import** button.
by the import cursor. This screen capture is only an example.
6. **You have two options at this point.**



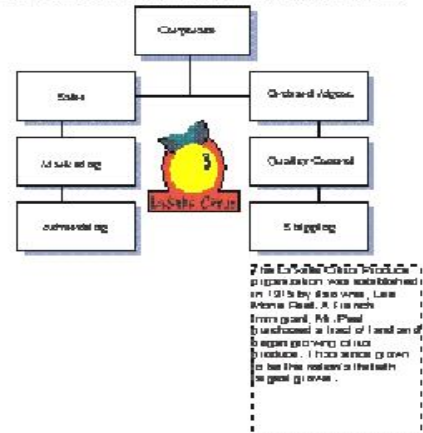
The name of the file you are importing is displayed



If you want to import the object at its original size, click at the spot you want the graphic.
If you want to resize the graphic, click and drag to reduce or enlarge the graphic to the size of the click and drag area.

7. You do not know the size of the original but you do know where you want to put the logo. Click and drag the cursor using the image below as a guide.
The logo is centered on the chart.
8. Save your work (**Ctrl+S**).
Your work should look similar to the chart below.

Organization Chart for LaSalle Produce Company



CLIPART

Clipart consists of drawings and bitmap images produced by artists for use in desktop publishing and graphic design. Corel Corporation provides thousands of clip art images with CorelDRAW 12. You **USE** the clipart, you do not **OWN** the clipart. Most suppliers ask that you indicate the source especially if you use several images. Each package of clipart comes with an agreement outlining the limitations and acceptable usage of the clipart. Always read your clipart package agreement. Copyright infringement fines are very high. Better safe than sorry!

Adding clipart to your drawing

1. Go to the **Standard Tool bar** and click on the **Import button**.

2. Go to the **class files folder** and select the **Oranges.cdr** file.
3. Click **OK**.
4. Click the cursor once at the **lower left corner of the page**.
The clipart oranges are much larger than we need.
5. Use the selection handles to scale the image down.
6. Save the file.

PRINTING YOUR WORK

CorelDRAW uses the print drivers in Windows. It does not have any print drivers of its own. Each printer will have a different set of standards and settings.

1. Go to the **Standard Toolbar** and select the **Print button**.
(Ctrl+P or File - Print)
This activates the Print dialog box. There are six tabs where parameters may be set for printing projects. Many of these are highly advanced for use in complex projects such as four color process work where very exact negatives must be created. You will cover only the options on the General tab in this class.

Printing Options	
Printer	Lets you select from a list of installed print devices. The Properties button activates the Setup dialog box for the selected printer.
Print Range	Lets you designate what you want to print. The Selection option is good for proofing parts of a drawing without having to print the whole page.
Copies	Sets the number of copies desired.
Print styles	Just as you saved styles for documents, you can save setting for printers. If you make several changes for a particular printer or type of print job, save them so you don't have to re-enter all your parameters.

2. Select **Current page** in the **Print Range** section.
This will print only the currently visible page of a multi-page document.
3. Go to the **Printer** section and select the **Properties button**.
This activates the Setup dialog box. Each dialog box will be specific to the currently selected printer.
4. Change the **Orientation** to **Landscape**.
If the orientation of the printer does not match the page, CorelDRAW will prompt you and ask if you want it to automatically change the orientation.
5. Click OK.
You will return to the Print dialog box.
6. Click OK again to begin printing.

EXPORTING YOUR WORK

Exporting an image or a file insures the code in the file is standard code for that type of file. Using Save As to create files other than cdr files is possible but risky. Save As is best used to make copies of a file under another name for example, saving versions of an image. Some types of files are more difficult to export. If you plan to import the image into another type of program such as a page layout program or word processor, do some samples first to see which type of file imports best.

1. Go to **page 1**.
2. Select the *LaSalle Citrus* logo.
3. Go to the **File Menu** and select **Export (Ctrl+H)**.
You can also use the Export button from the Standard Toolbar. This will activate the Export dialog box.
4. Go to the **Save in list** box and select the class files folder.
5. Select the **Save as type list** box.
Each type of file has different parameters. You will cover only one type here.
6. Go to the **list of file types** and select **Windows Metafile (WMF)**.
This applies the export filter. Filters are used to properly set the information in the exported file for the new file type. Windows Metafiles are useful if you use Microsoft programs.
7. Click the **Selected only** check box.
This option will export selected objects only. If you want to export the entire illustration, leave this blank.
8. In the **File name text box**, type: *Logo*

9. Click the **Export** button.
This will activate a filter dialog box. Some filters have these to set various options.
10. Under **Export text as**, select **Curves**.
By exporting as curves, you convert the text into a graphic. This avoids any problems of font availability between computers.
11. Click OK.
The logo is now exported.

Tip: The author has found it takes one-half to one-third the time to export when the elements of a graphic are ungrouped. Use the Ungroup All command on the Properties bar. After exporting, you can re-group the elements to keep them from moving.

SETTING A NEW DEFAULT STYLE

Creating a style with the Outline and Fill tools

1. Go to the **Toolbox - Pick Tool**.
2. Be sure nothing is selected (press the **Escape key**).
3. Go to the **Toolbox - Fill Tool**.
4. Activate the **Flyout** and select the invisible fill option, the large X.
You will be prompted by the Uniform Fill style dialog box warning you that you are about to change the default style properties for this document.
5. Click OK.
The new fill style is set to invisible for graphic objects. You can change it to no fill by turning off the 'Treat all objects as filled'.
6. Go to **Toolbox - Outline Tool**.
This will produce the Flyout.
7. Select the **2 Point Outline button** (fourth from right).
8. Click OK.
Again the dialog box appears and you can assign a line to each type of object as a default for this document.
9. Draw a rectangle.
The rectangle will now have a thicker border and no fill.
10. Delete the rectangle.
Selected objects can be deleted with the Delete key or on the Edit menu.

Setting defaults with Options dialog

1. Go to the Tools menu ➔ Options ➔ Workspace ➔ Toolbox ➔ Rectangle tool.
2. Reset the Corner roundness to 40.
3. Click OK.
4. Select the Rectangle tool and draw a rectangle on the screen.
The default has been changed to a rounded corner rectangle. The changes are only for the current document.
5. Go to the Tools menu ➔ Options ➔ Document ➔ Styles.
6. Go to the right panel and expand the Default Graphic listing.
7. Drop the fill menu down and choose Uniform Fill ➔ **Edit button** .
The Uniform Fill color palette appear. Here you may choose or create a color from the CMYK mixing area. The More button accesses an area where you can define the color precisely by the numbers.
8. Move the small box to the upper right corner to change the fill color.
9. Click OK.
10. Repeat these steps with the Outline dialog, choosing a different color for the outline.
11. Click OK.
Your changes do not take effect until you select OK.
12. Draw some rectangles.
The fill and outline should now be colored with round corners on the rectangles. These attributes will remain for all rectangles in this document until you change them.
13. Return the setting to the default of sharp corners, thinner line and invisible fill.

The Options dialog allows you to change the defaults for all of the tools including the Text Tool. You will work in customization of your Workspace later in this chapter.

CHANGING THE DEFAULTS FOR ALL DOCUMENTS

The default setting for DRAW is to apply the default changes you made in the last exercise only to the active document. If you want to change the defaults for all documents, you must change a setting. A note, some users of CorelDRAW 11 have had the setting change back to the factory default without warning. It is a sporadic bug and as such very difficult to fix. Corel Corp. is aware of it and attempting to fix it.

1. Go to **Tools - Options - Documents**.
The default parameter is for five of the six options to be non-documents specific. You may change any of these parameters. The authors recommend making the styles option non-document specific.
2. Select the box next to Styles.
Now all changes you make to Styles in Text, Fill, and Outline will apply to each new document you open.
3. Click OK to close the dialog.

Changing the ruler settings

1. Go to the **Tool menu - Options**.
2. Go to **Document - Rulers**.

Ruler Options	
Units	Many different units of measure are available for the rulers. This is because DRAW is an internationally sold program. Horizontal and Vertical Rulers can also have different unit of measure. Units of measure can also be changed on the Property Bar when nothing is selected.
Origin	The origin point for measuring can be moved here or manually on the rulers. To move the origin point, hold and drag the box at the upper left corner of the drawing window where the rulers come together.
Tick Divisions	This sets the number of marks between the major measurements as in sixth of an inch or tenths of an inch.
Show Rulers	Allows you to work without the rulers if you are short on screen space.
Edit Scale	The Edit Scale button allows you to work at a set scale such as 1:2 or 1 inch=1 mile.

3. Experiment by changing the units to metric or point and picas.
All object dimension displays will change to what you set on the rulers. You can mix units such as having the horizontal ruler in picas and the vertical ruler in inches.

WORKSPACE

CorelDRAW allows you to customize the working area or interface of the program. Just as you can float the tool bars, you can create new tool bars, hide tool button you never use, or change DRAW to speed work on particular projects.

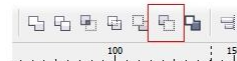
1. Go to **Tools menu - Options -Workspace** .
DRAW allows you to customize the working area to suit a project, work style, or knowledge of another vector illustration program.
2. Click on New to create your own workspace.
Do not make changes to the default. Workspace customization files are very small so you can create as many as you like. While you can return to factory defaults by pressing the F8 key while the program is loading, some customizations will not be over written. When using the F8 reset, be sure Default is Set as Current. If not, your personal Workspace will be over laid. By preserving the default workspace, you have a benchmark when you have problems.
3. Give the workspace a name.
4. Click OK.
5. Go to the listing at the left of the dialog and choose **Customization**.
6. To remove a button you don't use , such as the Cut, Copy and Paste buttons because you use the shortcut keys for those, hold down the button with the left mouse button, drag it to the work area and drop it.
It will be removed from the Toolbar.
7. To add a button, such as the Save All or Save As, go to the Customization option in the file tree at the left of the dialog.
8. Choose the File and Layout folder - File.
All the button options for the items on the File menu will then be displayed.
9. Select the button you want to add and drag it to the tool bar where you want to add it.
10. To create a new tool bar, drop the button on the workspace and a new toolbar is created.
Explore the many options by opening the various menu titles listed.
11. When you have made all the changes you want for now, click on Set as Current.
12. Click OK to return to the work area. You will see the changes displayed.

- To change the Workspace, go to **Tools menu - Options -Workspace** and choose the one you want, then click set as current. You can create Workspaces with all Web tools, different rules and measuring system, custom colors or any other combination you want. Just remember that if you are reloading the program using the F8 key, you should be in the default Workspace. If you have more than one person using DRAW, you can each create a custom Workspace. If you move from one machine to another, you can take the Workspace with you by copying the file. The Workspaces are saved in the Program Files folder with DRAW 12.

CorelDraw Illustration -1

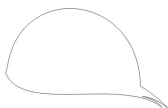
How to Create a Quirky Twitter Bird in Corel Draw

Below is the final image we will be working towards



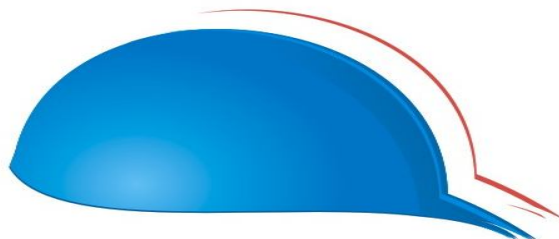
Step 1

Create new document, whatever size. A4 is fine. Draw the shape of the bird's body using the **Free Hand Tool** and make it nice with the Shape Tool. This part requires a bit of creativity :)



Step 4

Do the same again but cut a smaller, thinner part. Those steps are needed to add some light effects, which make it more 3D.



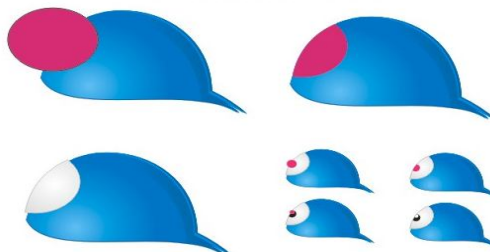
Step 2

Color the shape blue. Then Copy the shape and paste in the same place. Now using the **Up Arrow key**, move the second shape 4 pixels up. And then change the color of the second shape to a lighter blue. For better a effect use the Radial Gradient Fill Tool with a lighter to darker blue. Still the first shape should be darker to get that dark line at the bottom.



Step 5

This step uses only one simple option: Intersect (marked by red box, shown below). Just as in the steps above, select two object and Intersect. You will get the shape that both object share. This technique is an easy way to get shapes that you want in many other situations. In the picture below, notice that we used circles on the main shape, then the eye, then the eyeball, etc. Be sure to apply a radial fill to the eye as shown above.

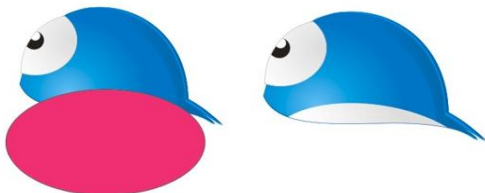
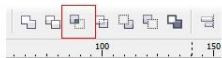


Step 3

Copy the shape and place it in the white area. Copy it again and paste it. Then make it a bit larger and put it over the smaller one (green on pink example). Using the Back Minus Front option Cut the shape off. Then change it to blue (or use the gradient that we did in last step). And place it on our main shape.

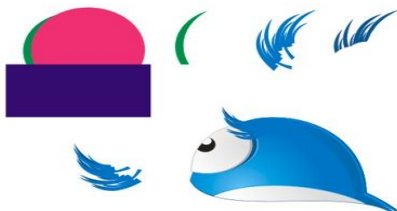
Step 6

Do the same thing again. This time create the bottom part of the bird (that's the way birds are built, a white patch makes the bird look more real).



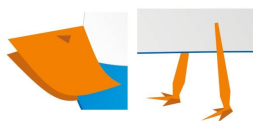
Step 7

Coming back to using the Back Minus Front option. Cut off the shape of the first eyelash. Then copy, paste, resize, and rotate to put them together. Now copy the whole thing and paste in place, change to a darker blue, rotate a bit, and move it to the back. Lastly, group it and place it on the bird.



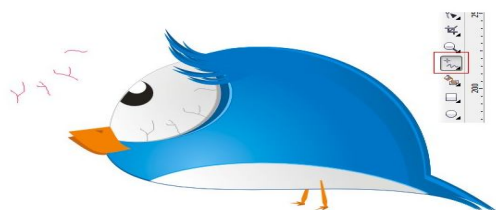
Step 8

To draw the legs and nose you need to use the Free Hand Tool and make it nice with the Shape Tool. In this step, we want to show you how using the same color, but in different brightness, adds more depth and dimensionality.



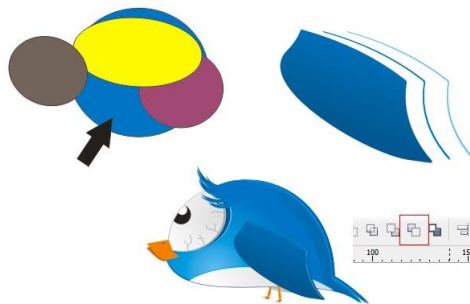
Step 9

This must be the easiest step because you do not have to be exact. Just draw away and create some jagged shapes for the eye. The more uneven the better.



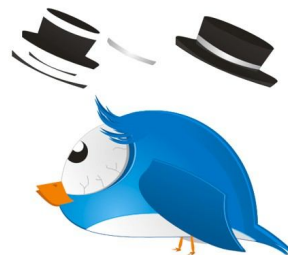
Step 10

Now let's make the wings. In the image below, you can see again how we cut the shape out of the circle using different circles. Then we rounded the corners a bit using the Shape Tool. Also, we added some light effect, just like in Step 4. Place the wing on the bird. Also, Copy and Paste In Place the same wing, but change color to gray, move to the back, and move to the left a bit. That gives the effect of the second wing on the other side of the bird (you can see tiny gray part near the legs).



Step 11

We're almost done. The hat is a simple thing drawn using the Freehand Tool to create the shapes shown below. They each were given different brightness, fills, and a radial gradients was placed on the white stripe to add 3D.



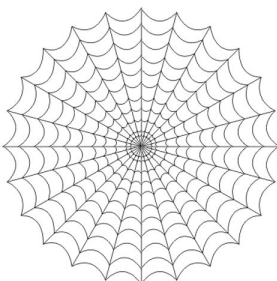
Conclusion

Place the hat on the bird. Add a dark blue ellipse under the hat (some kind of shadow of the hat). And our Quirky looking twitter bird in vectors is done!



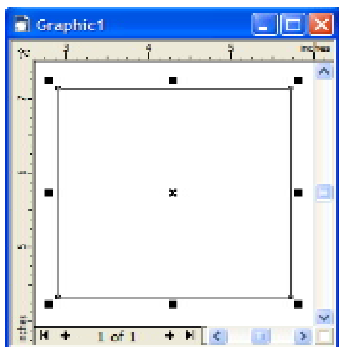
CorelDraw Illustration -2 Spider Web

Below is the final image we will be working towards



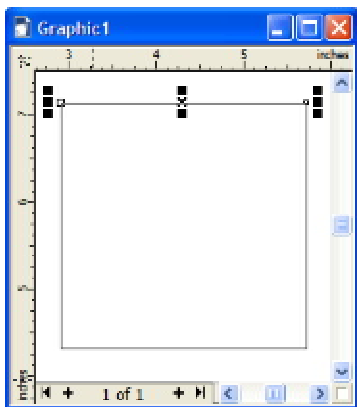
STEP ONE

Select the Rectangle Tool, hold down the Control key, and draw out a rectangle. Holding down control will keep the rectangle proportional.



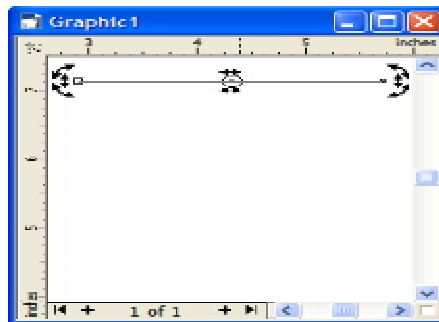
STEP TWO

Go to View > Snap To Objects and make sure it is selected. This will help find the edges and nodes of objects. The rectangle is just being used as a guide to create a straight line. Using the Bezier Tool, click the top left corner and then click the top right corner. You should have a straight line on top of your rectangle:



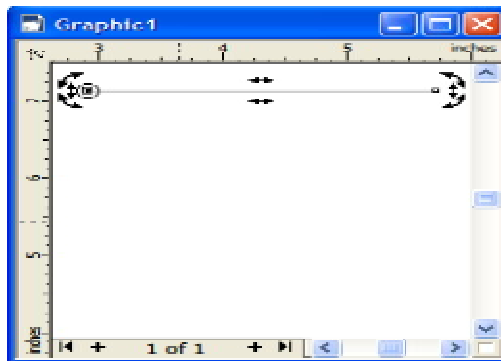
STEP THREE

You can delete the rectangle now so all you're left with is the straight line. We want to make copies of this straight line, but we need to rotate the copies and use left hand side of the line as the origin of rotation. So click twice on the line and you should see the following:



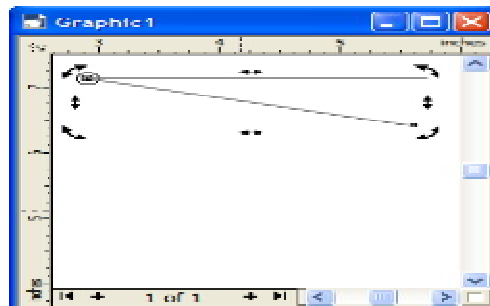
STEP FOUR

Notice the circle in the middle. Click on it and move it over to the left corner. This will be the origin of rotation.



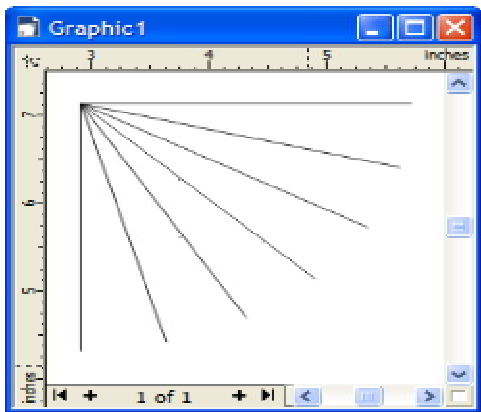
STEP FIVE

Now this next step may be a bit tricky but try and follow! While holding down the Control key, click and drag the bottom right rotation arrow downward until you see a new line appear. To duplicate the line, right click with your mouse. If you did it right you should end up with the following:



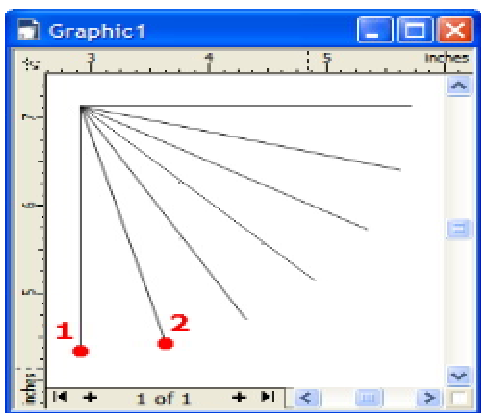
STEP SIX

Repeat step 5 five more times and you should end up with the following:



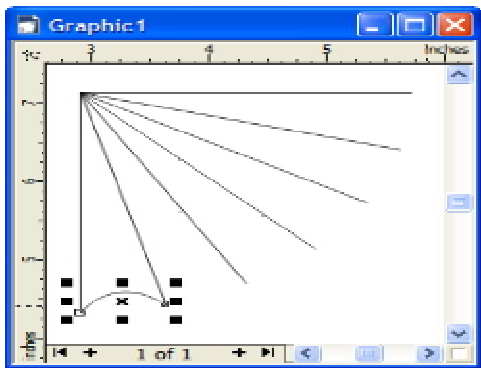
STEP SEVEN

Using the Bezier Tool, we're going to begin to create the curves in the web. Let's start with the following two points:



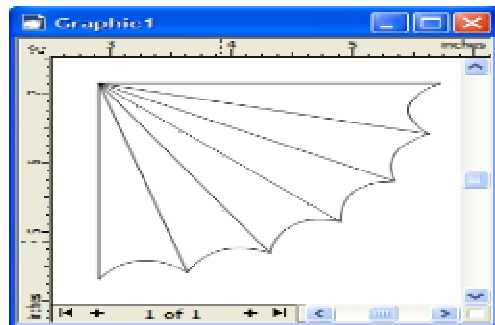
STEP EIGHT

Click on point 1 and then click and drag on point 2 until you get the following curve:



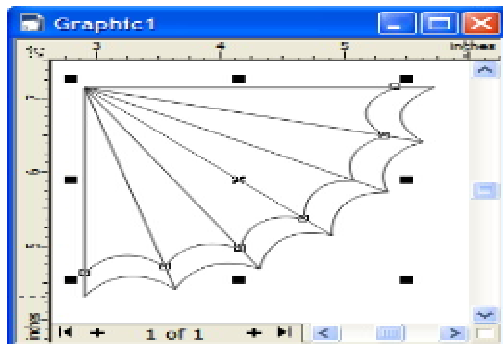
STEP NINE

Repeat step 8 for each pair of lines. It may help to click the Pick Tool and then click anywhere in the white space to deselect the previous curve before you begin a new curve. If you don't, you may end up adding to the curve and not getting the result you intended. You should end up with the following:



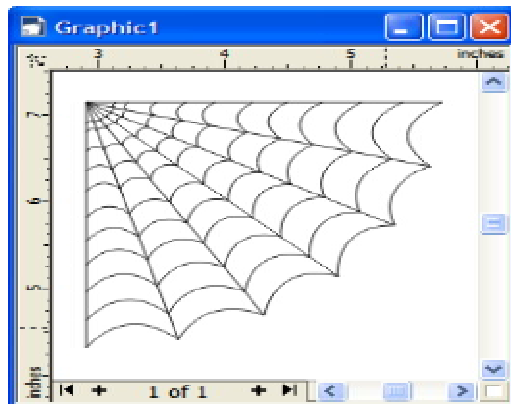
STEP TEN

Using the Pick Tool and holding down the Shift key, click on each curve and then group them all together by hitting Control + G. With the group selected, grab the bottom right handle and drag inward. You'll notice a new line of curves display. To duplicate, right click on the mouse. You should end up with the following:



STEP ELEVEN

Repeat step 10 until the spider web is complete! Here's my final result!



CorelDraw Illustration -3 Ray Effect

1. Open Corel DRAW. Select text tool and type the text. Use thick font to get proper line effect. We have used Impact font. Fill it with desired color.

Note: It is expected that you have finished with the beginners projects when you start with intermediate, as we do not repeat the small instructions.

POP

- 2. Drag the guide line and using it draw vertical straight line with **Bazier Tool**.
- 3. Make it thicker using **Outline Tool**.



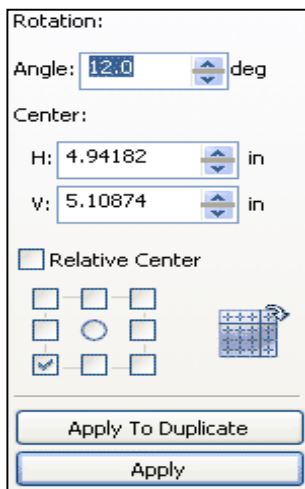
4. Double click on the line and drag the center of rotation to the bottom.



5. Change the line color to white by selecting the line and right clicking on the white color in the palette. Keep the line selected.



6. Arrange > Transformation > Rotation



7. Keep angle 12 deg and start pressing "Apply to Duplicate" till you get the complete ray effect.



Unit-III

PhotoShop 7.0

INTRODUCTION

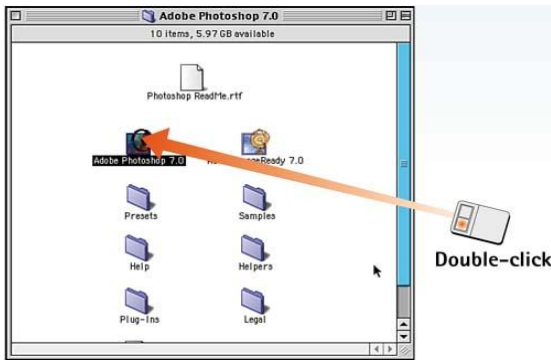
Photoshop is the leading digital image editing application for the Internet, print, and other new media disciplines. It has become a "killer app", embraced by a wide spectrum of developers. Traditionally, Photoshop has been and continues to be a print industry standard. There is a very strong chance that almost every photographic image you've seen in print (posters, books, magazines, flyers, etc.) has been prepared in Photoshop. The powerful features that make Photoshop the standard for print images are also just as useful for Internet and display-based images (video and computer presentations for example). Photoshop has evolved, expanding its print capabilities and adding Internet specific features essential to current and future web developers. Included with Photoshop is a web-specific companion program, ImageReady. This manual covers the fundamental elements of both programs, concentrating entirely on the web-side of digital image production. Photoshop is a very deep program. It will take time to use it proficiently and explore its many features. There are often many ways or methods to accomplish particular tasks. We will be looking at common web-specific production objectives and the methods you can use to achieve your goals. Before we get into the program, it will be useful to detail the nature of digital images themselves.

Photoshop and ImageReady

This task is a basic introduction to Photoshop and ImageReady. In this task, you launch each program and evaluate the general workspace.

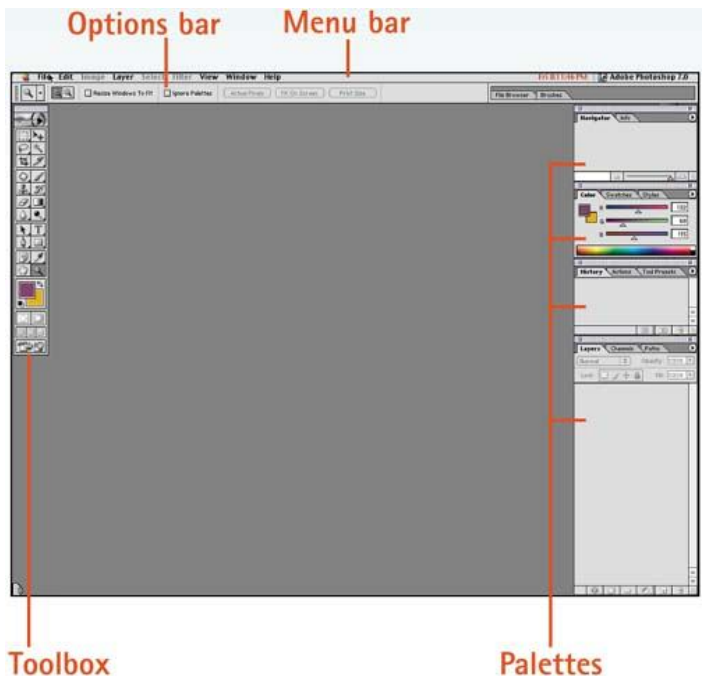
1. Launch Photoshop

To launch Photoshop in Windows, click the **Start** button and choose **Programs, Adobe, Photoshop 7.0, Adobe Photoshop 7.0**. To launch Photoshop on a Mac, open the folder labeled **Adobe Photoshop 7.0** and double-click the **Adobe Photoshop 7.0** icon.



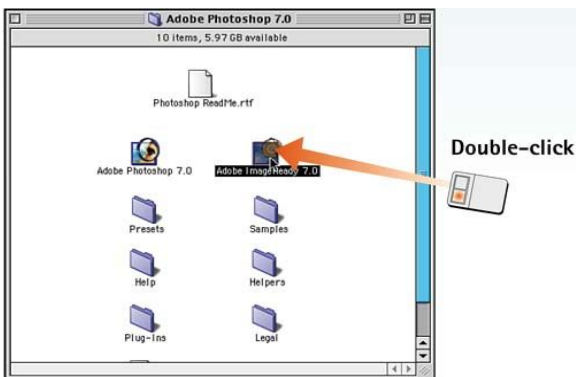
2. The Basic Photoshop Screen Areas

After closing the wizard, you'll see the full range of Photoshop controls arranged on your screen. All the **toolbox** is on the left side of the screen and contains all the Photoshop tools. The all the Photoshop **palettes** appear on the right side of the screen, and the **menu bar** appears across the top of the screen. The **Options bar** runs under the menu bar and contains the modifiers for each tool you select.



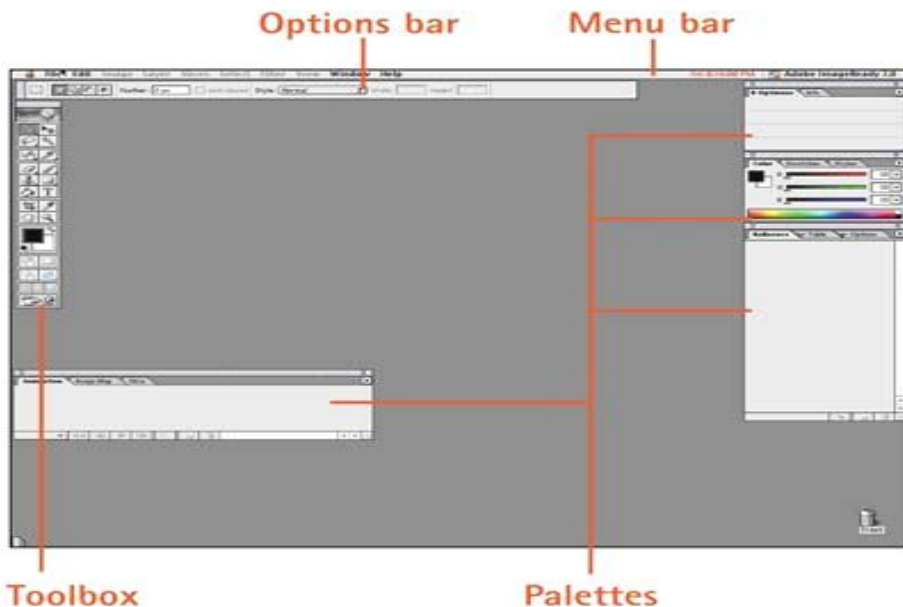
3. Launch ImageReady

To launch ImageReady in Windows, click the **Start** button and choose **Programs, Adobe, Photoshop 7.0, Adobe ImageReady**. To launch ImageReady on a Mac, open the folder labeled **Adobe Photoshop 7.0** and double-click the **Adobe ImageReady** icon.



4. The Basic ImageReady Screen Areas

You will find that the ImageReady desktop looks very similar to the Photoshop desktop. Closer examination reveals that some of the tool icons and palettes are different, and that the **Animation, Rollover, Image Map, and Style** palettes appear in the lower-left corner of the screen.

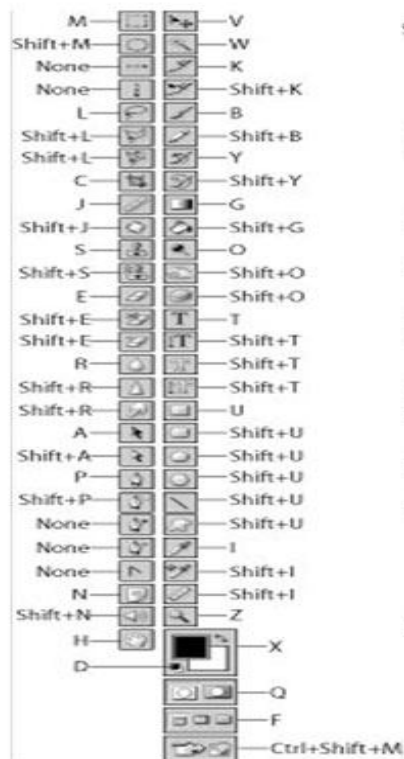


How to Use the Toolbox

Each time you launch Photoshop, the toolbox appears on the screen, usually in the upper-left corner. In the process of editing an image, you will go to the toolbox frequently to choose various selection, painting, and specialty tools. This task outlines what you'll find in the toolbox and how to access it.

1. Open the Photoshop Toolbox

The toolbox should appear automatically on the desktop, but it can be closed, which means you'll have to reopen it. To open the toolbox, choose **Window, Tools**.



The following information will help you to become familiar with all of the tools available.



The marquee tools make rectangular, elliptical, single row, and single column selections.



The move tool moves selections, layers, and guides.



The lasso tools make freehand, polygonal (straight-edged), and magnetic (snap-to) selections.



The magic wand tool selects similarly colored areas.



The crop tool trims images.



The slice tool creates slices.



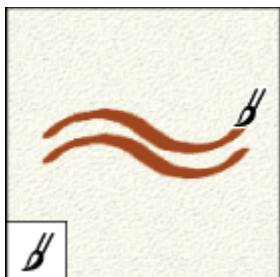
The slice selection tool selects slices.



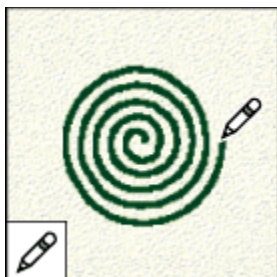
The healing brush tool paints with a sample or pattern to repairs imperfections in a image.



The patch tool repairs imperfections in a selected area of an image using a sample or pattern.



The brush tool paints brush strokes.



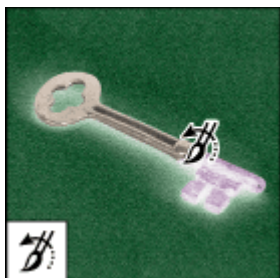
The pencil tool paints hard-edged strokes.



The clone stamp tool paints with a sample of an image.



The pattern stamp tool



The history brush tool paints

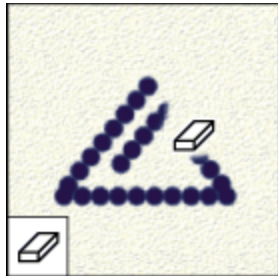


The art history brush tool



The magic eraser tool

paints with part of an image as a pattern.



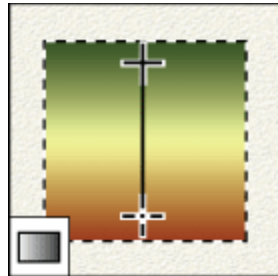
The eraser tool erases pixels and restores parts of an image to a previously saved state.

a copy of the selected state or snapshot into the current image window.



The background eraser tool erases areas to transparency by dragging.

paints with stylized strokes that simulate the look of different paint styles, using a selected state or snapshot.



The gradient tools create straight-line, radial, angle, reflected, and diamond, blends between colors.

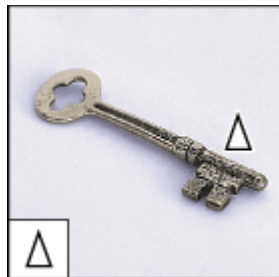
erases solid-colored areas to transparency with a single click.



The paint bucket tool fills similarly colored areas with the foreground color.



The blur tool blurs hard edges in an image.



The sharpen tool sharpens soft edges in an image.



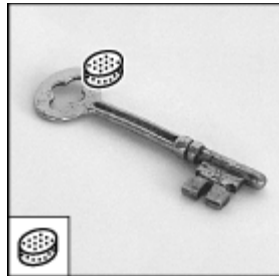
The smudge tool smudges data in an image.



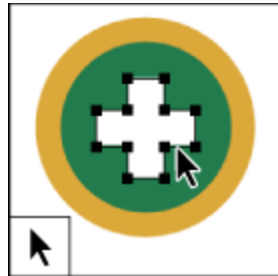
The dodge tool lightens areas in an image.



The burn tool darkens areas in an image.



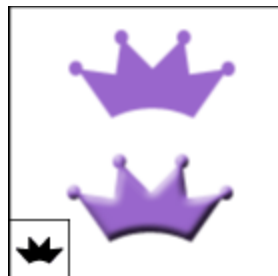
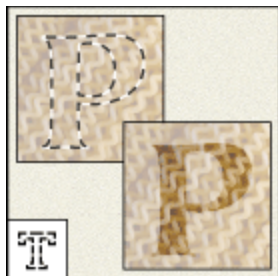
The sponge tool changes the color saturation of an area.



The path selection tools make shape or segment selections showing anchor points, direction lines, & direction points.



The type tools create type on an image.

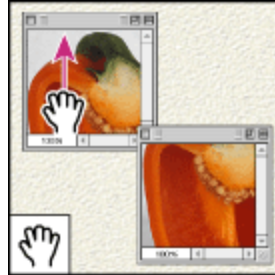
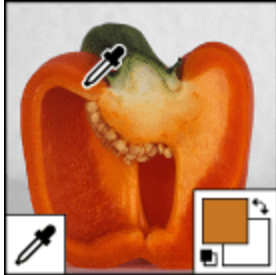


The type mask tools create a selection in the shape of type.

The pen tools let you draw smooth-edged paths.

The custom shape tool makes customized shapes selected from a custom shape list.

The annotation tools makes notes and audio annotations that can be attached to an image.



The eyedropper tool samples colors in an image.

The measure tool measures distances, locations, and angles.

The hand tool moves an image within its window.

The zoom tool magnifies and reduces the view of an image.

Using the tools

You select a tool by clicking its icon in the toolbox. A small triangle at the lower right of a tool icon indicates that there are hidden tools. If you position the pointer over a tool it will display a tool tip with the tool's name and keyboard shortcut.

To show or hide the toolbox:

Choose Window > Tools. A check mark indicates the item is showing.

To move the toolbox:

Drag the toolbox by its title bar.

To select a tool: Do one of the following:

- Click its icon or press its keyboard shortcut. If the icon has a small triangle at its lower right corner, hold down the mouse button to view the hidden tools. Then, click the tool you want to select.
- Press the tool's keyboard shortcut.

Using the tool options bar

Most tools have options that are displayed in the tool options bar. The options bar changes as different tools are selected. Some settings in the options bar are common to several tools (such as painting modes and opacity), and some are specific to one tool (such as the Auto Erase setting for the pencil tool).

You can move the options bar anywhere in the work area, and dock it at the top or bottom of the screen.

To display the tool options bar: Do one of the following:

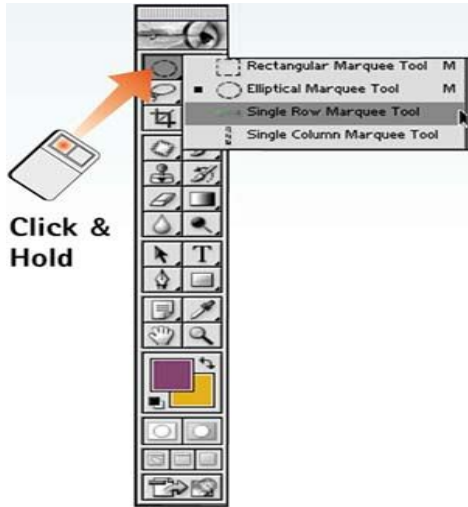
- Choose Window > Options.
- Click a tool in the toolbox.



Lasso options bar

2. Select a Photoshop Tool

Click a tool to select it. If the tool button contains a small triangle in the lower-right corner, that tool offers additional tool options in a pop-out menu. Click and hold the tool button to view the pop-out menu and drag through the pop-out menu to select one of the additional tools.



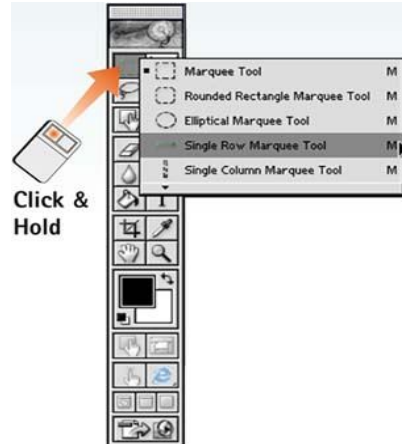
3. Open the ImageReady Toolbox

The ImageReady toolbox should appear on the desktop as soon as ImageReady opens. Like its Photoshop counterpart, the ImageReady toolbox also can be closed, requiring you to reopen it. To open the toolbox in ImageReady, choose **Window, Tools**.



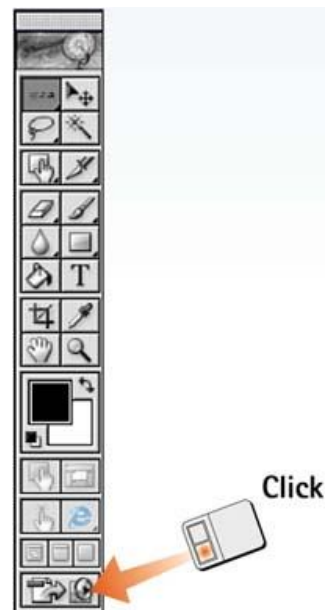
4. Select an ImageReady Tool

Click a tool to select it. If the tool button contains a small triangle in the lower-right corner, that tool offers additional tool options in a pop-out menu. Click and hold the tool button to view the pop-out menu and drag through the pop-out menu to select one of the additional tools.



5. Jump Between ImageReady and Photoshop

Click the **Jump To** button at the bottom of either the Photoshop or the ImageReady toolbox to move between Photoshop and ImageReady. This technique is especially useful when you have a file open and want to use features from both applications. You can also perform this command from a menu by selecting **File, Jump to, Photoshop/ImageReady** or by pressing **⌘+Shift+M** (Mac users) or **Ctrl+Shift+M** (Windows users).



How to Use the Menu Bars

The menu bars in Photoshop and ImageReady operate like the menu bars in any other application. Click the menu name so that the menu drops down. Choose an option that has a solid right-facing arrowhead, and a submenu pops out. Choose an option that has a three-dot ellipsis (...) following it, and a dialog box opens. Click any option to choose it. This task looks at the grouping of the different menus to help you understand the functionality associated with each menu.

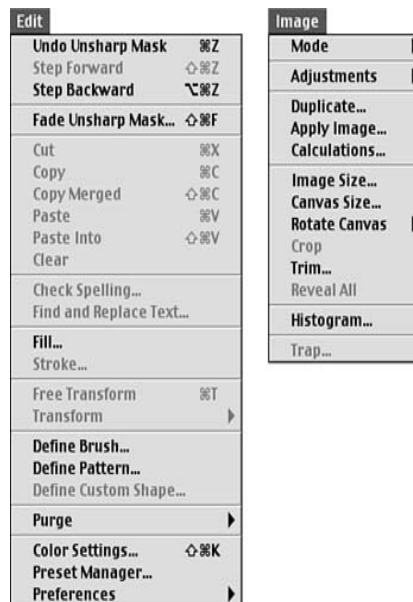
1. The Photoshop File Menu

You use the Photoshop **File** menu to address the basic opening, closing, and saving of files. This menu covers the import/export of files, workflow management and automated tasks, preferences, and color settings for the overall application as well. It also contains the **Quit** command (**Exit** in Windows) for closing down the application.



2. The Photoshop Edit and Image Menus

You use the Photoshop **Edit** and **Image** menus to specify most of the standard global changes to an open image. You'll find controls for cut and paste, as well as transformations, fill, stroke, and pattern on the **Edit** menu. On the **Image** menu, you'll find options for color mode, canvas and image size, and global color adjustments.



3. The Photoshop Layer Menu

The Photoshop **Layer** menu covers all your layer options—creating and deleting layers, merging, applying layer effects, and grouping. You can find most of these same controls on the **Layers palette menu**.



4. The Photoshop Select Menu

You use the Photoshop **Select** menu to control selection options within the program. These options include inverting selections, feathering, selection modifiers, and saving and loading selections.



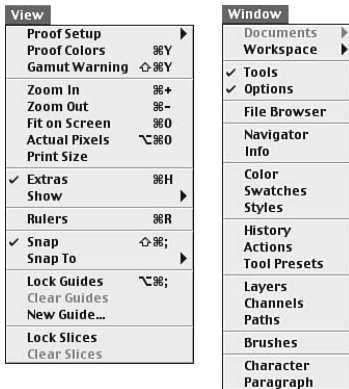
5. The Photoshop Filter Menu

Simply put, the Photoshop **Filter** menu contains all 101 of the native Photoshop filters, divided into 14 subheadings. The **Filter** menu also can include any third-party filters you may have loaded in the Photoshop plug-ins folder.



6. The Photoshop View and Window Menus

You use the **View** menu to control zooming and previews, as well as the visibility of rulers and guides. The **Window** menu lets you launch and close any of the 17 palettes. In addition, the **Window** menu lists all open file windows so that you can move a file to the front of the screen simply by choosing it from this menu.

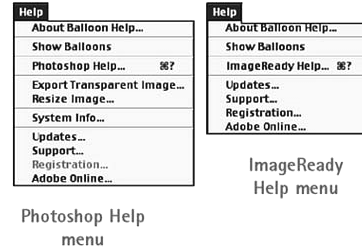


9. The ImageReady Edit and Image Menus

You use the ImageReady **Edit** and **Image** menus to control most of the standard global changes to an open image. Controls for cutting and pasting image data and HTML, as well as options for transformations, fill, stroke, pattern, and setting preferences are located on the **Edit** menu. The **Image** menu is more limited than its Photoshop counterpart; it offers canvas and image size controls, as well as a few global color adjustments.

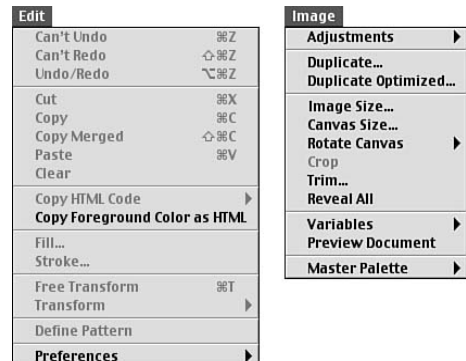
7. The Photoshop and ImageReady Help Menus

The ImageReady and Photoshop **Help** menus enable you to turn balloon help on and off (for the Macintosh), as well as to access help by topic. The Windows version of the **Help** menu offers two **About** options, which provide version information about Photoshop and plug-ins.



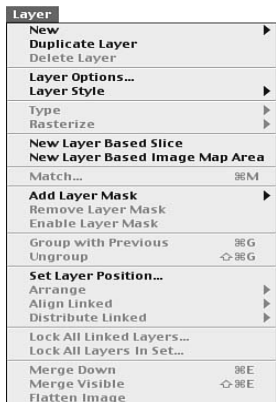
8. The ImageReady File Menu

You use the ImageReady **File** menu to open, close, and save files, as well as to save files optimized as GIFs or JPEGs. This menu also covers the import and export of files, HTML browser previews, and recent files. The **File** menu also contains the **Quit** command (**Exit** in Windows) for closing down the application.



10. The ImageReady Layer Menu

The ImageReady **Layer** menu covers all your layer options—creating and deleting layers, merging, applying layer styles, and grouping. It also offers control over layer-to-imagemap conversion (from the **Layer Options** selection), slice and image map layer creation, and precise layer placement and locking. You can find many of these same controls in the **Layers palette menu**.



11. The ImageReady Slices Menu

The **Slices** menu specifies the handling of image slices. A **slice** is the portion of the image when ImageReady divides an image into smaller pieces for optimization and display in an HTML table. This menu specifies how image slices are created, modified, linked, and deleted. You can also preview JavaScript rollovers and link slices and slice selections. If it has to do with slices, you'll find that option on this menu.

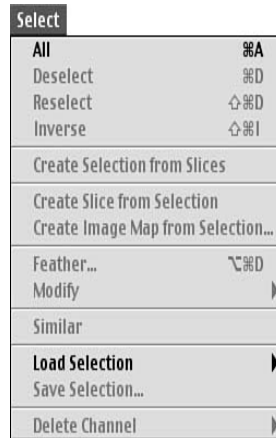


14. The ImageReady View and Window Menus

You use the **View** menu to control zooming and previews as well as the visibility of rulers and guides. The **Window** menu lets you launch and close any of the 18 ImageReady palettes. In addition, it also lists all open file windows and all the window-arrangement commands.

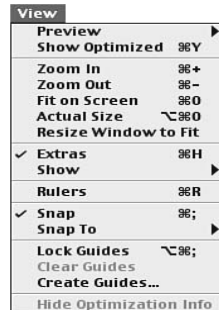
12. The ImageReady Select Menu

You use the ImageReady **Select** menu to control selection options within the program. These options include inverting selections, feathering, selection modifiers, and saving and loading selections.



13. The ImageReady Filter Menu

The ImageReady **Filter** menu contains 81 ImageReady filters divided into 13 subheadings. This menu also includes any third-party filters you may have loaded into the plug-ins folder.



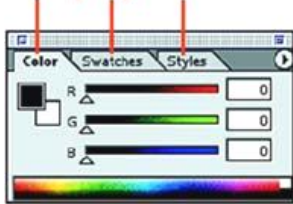
Use Photoshop and ImageReady Palettes

Photoshop and ImageReady use a floating palette system to group items and controls such as brushes and tool options. ImageReady uses 18 palettes; Photoshop uses 17. You can open and close palettes on demand and easily compress or expand them to optimize your workspace.

1. Examine a Group of Palettes

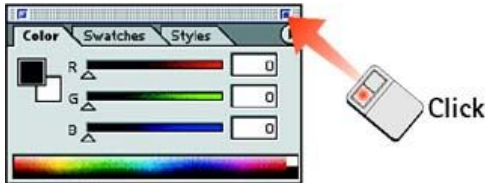
To open a palette in ImageReady or Photoshop, click the **Window** menu; while still holding the mouse button, choose the command related to the desired palette. To optimize your workspace, the application groups multiple palettes in a single window and separates them with tabs. If the palette you want is hidden, click its tab to bring it to the front of the window.

Multiple palettes in a single window



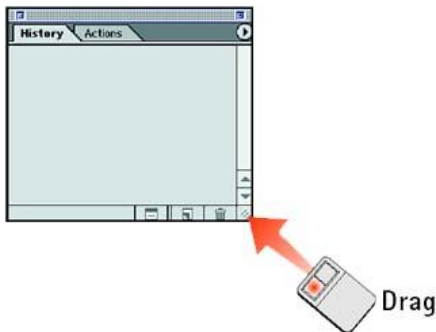
2. Collapse and Expand a Palette

To collapse or expand a palette, click the **Minimize/Maximize** button (in Windows) or the **Resize** button (on a Mac).



3. Resize a Palette

To resize most palettes (some cannot be resized), click and drag the lower-right corner of the window. To return a palette to its default size, click the **Minimize/Maximize** button (in Windows) or the **Resize** button (on a Mac).



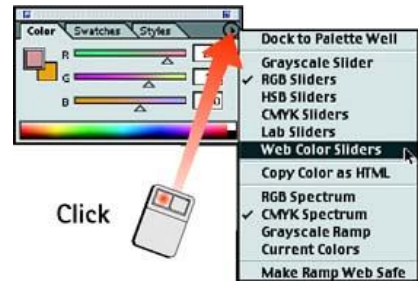
4. Tools and the Options Bar

The **Options** bar in ImageReady and Photoshop is unique in that its content varies depending on the tool selected in the toolbox. By default, the **Options** bar runs across the top of the screen, docked just below the menu bar. Should you close it, you can reopen it by choosing **Window, Options** or by double-clicking a tool in the toolbox.



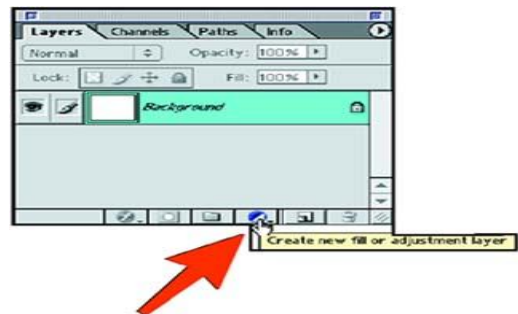
5. The Palette Menu

A **palette menu** lists options related to the functionality of the associated palette. To open any palette menu, click the black triangle in the upper-right corner of the palette; click again to make a selection from the list of options.



6. Use the Palette Shortcut Buttons

At the bottom of some palettes are shortcut buttons for easy access to common tasks. To find out what each button does, first make sure that the **Show Tool Tips** option is selected in the **Options** section of the **General Preferences** box (choose **Edit, Preferences, General**), and then position your mouse pointer over the button to read the description.

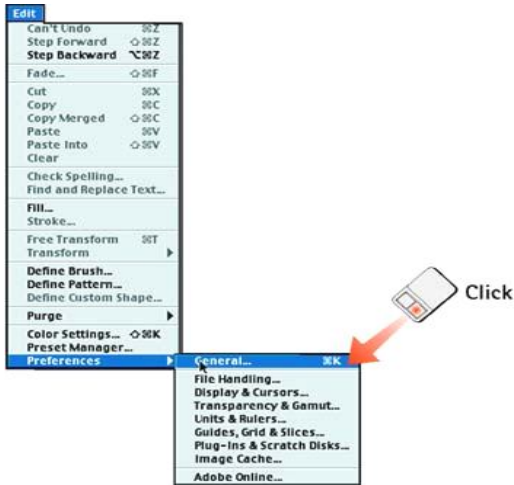


How to Use the Photoshop Color Picker

The Photoshop **Color Picker** is the standard Photoshop interface for selecting a color. It allows fast and intuitive color selection from millions of colors. The **Color Picker** also offers Pantone color matching and Web-safe color choices.

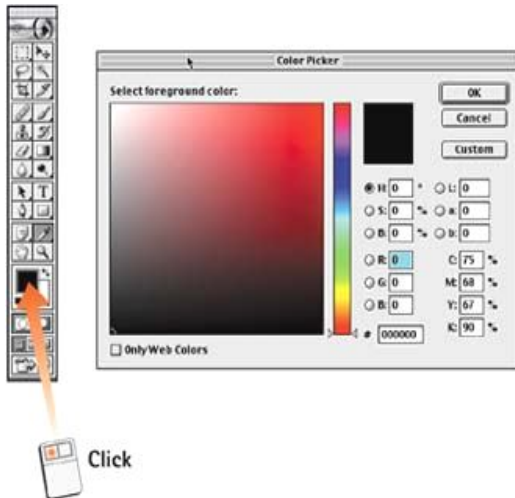
1. Set Color Picker Preferences

Choose **Edit, Preferences, General** to open the **Preferences** box to the **General** page. Select **Adobe** from the **Color Picker** drop-down list. Although you could select the Windows or Apple color picker, the Adobe version is the recommended choice. Click **OK** to close the dialog box.



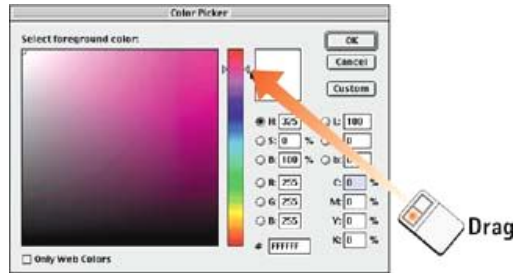
2. Launch the Color Picker

In the toolbox, click the **Foreground** color swatch to launch the **Color Picker** dialog box.



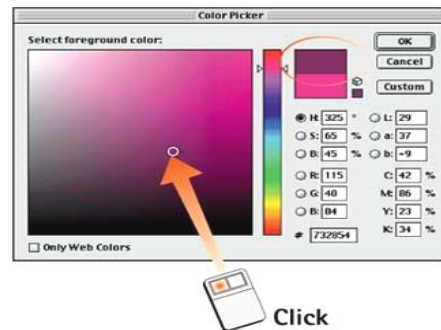
3. Set the Hue

Click and drag the white triangles on the **Hue** slider to select the desired hue. As you drag, notice that the range of colors displayed in the large **Select foreground color** window changes.



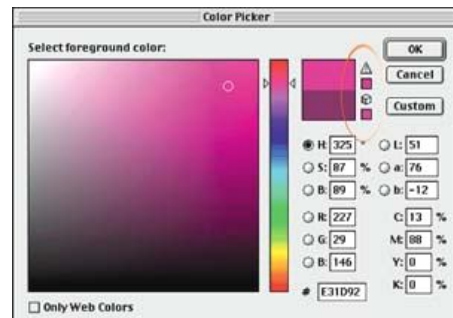
4. Select a Value

Move the cursor into the **Select foreground color** window. Notice that the cursor changes into a sample dot as you do so. Click in the color window to select a color; that color selection is reflected in the color swatch at the top right of the dialog box.



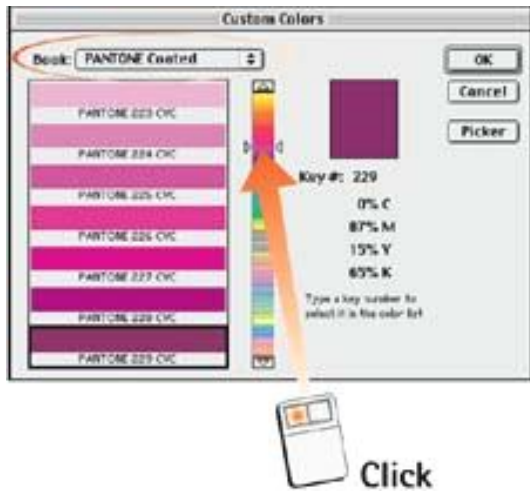
5. Check the Gamut Warnings

If the color you selected falls outside the printable CMYK color gamut, a triangle with an exclamation point appears next to the selected color. The small color box that appears below the triangle indicates which color will print based on the current conversion settings. If the color you selected does not fall within the browser-safe color palette, a cube appears just below the triangle, along with another small color box that indicates the corresponding Web-safe color.



6. Select Pantone-Type Colors

In the **Color Picker**, click the **Custom** button to open the **Custom Colors** dialog box. Select a color-matching system from the **Book** drop-down list and type the color number (if you know it) or click in the color spectrum slider to select a color. Click the **Picker** button to go back to the Photoshop **Color Picker**, or click **OK** to select the color and close the color-selection dialog boxes.

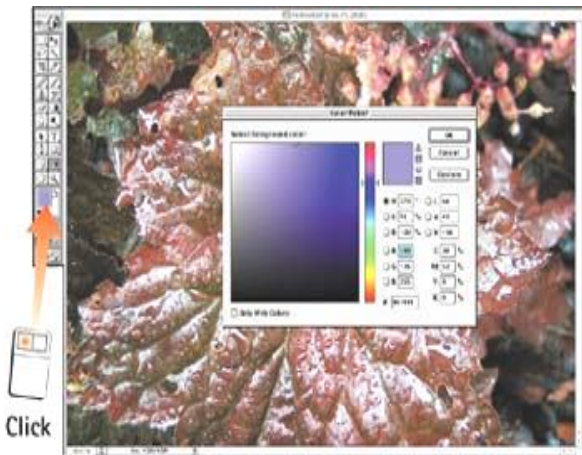


How to Select a Color

The methods described in this task use a combination of working with the **Color Picker**, sampling colors from images, and using preset swatches. Use the method that best suits the task at hand.

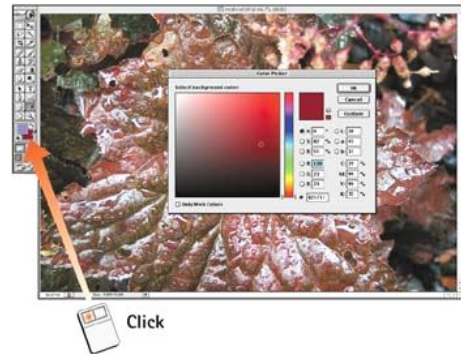
1. Select a Foreground Color

Click the **Foreground** color swatch in the toolbox to launch the **Color Picker**.



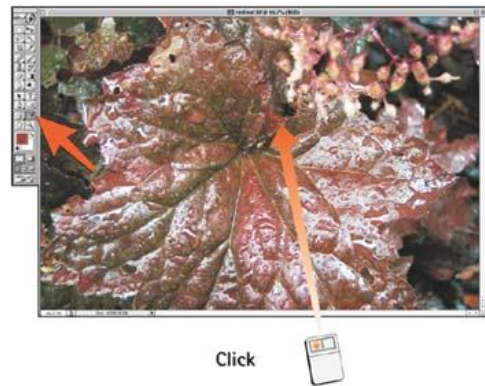
2. Select a Background Color

Click the **Background** color swatch in the toolbox to launch the **Color Picker**.



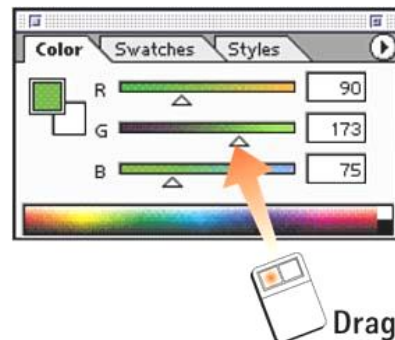
3. Sample a Color

Click the **Eyedropper** tool in the toolbox. Move the tool in the image over the color you want to sample and click to select the desired color. The color you select becomes the foreground color (check the color swatch in the toolbox).



4. Use the Color Palette

Choose **Window, Color** to open the **Color** palette. Move the RGB sliders as necessary to "mix" the desired color; watch the color you are creating in the swatch on the left side of the palette or in the toolbox. You also can select additional color models and options from the **Color** palette menu.



5. Use the Color Swatches

Choose **Window, Swatches** to open the **Swatches** palette, which contains an array of preset color swatches. Click the desired color to select it (it becomes the foreground color in the toolbox). To add the current foreground color as a swatch on this palette, move the pointer to an empty space on the palette until the pointer changes to the **Paint Bucket**; click to add the color as a swatch on the palette.

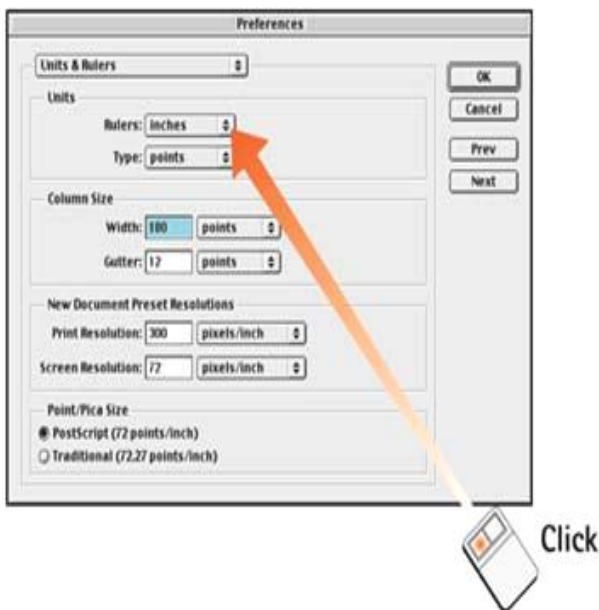


How to Use Rulers, Grids, and Guides

The importance of rulers and guides has grown considerably in the last few revisions of Photoshop. Guides are user-defined alignment lines. The **grid** is an underlying matrix of lines you can use for general alignment of all items on the page. The enhanced type features have made text-alignment issues much easier to address. In addition, designers are creating complete Web pages in Photoshop and ImageReady, which necessitates using guides and grids to maintain spacing and alignment.

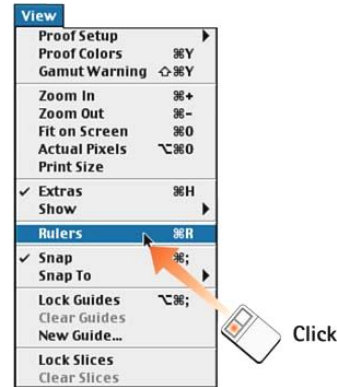
1. Set Rulers Preferences

Choose **Edit, Preferences, Units & Rulers** to open the **Preferences** box to the **Units & Rulers** page. From the **Units** drop-down list, choose the desired unit of measurement and click **OK**. In this instance, you do not have to restart Photoshop for the preference change to take effect.



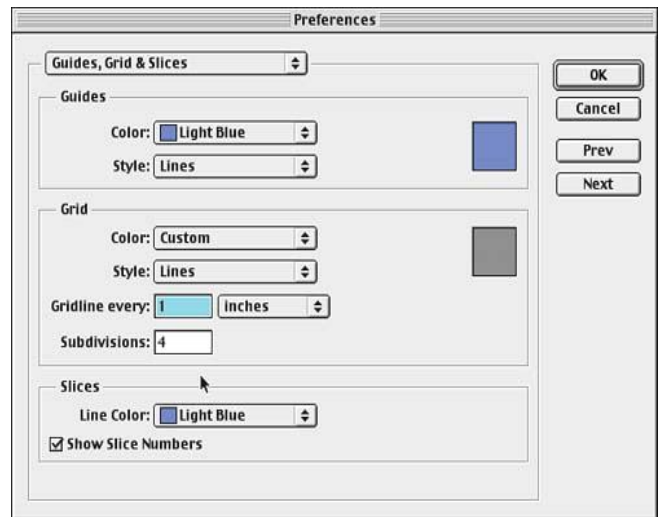
2. Activate Rulers

Choose **View, Rulers** to make the rulers visible around the top and left edges of the image area.



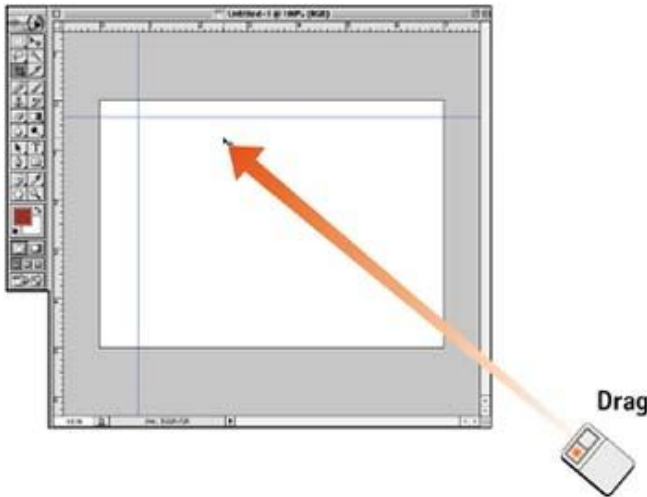
3. Set Guides Preferences

Choose **Edit, Preferences, Guides, Grid & Slices** to open the **Preferences** box to the **Guides, Grid & Slices** page. Here you can specify the color and format of the guide and gridlines, as well as the spacing for the grid. Click the color swatches to select a custom color, or use the **Color** drop-down lists to select from preset colors. You can also select slice colors and toggle slice numbers on and off.



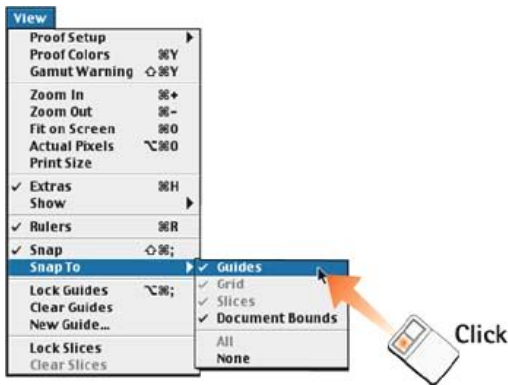
4. Create and Activate Guides

To create a guide, click the **Move** tool in the toolbox. Click in the ruler area and drag into the image area. A vertical or horizontal guide will follow the tool, depending on which ruler you started with. You can drag out as many guides as you need. You can also place a guide in a specific place by selecting **View, New Guide** and entering the orientation and pixel position in the dialog box that appears.



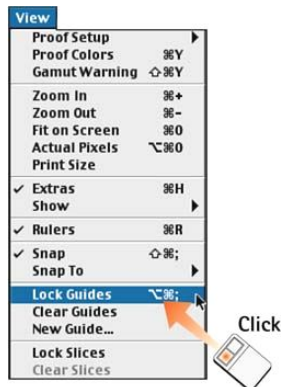
5. Set Snap-To Parameters

To precisely align elements to guides and grids as you drag the elements; choose **View, Snap To, Guides** or **View, Snap To, Grid**. Choose these commands again to turn them off.



6. Lock Guides as Needed

To lock the guides in place, choose **View, Lock Guides**. When you lock the guide lines, you prevent them from moving accidentally, especially when you are using numerous guides.



USING LAYERS

One of Photoshop's most powerful features is Layers. Layers are similar to acetate or transparent paper. Each Layer in a Photoshop document or image can contain image data that adds to the image data placed on the Layers below. Effectively, each Layer is an entire image unto itself within a master image. By combining these images together, you get what is called a composite, meaning an image composed of many different elements, in this case made up of multiple Layers. The best way to understand the concept of Layers, how they work, and why they are so powerful is to use them.

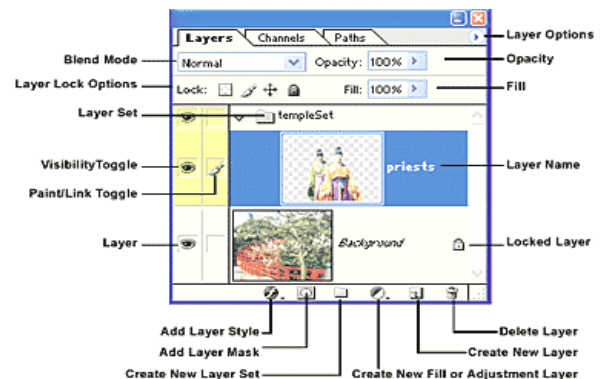
Open **priests.psd** and **gate.psd**.



Make **gate.psd** active by (Clicking) on the Image Window Title Bar. You'll notice the color mode is CMYK rather than RGB. CMYK is a color space suited for Print production, such as magazines or flyers. Examine the Channels Palette. CMYK images are made of a composite of 4 color channels. Because we are developing for the Internet, we need to convert from CMYK to RGB Image Mode. Select **Image/Mode/RGB Color**. Examine the Channels Palette. You'll see only 3 primary color channels and the composite RGB channel. We're going to use Layers to add text to the **gate.psd** image and add some content from the priest image. We'll be using some of the Selections Tools as well. We'll begin by examining the Layers Palette. (Click) the Layers Tab in the Layers Palette Set.

Layers Palette

The Layers Palette consists of many distinct controls, which include Layers themselves, Layer Options, Blend Mode, Opacity, Layer Lock Options, Fill, and the Layer Style, Layer Mask, New Layer, New Layer Set, New Adjustment Layer, and Trash Icon set at the bottom of the Palette. It's important to note that Layers have a stacking order, from the bottom up, meaning the Layer at the very bottom of the Layers Palette is the last or bottom Layer.



Layers

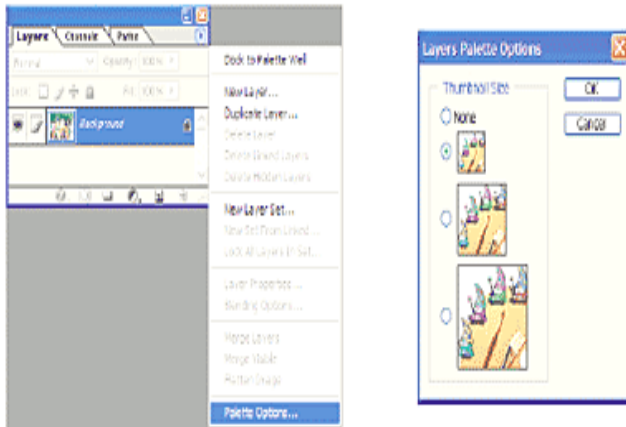
Each Layer contains a Layer Name, Thumbnail, Paint or Link Toggle, and Visibility Toggle.

Layer Name

It's a good idea to name your Layers for easy reference and organization. By default Photoshop names each new Layer "Layer x" where x represents a number, starting at 1. If you import a flat image (meaning an image with only one Layer, such as priests.psd, Photoshop defaults to naming the Layer "Background" in italics. The Italics indicate that no other Layer can be placed beneath it, in effect locking the Layer as the bottom of the Layer stack. To change the name of the "Background" Layer simply {Double-Click} the Layer and enter a new Name in the Name field. When you rename the "Background" Layer it is no longer fixed to the bottom of the stack. The Lock Icon will disappear.

Thumbnail

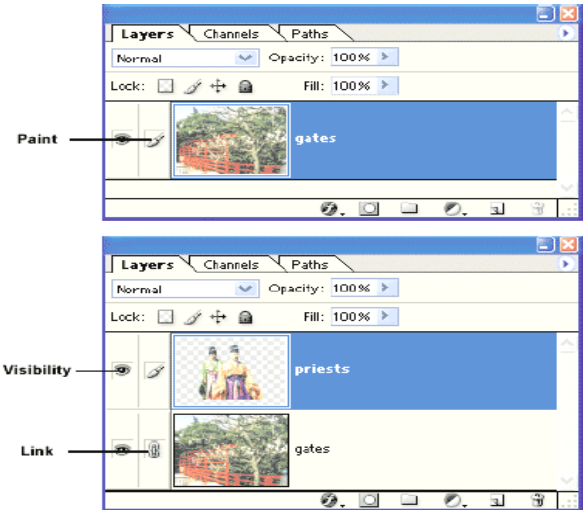
The Thumbnail is a visual representation of the Layer's content. By default, Photoshop uses the smallest Thumbnail size. To change the size or disable the Thumbnail {Click} the Layer Options menu and select Palette Options. Check the Thumbnail size you desire in the Layers Palette Options dialog box. The Layers Palettes pictured in this manual is set to the largest thumbnail size.



Select Palette Options and then select from four (4) choices for Thumbnail Size.

Paint or Link Toggle

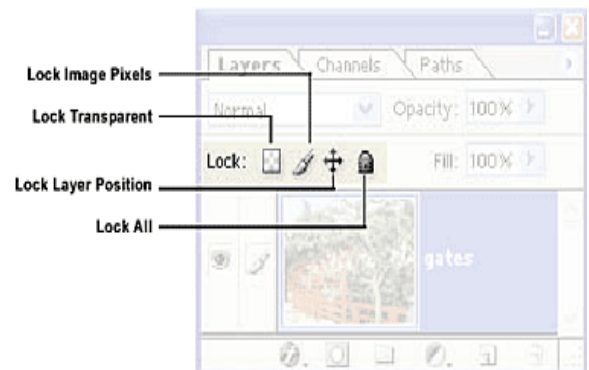
When a Layer is active or selected (by {Clicking} on it) a Paintbrush icon appears in the Toggle box beside the Thumbnail, indicating the Layer can be manipulated for editing. When you {Click} in the Toggle box of an inactive or unselected Layer you "Link" that Layer's content to the current active Layer, no matter where the active Layer is in the stacking order. Changes in position and various effects you apply to the active Layer are also applied to the Linked Layer. A Chain Icon appears to indicate Linking.



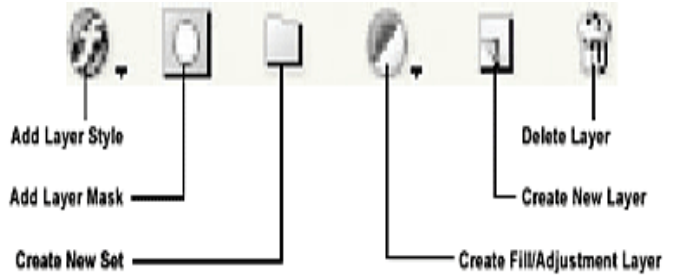
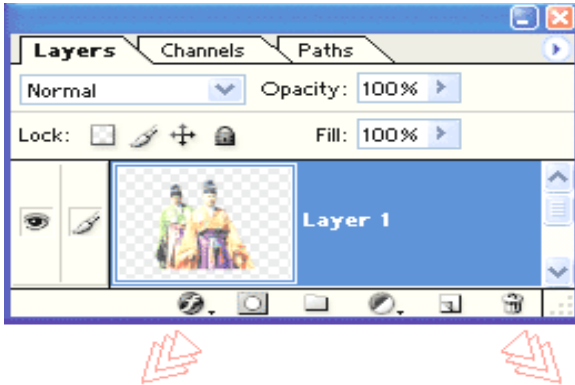
Visibility Toggle: {Clicking} the Visibility Toggle (see above) makes Layers visible or invisible in the Image Window. It's important to note that even though a Layer may be invisible, if it's the active Layer or is linked to an active Layer any changes you perform still occur.

Blend Mode: You can select from over twenty different Blend Mode options that affect how the image data in a Layer mixes or blends with other Layers. Usually you'll use Normal mode. Some of the other Blend Modes produce interesting effects. By experimenting and practicing as you compose your images, you will become familiar with the most, if not all the Blend Modes. You must have at least two Layers in your image to use Blend Mode.

Lock Transparency, Pixels, Position, and All: {Click} the Lock Transparency Icon to limit painting and editing effects to areas of a Layer that are not transparent. You can also lock the pixels information itself, lock the position of the pixels, or lock the entire Layer by {Clicking} the appropriate Icon. A Lock Icon appears beside the Layer Name. To disable a lock, {Click} the appropriate Icon again.



Layer Modification Options: Along the bottom of the Layers Palette are six (6) key Options.



Add Layer Style: A Layer Style is a prepackaged set of visual modifications that you can control to modify the content of the selected Layer. Typical Layer Style's include Drop Shadow, Bevel and Emboss, and Color Overlay among others. We will be using some of these as we progress through the manual.

Add Layer Mask: A Layer Mask will mask the currently active Layer. We will use a Layer Mask later in the chapter.

Create New Set: {Clicking} Create New Set creates a new Layer Set above the currently selected Layer or Layer Set. We will create a Layer Set later in the chapter.

Create New Fill or Adjustment Layer: {Clicking} Create New Fill or Adjustment Layer creates a Layer that allows the designer to apply tonal and color modifications to their image without having to permanently affect the image content. For example, you may wish to make someone's shirt brighter. Rather than actually modifying the brightness of the pixels that make up the shirt in the image, you create a Layer that makes the shirt appear brighter. If you or your client do not like the change you simply discard or change the Adjustment Layer. The original pixel information will have never been modified. We'll be using this feature later in the chapter.

Create New Layer: {Clicking} Create New Layer creates a new Layer above the currently active Layer.

Delete Layer: {Clicking} Delete Layer deletes the currently selected Layer. You are asked to confirm whether or not you wish to delete the Layer. If you have only a one (1) Layer you cannot delete it.

Using Layers: Make sure you have both *priests.psd* and *gate.psd* open and that you have changed the Image Mode of *gate.psd* to RGB.

If you haven't done so already in the previous chapter, make a Selection around the Priests in the orange and green robes in *priests.psd* (if you have made the Selection, feel free to load *priestsChannel.psd* (if you called it that) for this exercise.) The shape around the Priests is somewhat irregular so a selection has been saved with the image for your convenience if you do not wish to create your own. Once the Selection is completed, select Edit/Copy to copy the contents of your Selection to the clipboard. The clipboard is Photoshop's storage area for image data you copy and paste.

Make *gate.psd* active. Select Edit/Paste. Your Selection (the Priests) is pasted into *gate.psd* in a new Layer. Photoshop automatically titles the Layer "Layer 1." Select the new Layer and rename it "priests". Another method of moving image data from one image to another is by using the Move Tool. With the Move Tool, {Click}, drag, and drop your selection from *priests.psd* to *gate.psd*.

Transparency: Examine the Layers Palette. The priests Layer sits on top of the Background Layer and in the Image Window the Priests sit on top of the Gate image.



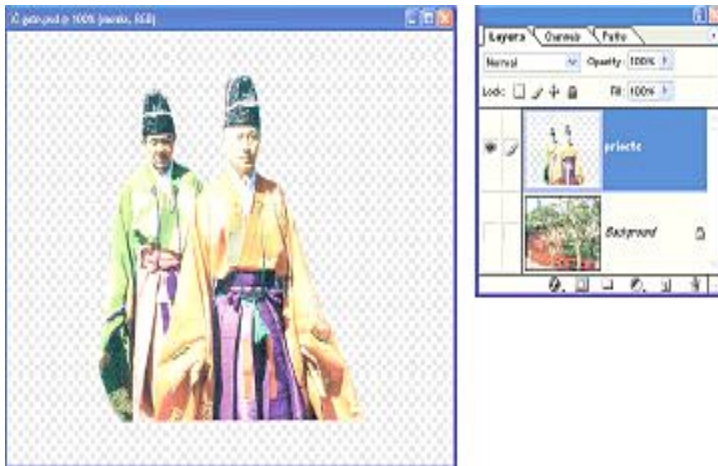
Make *priests.psd* active.



The Priests appear on top of the gate, just as the priests Layer is on top of the Background Layer in the Layers Palette.

You can see the gate, tree, and landscape around the Priests because, by default, Layers are transparent. Pasting the selection into gate.psd has created a new Layer with a transparent background in which the Priests selection sits.

Transparency (con't): Recall when we created a new image we selected a transparent background. Transparency is represented by a gray and white checkerboard. {Click} the Visibility Toggle in the Background Layer. The gate disappears. You see only the Priests and the transparent background that surrounds them.



With the visibility of the Background Layer toggled to invisible we can see the transparency surrounding the Priests.

Lock Transparent Pixels: Select the Brush Tool. Make sure the Priests Layer is active. {Click} Lock Transparent Pixels. Paint on the Priests Layer. You'll notice that your paint strokes are limited to areas that contain image data, in this case the Priests.

The effect is similar to painting a Selection. By selecting Lock Transparent Pixels, you are restricting changes to the image data contained within the Layer. Use the History Palette to remove your brush strokes and {Click} Lock Transparent Pixels again to disable it.

Lock Image Pixels: {Click} Lock Image Pixels. Locking the Layer's pixels will allow you to reposition the content of the Layer but not change or modify the pixels themselves. You cannot, for example, use the Brush Tool to change the color of an object on a Layer with locked pixels. {Click} Lock Image Pixels again to disable it.

Lock Position: {Click} Lock Position. Locking the Position of content on a Layer allows you to paint or edit it but not move it. {Click} Lock Position again to disable it.

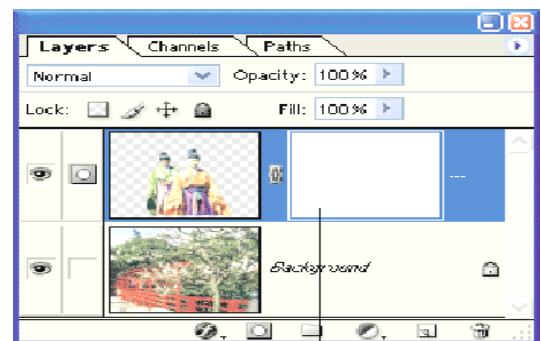
Lock All: {Click} Lock All. Locking the entire Layer disables moving or modifying the Layer whatsoever. {Click} Lock All again to disable it.

Make the Background Layer visible again. Make sure the Priests Layer is active. Layers are active when colored blue. A Paintbrush icon also appears in the Paint/Link Toggle box. {Click} the opacity control and drag the slider back and forth. You begin to see the Gate and Trees in the background through the Priests as you decrease its opacity. As you create images you'll find Transparency a powerful tool.

Moving Layers: Select the Move Tool. Make sure the priests Layer is active. {Click} and drag the Priests in the Image Window. You'll notice that you can move the Priests or part of Priests outside the edges of the Image Window. With Layers, you can think of the Image dimensions as the dimensions of a virtual window through which we see the image data. Photoshop permits you to move image data outside of the virtual window. As a result, we can do things like drag the Priests to the bottom right corner of the screen so that only their faces appear. You'll find this flexibility a great creative aid when composing images.

Blend Modes: Move the Priests to the center of the image. {Click} the drop-down Blend Mode list and explore the different Blend Mode Options. Photoshop examines the color data of the Layer you are blending and the color data of the Layers below and uses the various Blend Mode Options to create particular visual effects. Keep in mind you can also move the Layer around and play with Opacity. Photoshop's flexibility and complexity encourages combining effects and operations for increased creativity. Move the Priests around the image to see how each Blend Mode appears against different parts of the Layer beneath. Make sure you select Normal for the Blend Mode before proceeding.

Layer Masks: Non-Destructive Editing: Layer Masks are Alpha Channels attached to a Layer. Black completely masks or covers image data. White reveals image data. Gray values between Black and White reveal image data at various degrees of opacity. Add a Layer Mask to the Priests Layer by {Clicking} the Add Layer Mask button at the bottom of the Layers Palette. A Link Icon and a Mask Thumbnail are added to the Layer.

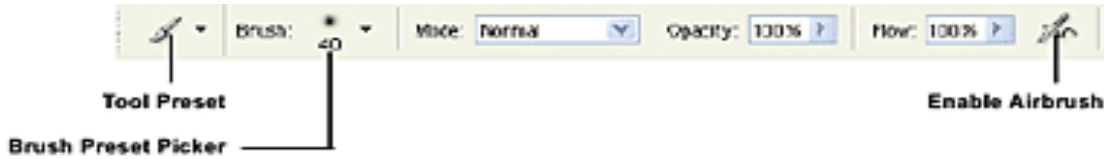


A Layer Mask is linked to the priests Layer.

Layer Masks: Non-Destructive Editing (con't)

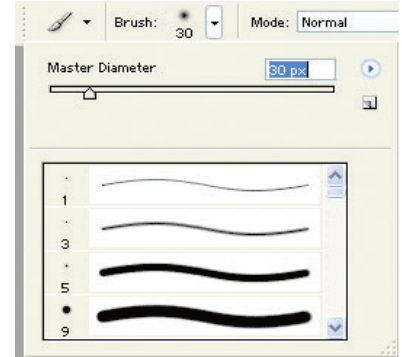
Set the Foreground Color to Black. Select the Brush Tool. {Click} the Enable Airbrush Icon and {Click} on the Brush Preset Picker in the Brush Tool Options.

Make sure that Mode is set to Normal, Opacity to 100%, and Flow to 100%.



Layer Masks: Non-Destructive Editing (con't)

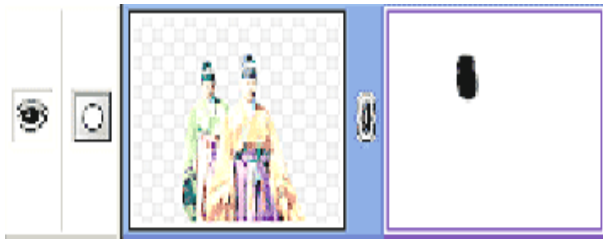
Use the Master Diameter Slider or input a Diameter manually in the Master Diameter Field. In this case, select a Diameter of 30 pixels (px).



We're going to remove the Priest in the green robe from the picture, or rather we are going to Mask the Priest so that he is not visible. This is a Non-Destructive approach to removing the Priest in the green robe. If we were to take a Destructive approach, such as erasing the Priest from the Layer, we would not have the benefit of easily reversing our decision to remove the Priest. For example, we or one of our clients may want the Priest removed one week and put back in the next. Using a Non-Destructive approach such as a Layer Mask, we could simply load the Photoshop Document and remove the Mask. Let's try it out.

Layer Masks: Non-Destructive Editing (con't): Start painting over the Priest's face by {Clicking}, holding, and dragging the mouse over the face. Notice how the face disappears. {Release} the mouse button. If you examine the Thumbnails in the Layer, you'll notice the Mask Thumbnail displays Black where you've applied your paint strokes, making those areas taken up by the Priest's face transparent. The Priest Thumbnail looks the same because you haven't actually erased the Priest; you're merely hiding or masking him.

Layer Masks: Non-Destructive Editing (con't)



You can see the Priest's face in the Layer Thumbnail. You can also see the Mask in the Mask Thumbnail. The Priest's face is hidden or masked in the Image Window.

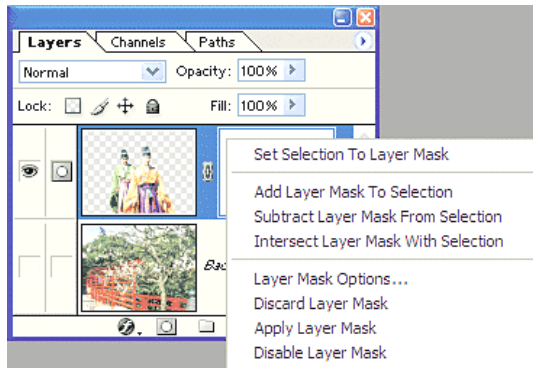


Layer Masks: Non-Destructive Editing (con't): Continue using the Brush Tool to hide the Priest. You may need to zoom in closer and reduce the Diameter of the Brush Tool as you paint the Mask closer to the edge of the Priest in the yellow robe. You should notice that the longer you hold the mouse button down, the pixel data is erased gradually, this is because we have set the Brush Tool to the Airbrush Option. As you create your Mask, you may wish to look at the Channels Palette as well. Note that a Mask in Photoshop is automatically added to the Channels Palette as an Alpha Channel.

As you paint the Mask over the Priest in the green robe the pixel data is hidden. When the Mask is complete, it appears that only one Priest is in our image. Because a Layer Mask is Non-Destructive, the Priest is still actually present, and his visibility can be restored by disabling, modifying, or removing the Layer Mask.

Modifying a Layer Mask

You can modify a Layer Mask by {Right-Clicking} the Layer Mask in the Layers Palette and selecting from a number of different options.



Set Selection to Layer Mask

This creates a Selection around the boundaries of the Layer Mask.

Add, Subtract, Intersect

If you already have a Selection created, use one of these Options to use the boundaries of the Layer Mask in combination with your Selection.

Layer Mask Options

You can set the color and the opacity of the Layer Mask when you toggle its Visibility in the Channels Palette.

Discard Layer Mask

Select this Option to delete the Layer Mask. Anything that was covered by the Layer Mask is uncovered.

Apply Layer Mask

Select this Option to make the Layer Mask permanent. The area in the image that is covered by the Layer Mask is removed and the Layer Mask itself deleted.

Disable Layer Mask

Select this Option to temporarily disable the Layer Mask. This Option changes to Enable Layer Mask when the Layer Mask is disabled.

Link and Unlink a Layer Mask

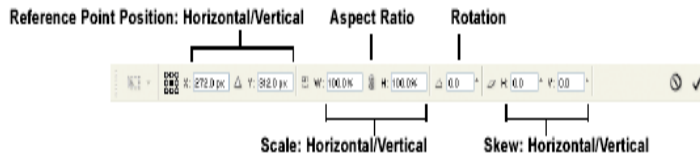
{Click} the Link Icon in between the Thumbnails of the priests Layer. Move the Priests with the Move Tool. Note that the Mask remains in place. To move the Mask with the image data keep the Thumbnails linked.

Transforming Layers

You may have noticed that the Priest is a bit too large for the image that he has been inserted into. This can be easily corrected. You can Transform the Layer to scale, rotate, and distort image data.

Select Edit/Free Transform. A Transformation Box surrounds the image data of the Layer, in this case the Priest. By {Clicking} on the Box's handles, you can resize the image data. Holding the [SHIFT] key constrains the Box as you resize, maintaining proportion. If you hold the mouse pointer just outside of the Box close to one of the Handles you can rotate the image.

For precise Transformation control you can input numerical values in the Options Bar.



Rotation is based around the Reference Point, which is at the center by default. To move the Reference Point, {Click}, hold, and drag it to the desired location. {Release} the mouse button to place it.

What is Skew?: When an image is skewed its distorted on an angle. For example, we've applied a skew to the priest. Note how he seems to be leaning to the left.



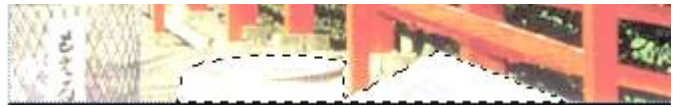
What is Skew (con't)?: We don't want to skew or rotate the Priest, we simply want to reduce his scale. Make the Priest is slightly smaller so that he looks as though he is walking down the path beside the gate. We've selected the Maintain Aspect Ratio button between the Width and Height fields and input a value of 80%. We've also placed him toward the left side of the image:



Creating New Layers

To create a new Layer {Click} the Create a New Layer button at the bottom of the Layers Palette. A Layer is added above the currently active Layer. Make the new Layer active and rename it "Garbage Can."

Make the Background Layer active. Make a Selection around the White Garbage Can and Sign on the bottom left hand side of the image. The Priest may be obscuring that part of the image, if so, use the Visibility Toggle for the priests Layer.



Having made your Selection, copy it to the Clipboard by selecting Edit/Copy. Make the Garbage Can Layer active. Select Edit/Paste. Your Selection, in this case the Garbage Can, is placed into the Layer. You may have to move the content on the Layer to reposition it exactly where it's placed on the original image (the Background Layer.) As an alternate, you can select Edit/Paste Into. A new Layer is created and the image data in the Selection is copied to the precise position it was copied from. In addition, a Layer Mask is automatically created based on the Selection.

Creating New Layers (con't)

If you toggle the Visibility of the other Layers to off, you can see the items you've selected, cut, and pasted into a new Layer.



Move the priest Layer by dragging it beneath the Garbage Can Layer (if you used the Paste Into method, delete the Garbage Can Layer you created and rename the automatically created Layer to Garbage Can.)

Creating New Layers (con't): The Priest now appears behind the garbage can. We've now added depth to the image. The Priest appears behind the Garbage Can and a measure of realism has been added to the photograph. You've created an image or composite using Layers. By isolating different elements or components of an image in Layers, you have a great deal of creative flexibility. Imagine creating this image without Layers. You would have to make very precise selections and use the History Palette extensively. It would also take up much more time.

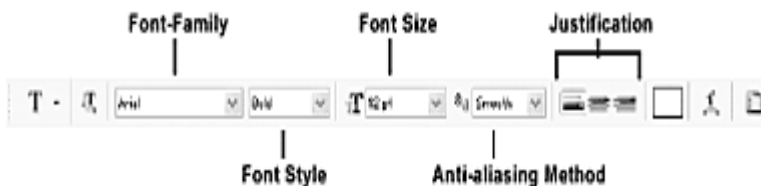


By using a combination of Layers, Selections, Transforms, and a Layer Mask, a Priest from one image has been placed in another to make a new image.

Text and Layers: When you add Text to an image by selecting the Type Tool and {Clicking} in the Image Window at the location you want your text to appear, a Layer is automatically created above the currently active Layer. The name of the Layer defaults to the text you input.

Photoshop allows you to type text directly into or over the Image Window. Other image editing programs and previous versions of Photoshop required that you type your text into a specialized dialog box. Now all the user needs do is select the Type Tool, place their cursor in the Image Window and begin to type.

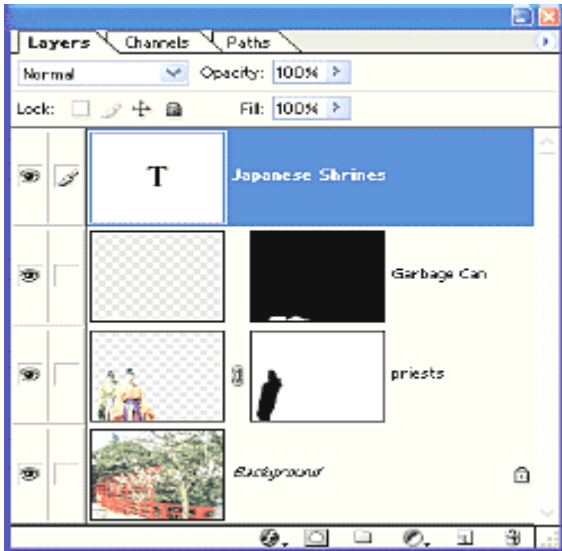
Make sure the top Layer in the Layers Palette is active and the Foreground Color is white. Select the Type Tool and {Click} toward the top left corner of the image. At this point, we won't go through the Type Tool options in the Options Bar, for now select the following settings:



- Arial (a typeface everyone should have) from the Font Family drop-down menu
- Bold from the Font Style drop-down menu
- Input or select a value a 12 pt in the Font Size drop-down menu
- Smooth from the Anti-aliasing Method drop-down menu
- Left Align from the Justification Options

Text and Layers (con't)

Input "Japanese Shrines" and {Click} OK. Your type is created in its own Layer and the name of the Layer is the text you input. This Type Layer is editable and is indicate by a capital "T" in the Layer Thumbnail.



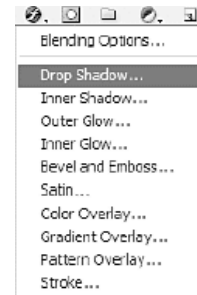
Text and Layers (con't): At this point, the type can be re-edited or changed by highlighting the text in the Image Window (make sure the Type Layer is selected in the Layers Palette) with the Type Tool in the Layer. You can position the type as close to the top left corner as you wish using the Move Tool.

Looking at the image at this point, the text isn't particularly visible against the background.



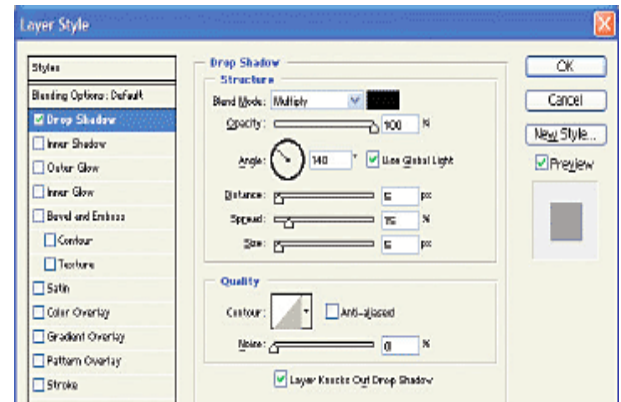
We could change the Color, Font Family, or Font Size, or we could use a Layer Style.

Layer Styles: Layer Styles are pre-defined special effects applied to the image data contained in the Layer. To apply a Layer Style, select the Layer you want to apply the effect to and {Click} on the Add a Layer Style button at the bottom of the Layers Palette. In this instance, apply a Drop Shadow to your Type Layer. From the Styles drop-down, select Drop Shadow.



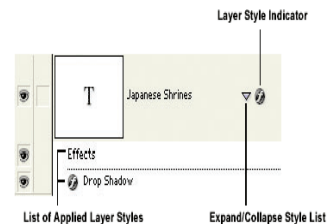
Layer Styles (con't): A rather substantial dialog box appears with options to adjust the appearance of the Drop Shadow. Use the Layer Style dialog box to add, remove, and modify Styles attached to your Layers. {Click} on a Layer Style checkbox to add a Style and {Click} on the Style label to modify its properties. We'll take a closer look at the Styles later in the manual so stick with the Drop Shadow for the time being. Make sure you use the following settings (as seen in the screenshot):

- Blend Mode: Multiply
- Opacity: 100%
- Angle: 140 degrees
- Use Global Light: Checked
- Distance: 5 px
- Spread: 15 px
- Size: 5 px
- Layer Knocks Out Drop Shadow: Checked



Layer Styles (con't)

Once you've set the Options, {Click} OK to close the Layer Style dialog box. Take a look at your Image Window. There is a shadow behind the type, making it more visible against the background. A lower-case italic "f" appears in the Layer indicating that a Layer Style has been applied. You can {Click} the triangle beside the "f" to expand or collapse the list of Layer Styles you've applied to a particular Layer. You can also toggle the visibility of any of the Layer Styles, just as you do a Layer. To edit an existing Layer Style, {Double-Click} it in the Layers Palette. Each Layer Style has a set of properties that change according to the effect. Experiment with properties to customize the effect.



Managing Layers: As you produce images in Photoshop, some of them can be quite complex, consisting of many Layers. Knowing how to manage Layers can help you and anyone you may collaborate with work efficiently.

Changing the Stacking Order: To change the stacking order of Layers simply {Click} and drag the Layer above or below other Layers. A solid black line indicates the Layer is ready to be dropped. {Release} the mouse button.

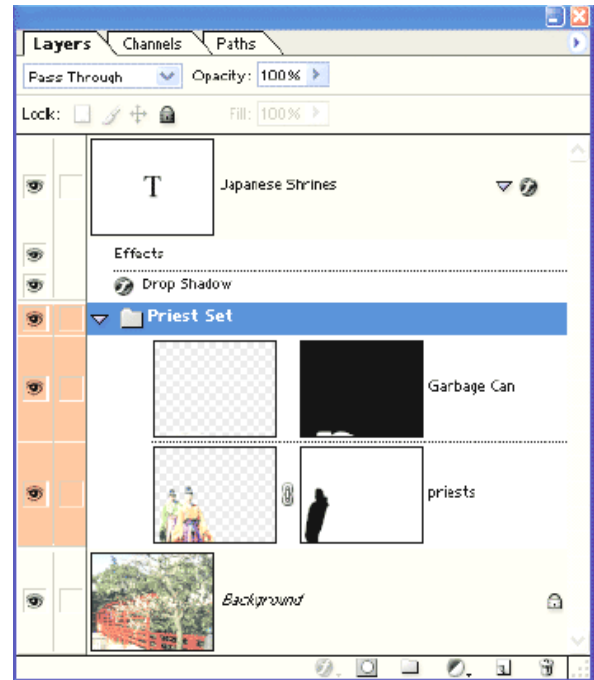
Duplicating Layers: Use the Layer Options Menu and select Duplicate Layer to make a copy of the Layer. You can title the Layer and choose to copy it to the same image, another image you have opened, or create a new image with the contents of the Layer.

Merge Options: Selecting Merge Down merges the contents of the currently active Layer with the Layer below it. Selecting Merge Visible merges the all the currently visible Layers. The bottom Layer must be visible and the currently active Layer. Select Layer/Merge Linked to merge Layers you have linked together. Select Flatten Image to merge all Layers. This removes all the flexibility you have with Layers.

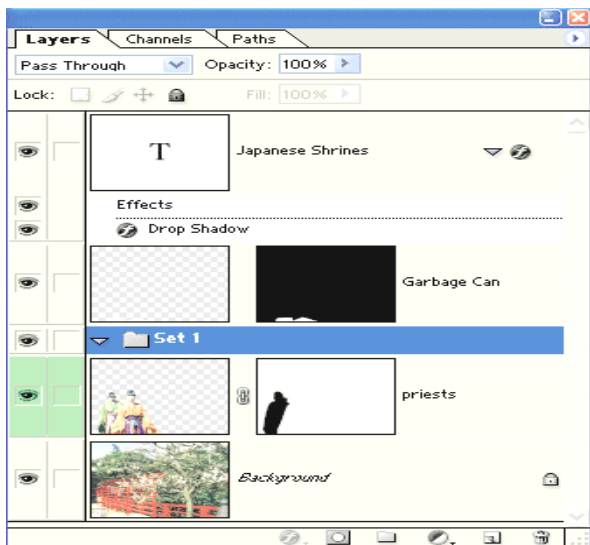
Color-coding Layers: Photoshop has made managing Layers much easier by allowing the user to color-code them in the Layers Palette. Select Layer Properties from the Layer Options Menu, select a color from the drop down menu and {Click} OK.

Layer Sets: Photoshop also allows the user to group similar content into a Layer Set. A Layer Set is like a folder into which you place a collection of individual Layers. Create a Layer Set by clicking on the New Layer Set button at the bottom of the Layer's Palette. The Layer Set is created above the currently selected Layer by default.

Layer Sets (con't): The new Layer Set is named "Set 1" by default. Rename the Layer Set by {Double-Clicking} on it and inputting an appropriate name. You can also give the Layer Set a color if you wish. It is important to remember that the color settings for your Layer Set override any individual color settings you have given individual Layers. To place a Layer in a Layer Set you {Click} and drag it onto the Set's Folder Icon. You need to place it directly on the Icon or the move won't take place. A successfully relocated Layer will appear below the Layer Set and its Thumbnail will be slightly indented. A Layer Set can be expanded or collapsed by {Clicking} on the small gray rectangle beside the Layer Set name.

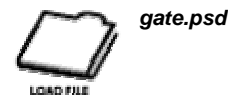


Both the "priests" and the "Garbage Can" Layers are in the "Priest Set" Layer Set.



By default the new Layer Set is created above the currently selected Layer.

Layer Sets (con't): Note the default Blend Mode of the Layer Set. It is set to Pass Through. What Pass Through indicates is that the Layer Set itself does not have any Blend Mode properties; it merely passes through the Blend Mode settings of the Layers it contains. You can select another Blend Mode for the Layer Set and it will take all the properties of the Layers it contains and composite them. Once the composite is built, that composite of Layers is treated as single Layer and the Blend Mode for the Layer Set is applied to the composite of Layers and then composited with any other Layers and/or Layer Sets that the image contains. You have successfully completed assembling your first composite image using Selections, Layers, a Layer Mask, and a Layer Set. Save your image if you wish. You can compare your image to the one referenced in this manual which is called gate.psd, in the **completed** folder for this chapter.



EDITING IMAGES

Using Photoshop's Tools

Photoshop's Tools are very powerful. For each Tool, there are sets of options (in the Options Bar) you use to define how the Tool operates. To use Photoshop effectively you should be familiar with all the fundamentals and use them in combination to create images.

As we progress through the Drawing Tools we're going to need an image we can use to experiment with. Open **blank.psd** (we'll be using other images as well.)



This image is 600 x 300/72ppi, with two (2) Layers, transparent and white. As you read this section, try the tools and options out on your image. You might want to make a separate Layer for some of the Tools you experiment with.

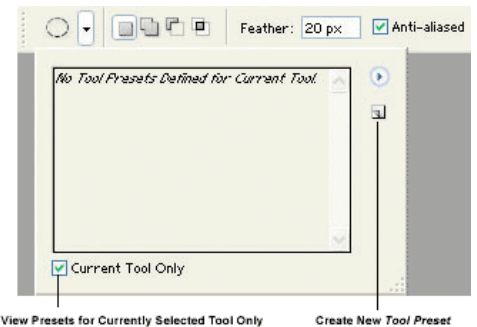
The Brush Tool



When you use any of the Brush Tools, it's a good idea to select a Brush Diameter, Brush Shape and Color immediately. Select the Brush Tool and examine Options Bar.

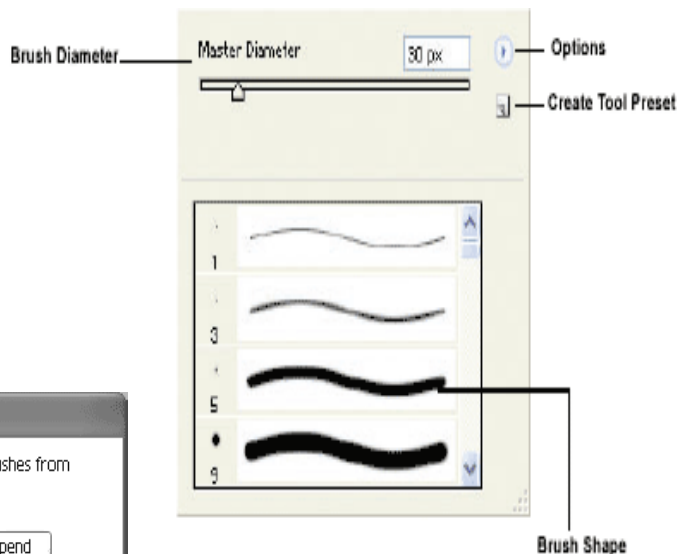


Tool Presets: A Tool Preset is effectively a library of custom settings for a particular Tool. Each Tool in Photoshop has a set of Options that can be set in the Options Bar. If you find yourself using the same set of Options repeatedly you may wish to make a Tool Preset so that you do not have to input the Options in the future. If you examine the Options for the Marquee Tools for example, among other Options we have Feather and Anti-aliased. We'll cover each of these Options below, however, if you were to commonly use the Elliptical Marquee Tool with Anti-aliased checked and a Feather value of 20, you could create a Tool Preset that saves those Options.



To create a Tool Preset, select the Tool, in this case the Elliptical Marquee Tool. Input a value of 20 into the Feather field, and check Anti-aliased. Next, {Click} the Tool Preset drop-down menu to view the Tool Preset window.

Brush Preset Picker: {Click} the Brush Preset Picker to set Brush Diameter and Brush Shape. Use the Master Diameter Slider or input box to set the diameter you desire. Select a Brush Shape by {Clicking} on it. You can use the scroll bar to view more shapes or resize the Brush Preset Picker box. The diameter is displayed (which you can change) and a sample stroke is displayed.



Brush Preset Picker (con't): In addition to the default Brushes, you can add more Brushes by selecting Options and choosing from a variety of Brush categories. For example, if we select the Special Effect Brushes Category, we are asked if we wish to replace the current Brushes or append them to the current set of Brushes. The additional Brushes will appear below the current set.



Its usually good to append so that you do not remove the default set, however, if you do, select Reset Brushes from Options. The defaults will be restored.

Painting Mode: Painting Mode affects the way the color of the Brush mixes with existing image data in the same manner as the Blend Mode for Layers

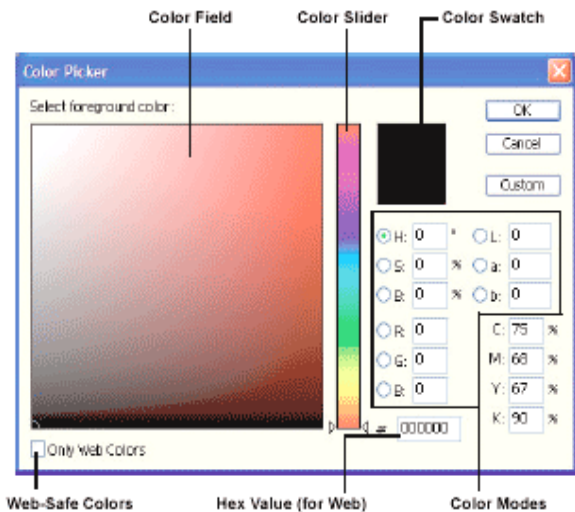
Stroke Opacity: Stroke Opacity affects the level of transparency of the Stroke (0% being fully transparent, 100% being fully opaque.)

Stroke Flow Rate: The Stroke Flow Rate determines the rate at which paint is applied. For example, even though you might have Stroke Opacity set to 100%, if you've set Stroke Flow Rate to 20% and you've selected Black as your Color, a grey opaque Color results. By continuing to brush over the same area, the Color will get darker.

Enable Airbrush: {Click} Enable Airbrush to switch the Brush Tool to an Airbrush Tool. When an Airbrush, the Brush Tool effectively sprays color onto an image, similar to painting with a can of Spray Paint. Imagine the mouse button is the nozzle you press down and hold as you spray. The longer you spray a particular area the more opaque or dense the color or paint becomes. In other words, as you apply increased or consistent pressure the density of the color increases.

Selecting a Color: Before we proceed, we should select a Color. In Photoshop, there are a variety of ways to select a Color, including the Color Picker, the Color Palette, and the Swatches Palette.

The Color Picker: One method of selecting a Color in Photoshop is to {Double-Click} the Foreground Color Swatch (because the current Foreground Color Swatch holds your paint Color) to launch the Color Picker.

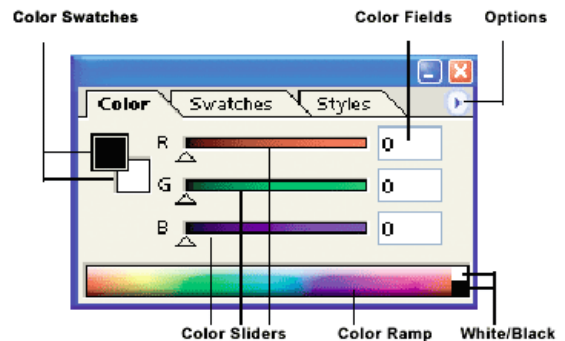


The Color Picker (con't): There are three Color Modes with which you can select a Color from by using the Color Slider and the Color Field. By default, the HSB Color Field is selected. HSB stands for Hue, Saturation, and Brightness, and is a Color Mode from which you can select a valid RGB Color. To select a Color, simply {Click} anywhere within the Color Field. Note that the numerical values in each Color Mode are displayed. Use the Color Slider to adjust the range of Colors within the Color Field.

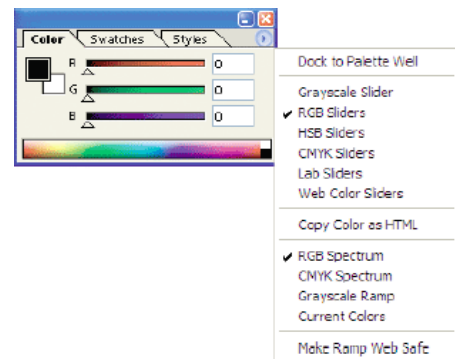
To get a good idea of how the Color Field works in tandem with the Color Slider select the R in the RGB Color Mode. The Color Slider presents the full range of Red Colors from the darkest to the lightest. With Red selected, the Color Field will consist of a mix the remaining primary colors, Green and Blue. You can select a Red by using the Color Slider or select from the Color Field. Just as with the HSB Color Field, when you adjust the Color Slider, the Color in the Color Field adjusts as well. You can also input numerical values into the Color Mode Fields or the Hex Value Field. To view only Web-Safe Colors (a range of 216 fixed Colors that the major browsers use), check the Web-Safe Colors checkbox. Your chosen Color appears in the Color Swatch. Once you have chosen a Color, {Click} OK. You can begin to paint with your selected Brush.

Try a variety of Brushes, Colors, and Brush Shapes. Append other Brush Sets to the Brush Preset Picker and try them. Adjust both Opacity and Flow Rate and note how these settings affect the Brush Stroke. Use the History Palette to remove your changes or make different Layers to experiment with.

The Color Palette: To create a Color using the Color Palette, select the Foreground Color Swatch or Background Color Swatch and use the Color Sliders, the Color Fields (input values between 0 - 255), or the Color Ramp to select your desired Color.



The Color Palette (con't): Select both RGB Sliders and RGB Spectrum (for the Color Ramp) when working with images for the web. If you are limiting yourself to the Web-Safe Color palette, select Web Color Sliders and Make Ramp Web Safe. Web-Safe Color is covered in a later chapter.



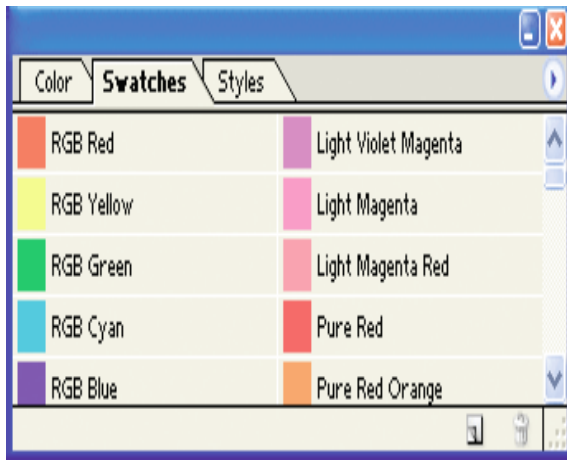
The Swatches Palette: The Swatches Palette defaults to a broad spectrum of available Colors. To choose a Color {Click} on a Color Swatch. The Color you select replaces the current Foreground Color.



Create New Swatch of Foreground Color

Creating a Custom Swatch: To create your own swatch(es), modify the Foreground Color in the Color Picker or Color Palette and then select the Swatches Palette and {Click} the Create New Swatch of Foreground Color button. Name your custom swatch accordingly.

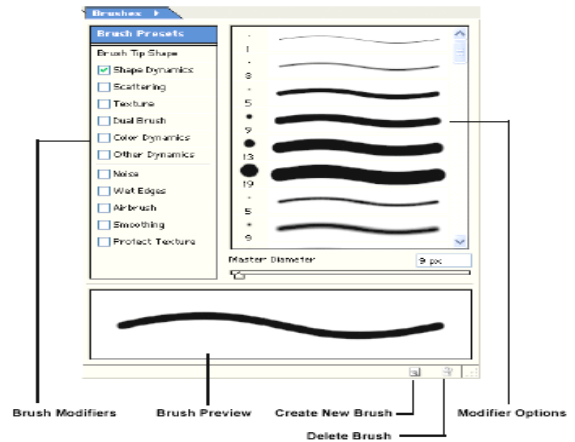
Viewing Colors by Name: To view Colors by name, select Small List from the Options Menu. You can change the scale of the Swatches Palette to view a list of two (2) columns.



Saving, Adding, and Restoring Swatches: To save swatches you've created select Save Swatches from the Options Menu. You can also add swatches by selecting from a variety of included swatch sets listed at the bottom of the Options Menu as well as selecting Load Swatches to load in a custom swatch set. You will have the option to append or replace the existing swatch set.

To restore the Swatches Palette back to its default Colors, select Reset Swatches from the Options Menu.

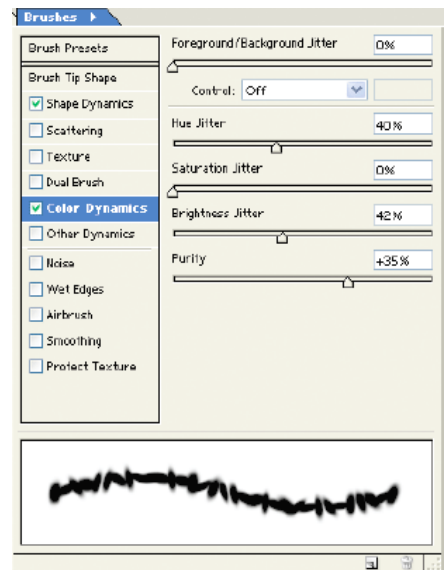
The Brushes Palette: To customize and modify Brushes to a great degree, you can use the Brushes Palette which, by default, is docked in the Palette Well beside the File Browser.



Selecting a Brush Preset: To select a Brush Preset, {Click} on the Brush Presets Name in the Brush Modifiers column. The Modifier Options column displays the default Brush Presets that we looked at in the Brush Preset Picker. Use the Master Diameter Slider to set the size of the Brush.

Creating a Custom Brush: To create a custom Brush, first select a Brush Preset as a starting point and {Click} the Create New Brush button. Give the Brush an appropriate name.

Next, you can select from any of the remaining options in the Brush Modifiers column. You usually start by modifying the Brush Tip Shape and then move on to select one of more options to create your custom Brush. Selecting the checkbox beside each Modifier



We've create a custom Brush called Warbly.

makes it active. To view and modify the options for each Modifier, {Click} on the Modifier Name itself. Modifier Options will vary. Experiment with the options presented to you until you are happy with your custom Brush. Note that not all of the Brush Modifiers have options.

Try to create your own custom Brush and experiment with it. Remember to select different Colors, try different Brush Diameters, and change Opacity and Flow Rate.

Pencil Tool Options: Select from Brush Preset Picker, Painting Mode, Opacity, and Auto Erase.



Brush Preset Picker: {Click} the Brush Preset Picker to set Brush Diameter and Brush Shape. Use the Master Diameter Slider or input box to set the diameter you desire.

Painting Mode: Painting Mode affects the way the color of the Brush mixes with existing image data in the same manner as the Blend Mode for Layers.

Opacity: Opacity affects the level of transparency of the Stroke (0% being fully transparent, 100% being fully opaque.)

Auto Erase: Check Auto Erase to make the Pencil Tool paint the currently designated Background Color over the currently designated Foreground Color. Experiment with Pencil Tool with **blank.psd**.

The Clone Stamp Tool: The Clone Stamp Tool operates like the Brush Tool except that rather than selecting a color to paint with, you select an area of the image to duplicate or clone by {Alt/Option-Clicking} the area you wish to duplicate. As you paint with the Clone Stamp Tool a cross-hair passes over the area you've selected for your reference. The diameter of the brush you select in the Brushes Palette determines the size or radius of the cloning area. Usually, you'll have to reestablish a reference point or area repeatedly and paint over other areas of the image in small parts. Use the Clone Stamp Tool to modify photographs. For example, we wanted to remove the people from the following image:



The Clone Stamp Tool (con't): Using the Clone Stamp Tool, we selected reference points close to the people in the image and painted over the people by duplicating the surface of the pillars nearby. The result:



The people have been removed.

Clone Stamp Tool Options: Most of Options for the Clone Stamp Tool are identical to the Brush Tool; however, the Aligned and Use All Layers Options differ.



Aligned: Check Aligned to force the cross-hair established at the reference point to follow the Clone Stamp Tool regardless of how many times you {Click} and {Re-Click}. When Aligned is unchecked the cross-hair returns to original reference point after you have released the mouse button and {Click} again to resume.

Use All Layers: Check Use All Layers to duplicate visible image data in all Layers. Uncheck to duplicate the image data from currently active Layer exclusively. The Clone Stamp Tool is not limited to duplicating image data into the same image or a single Layer. You can establish reference points in one Image Window and duplicate the contents into another Image Window or another Layer. Open the **landscape.psd** image and practice using the Clone Stamp Tool.

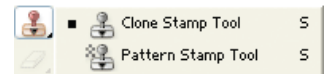


Try to add and remove trees and rocks. Duplicate elements from landscape.psd into a new Layer of blank.psd.

Pattern Stamp Tool:

The Pattern Stamp Tool paints or repeats a pattern.

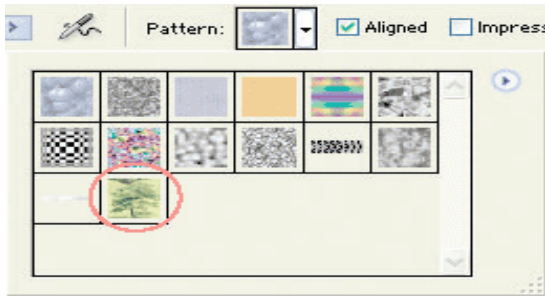
You use the Rectangular Marquee Tool to define patterns in Photoshop.



Defining a Pattern: Using the landscape.psd image, create a rectangular Selection around one of the trees. Select Edit/Define Pattern. Name the Pattern accordingly. There are no limits on the size or content of the pattern, but it must be rectangular. Photoshop stores the pattern you've just defined for use by any of the Tools that use patterns, such as the Pattern Stamp Tool in Pattern drop-down menu in the Options Bar. {Click} on the Pattern drop-down to access your defined pattern in addition to a range of preset patterns.

The Options menu for the Pattern drop-down will allow you to add, delete, rename, and reset the Patterns available.

Pattern Stamp Tool (con't): Many of the settings in the Options Bar for the Pattern Stamp Tool are similar to the Options for the Brush Tool and the Clone Stamp Tool. You'll find many of the Tools share many of the same Options.




The Pattern of the tree we created is added and made available in the Pattern drop-down menu.

Painting with the Pattern Stamp Tool: Paint with the Pattern Stamp Tool as you do with the Brush Tool. You'll notice that the Pattern you just defined is painted and repeated (also called tiled.) Check the Impressionist checkbox to give the Pattern a painterly impressionist affect.



A pattern is painted in a new Layer in blank.psd.

The Healing Brush Tool : The Healing Brush Tool is very similar to the Clone Stamp Tool. Just as with the Clone Stamp Tool, you select a reference point that you wish to duplicate within another area of the image and build a Brush Shape to replicate the reference point. The Healing Brush Tool differs from the Clone Stamp Tool in its purpose. You use the Healing Brush Tool to correct imperfections within an image. You may have to scan flawed source material, such as an old photograph, or modify the complexion of a person in a photograph. **For example**, examine this image:



The print has been cracked and stained. By using the Healing Brush Tool, we can restore this image or correct the imperfections.

The Healing Brush Tool (con't): Open *restoration.psd*.



Select the Healing Brush Tool and examine the Options in the Options Bar.

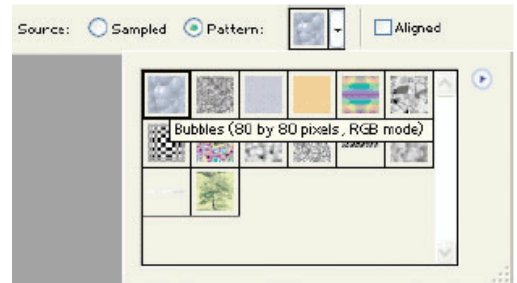
Brush Picker: You can build the Brush you'll use to paint with using the Brush Picker. You can modify Diameter, Hardness, Spacing, Angle, Roundness, and Size (for work pressure sensitive tablets.) Experiment with each option to learn how they affect your Brush. Similar options are available when creating a custom Brush using the Brushes Palette (see "Creating a Custom Brush" on page 112.)

Effect Mode: Select from a variety of Effect Modes. These function like the Blend Mode setting for Layers or the Painting Mode setting for the Brush Tool (see "Blend Modes" on page 86.)

Source: To specify what the source of the Healing Brush Tool will be select from either Sampled or Pattern. If you select Sampled, the source is the area at which you [ALT-Click] upon, just as with the Clone Stamp Tool. If you select Pattern, choose a Pattern from the drop-down menu.

Aligned: Check Aligned to force the cross-hair established at the reference point to follow the Clone Stamp Tool regardless of how many times you {Click} and {Re-Click}. When Aligned is unchecked the cross-hair returns to original reference point after you have released the mouse button and {Click} again to resume.

The Healing Brush Tool (con't): Thus far the options and use of the Healing Brush Tool do not differ much from the Clone Stamp Tool. However, recall that the Clone Stamp Tool merely duplicates the area you designate as the reference point so that if you reference a red area of an image and paint with the Clone Stamp Tool somewhere else in the image the painting will also be red. With the Healing Brush Tool this is not the case. The lighting, texture, and shading of the referenced area automatically matches (as best it can) the lighting, texture, and shading of the healed area. For example, rather than selecting Sampled for our reference point, lets select Pattern. Select the Bubbles preset Pattern.



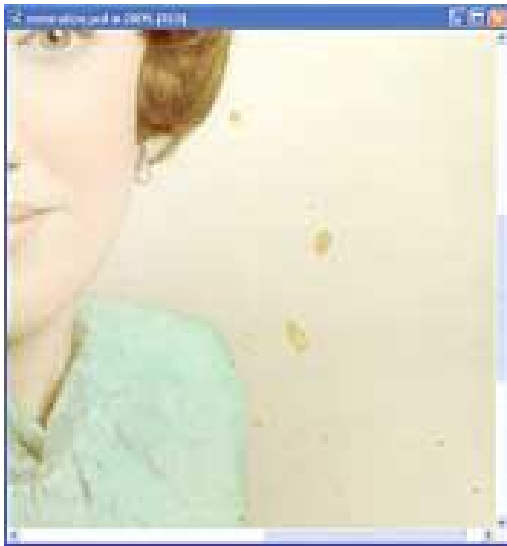
The Bubbles Pattern is blue in color. With the Healing Brush Tool, paint on the **restoration.psd** image along the right side. As you paint, the Pattern appears to be painting, in its original Color over the brown Color of the image. However, when you {Release} the mouse button, Photoshop matches the lighting, texture, and shading of the painted area with the Pattern.

The Healing Brush Tool (con't): Switch to the Pattern Stamp Tool and select the same Pattern. Paint beside the painting you just completed. Note the difference. With the Pattern Stamp Tool (and the Clone Stamp Tool) the referenced area is replicated (though the options you choose (Opacity, Flow Rate, Airbrush, Brush Shape, etc.) can change how it's replicated and applied.) With the Healing Brush Tool, the referenced area is replicated but the lighting, texture, and shading of the painted area is preserved.

The Healing Brush Tool (con't): Next let's try to use the Healing Brush Tool with Sampled selected from the Source Option. First, restore restoration.psd back to its original state using the History Palette. Create a Brush with the following settings:

- Diameter: 10 px
- Hardness: 70 %
- Spacing: 1%
- Angle: 0 degrees
- Roundness: 100 %

Like the Clone Stamp Tool, you may have to select a reference point repeatedly and modify the size and shape of your Brush for the best results. Begin to reference clean areas of the background and paint over damaged areas. It will take some time, and you may need to zoom into the image. For example, we can start by removing the stains to the left of the woman's shoulder.



Sample (establish a reference point) the areas close to the stains and then paint over the stains.

The Healing Brush Tool (con't): As you paint, you may notice that the area appears to be darker or lighter. Once you {Release} the mouse button, Photoshop will adjust the replicated area to match the painted areas lighting, texture, and shading as best it can. Usually, it does a spectacular job. For the spots on the dress, you may have to reduce the Brush Diameter.



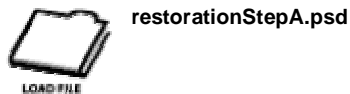
Using the Healing Brush Tool, the stains/spots are removed from this area.

The Healing Brush Tool (con't): Continue to use the Healing Brush Tool to remove the stains, spots, scratches, and so forth from the image. Often you have to use a combination of the Healing Brush Tool and the Clone Stamp Tool. Why the Clone Stamp Tool? Sometimes you may not want to preserve the lighting, texture, and shading of a particular area. Try making some corrections along the edge of the image (where the brown background reaches the white frame of the image) to see why you may need to use the Clone Stamp Tool as well. Don't worry about correcting the white frame area of image, we'll not be using that area of the image for the web site. When you've done, your image should look something like this:

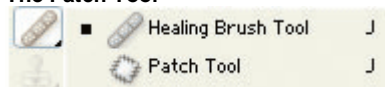


Using a combination of the Healing Brush Tool and the Clone Stamp Tool the stains, spots, and scratches are removed. The image is almost restored.

The Healing Brush Tool (con't): Save your image if you like. Do not save over restoration.psd as you will need this image for the next Tool we cover, the Patch Tool. If you like, open **restorationStepA.psd** to view the changes we've made thus far. Compare it to your own to see if you missed some spots or if we've missed some spots.



The Patch Tool



The Patch Tool is similar to the Healing Brush Tool but the method one uses to patch or correct particular areas of an image differs. To use the Patch Tool:

1. Select either Source or Destination from the Options Bar.

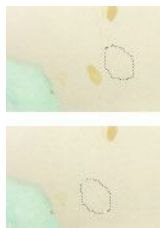


2. If you've selected Source, use the Patch Tool to draw a Selection around the area you wish to correct, such as one of the stains in the restoration.psd image.



The Patch Tool (con't)

3. Next, with the Patch Tool still selected, place it within the Selection you've just made and drag the Selection to the area you wish to duplicate. {Release} the mouse button. The area you dragged the Selection to is replicated over the area your originally selected, with lighting, texture, and shading preserved.



4. The selection returns to the original area. Deselect.

The Patch Tool (con't): Alternately, you could have selected Destination from the Options Bar. In this case, you select the area you wish to replicate first and then drag the replicated Selection over the area you wish to patch.



Note

You can use the standard Selection Tools first, to make a Selection for your patch and then use the Patch Tool. The Patch Tool will inherit the Selection you've already made and use it as the basis with which to make the patch.

Using a Pattern with the Patch Tool: To use a Pattern with the Patch Tool, make a Selection first. The Pattern Option is now available. Select your Pattern and press the Pattern button to apply it. For example, we've used the Magnetic Lasso Tool to create a Selection around the woman. Then we inverted the Selection (Select/Inverse from the Menu), selected the Patch Tool, selected the Bubbles Pattern and applied it to our selected patch area by pressing the Pattern button. The result:




Open restoration.psd again (or use the History Palette to restore it to its original state.) Experiment with the Patch Tool.

To view the image above, open **bubbles.psd**.



**restoration.psd
bubbles.psd**

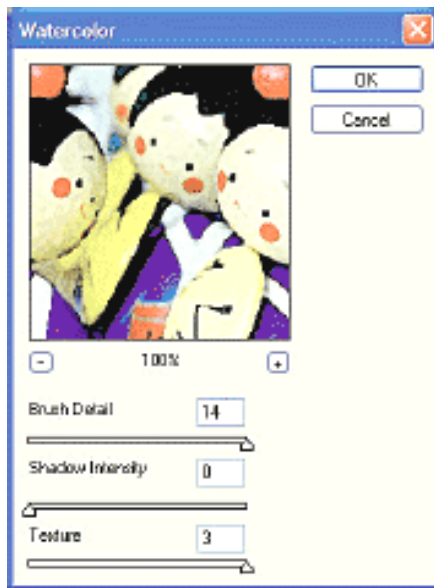
History Brush Tool  : The History Brush Tool operates like the Brush Tool except that rather than selecting a Color to paint with, you select a History State to restore as you paint. To illustrate how the History Brush Tool works we're going to apply two filters to an image (filters are covered later) and then use the History Brush Tool to restore particular areas of the image to previous States.

Open *toys.psd*.




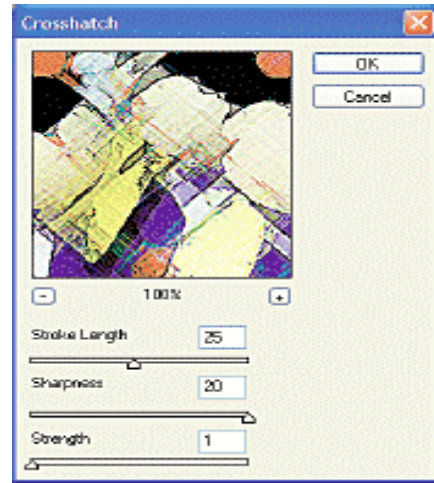
toys.psd: A collection of wooden dolls

History Brush Tool (con't)  : From the Menu, select Filter/Artistic/Watercolor.




Use the following settings - Brush Detail: 14 / Shadow Intensity: 0 / Texture: 3. {Click} OK.

History Brush Tool (con't)  : Select Filter/Brush Strokes/Crosshatch.



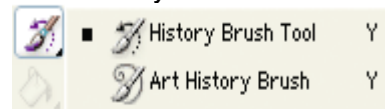
Use the following settings - Stroke Length: 25 / Sharpness: 20 / Strength: 1. {Click} OK. The filter is applied, changing the image to a distorted sketch.

History Brush Tool (con't)  : Examine the History Palette. You'll notice that both the Watercolor and Crosshatch filters are listed as History States. To remove the Crosshatch effect on the one of the toys select the History Brush Tool, select a Brush Diameter, and select 100% Opacity. {Click} the Toggle Box in the Watercolor State. A History Brush icon appears. This indicates that you will painting with the contents of this particular History State. As you paint over the toy of your choice that toy will appear as it did in the Watercolor State, before you applied the Crosshatch Filter.



The History Brush Icon beside the Watercolor History State indicates that as you paint, you'll be restoring the appearance of the image from that particular State.

The Art History Brush Tool



The Art History Brush Tool operates like the History Brush Tool with

additional brush or paint effects. Like the History Brush, the Art History Brush samples data from a History State of your choice.

Art History Brush Options: You can produce various natural media effects by changing the Painting Mode, Opacity, Painting Style, Painting Area, and Painting Tolerance settings in the Options Bar. The Art History Brush Tool takes some getting used to and practice. Experiment with different settings to learn how they affect your image.



The Art History Brush Tool has some unique options.

Art History Brush Options (con't)

Painting Style:

Select from a number of different options to define the shape of your brush strokes.

Area:

Area determines how much of the image is covered by your paint strokes and how frequently the stroke effects are applied. Larger numbers increase both the area and the frequency.

Tolerance;

Tolerance determines the limitations of your strokes based on color variations. Increasing the value limits your strokes to area of similar color. Decreasing the value broadens the range of color your strokes affect.

The Eraser Tool

The Eraser Tool works similarly to Photoshop's other painting Tools except rather than add color you remove image data. Like the other painting Tools, you select the Brush Diameter and other settings from the Options Bar. In addition, you can select Erase to History to make the Eraser Tool operate like the History Brush Tool.

Eraser Tool Options/: Options for the Eraser Tool are similar to the Options for the Brush Tool. Additional Options include Erasing Mode and Erase to History.



Eraser Tool Options (con't)

Erasing Mode: Select from Brush, Pencil, or Block to determine how the Eraser Tool behaves. Block produces a square block.

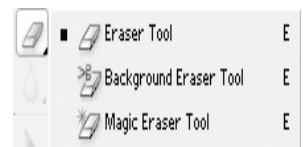
Erase to History: Toggle a History State or Snapshot in the History Palette and check the Erase to History checkbox if you want to erase to an earlier incarnation of your current image. This functions in the same manner as the History Brush Tool. This is very similar to the image we worked on previously. Recall that we removed the Priest in the green robe by using a Layer Mask. Using a Layer Mask is a non-destructive approach, using the Eraser Tool to accomplish the same goal is a destructive method. The Layer Mask hid or masked the Priest from view whereas erasing the Priest with the Eraser Tool will actually remove the image data. Expand the Priest Set Layer Set and select the priests Layer. Use the Eraser Tool (in combination with the Zoom Tool and any other Tools you've learned to use, such as the Selection Tools) to remove the Priest in the green robe from the Layer. Once image data is erased, and you have saved the edited image, you will not be able to recover it. This is a perfectly valid method and one you will employ frequently in a number of different situations. Sometimes you will want to use a Layer Mask for maximum flexibility. Keep the differences in mind.

Open **gate.psd**.



The Background Eraser Tool

The Background Eraser Tool intelligently erases areas of an image to transparency, most particularly areas of continuous or similar Color. By {Clicking} and dragging close to an edge the Background Eraser Tool will erase the background but not the edge. You can use the Background Eraser Tool to remove the background from around an object, such as a person, rather than making a Selection around the person.



Background Eraser Tool Options

Options include Brush Preset Picker, Limits (Discontiguous, Contiguous, Find Edges), Tolerance, Protect Foreground



Color, and Sampling (Continuous, Once, Background Swatch).

Background Eraser Tool Options (con't)

Brush Preset Picker: You can build the Brush you'll use to paint with using the Brush Picker. You can modify Diameter, Hardness, Spacing, Angle, Roundness, and Size (for work pressure sensitive tablets.) Experiment with each option to learn how they affect your Brush. Similar options are available when creating a custom Brush using the Brushes Palette.

Limits: Select Discontiguous to erase the sampled Color wherever it occurs beneath the Brush. The strictness of this setting is affected by the Tolerance value you set. Select Contiguous to erase the sampled Color and surrounding Color in a similar range. The strictness of this setting is affected by the Tolerance value you set. Contiguous is the default value. Select Find Edges to erase areas of the same Color as well as maintaining a sharper definition for the edge. These settings are similar to some of the Selection settings we examined earlier. To set a base sample Color, [ALT-Click] over the Color you wish to sample with the Background Eraser Tool. If you do not set a sampled Color yourself, the first Color you {Click} on while using the Background Eraser Tool becomes the sampled Color. The way the sampled Color behaves is affected by what you select for the Sampling Option.

Background Eraser Tool Options (con't)

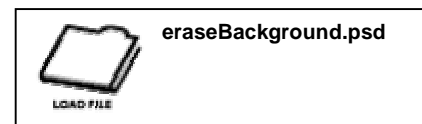
Tolerance: Tolerance affects the range of Colors erased based on the sampled Color. A low value restricts erasure to Colors similar to the sampled Color. Higher values increase the range of Colors that can be erased.

Protect Foreground Color: Check Protect Foreground Color to prevent the eraser from erasing colors that match the current Foreground Color. This option is unchecked by default.

Sampling: Select Continuous to sample as you drag. Contiguous is the default value. Select Once to sample and erase areas containing the initial sample color. Select Background Swatch to erase areas containing the current Background Color. The strictness of this setting is affected by the Tolerance value you set. Use the applicable settings in the Options Bar as required. Usually the default values are fine, though you'll need to set Tolerance as needed.

The Background Eraser Tool: Open *eraseBackground.psd*.

We've cropped our restoration.psd image to isolate the face of the woman. We need to remove the background. Let's do so by using the Background Eraser Tool. Select the following Options:



1. For the Brush: Diameter = 20px; Hardness = 80%; Spacing = 1%; Angle = 0 degree; Roundness = 100%
2. Limits: Contiguous
3. Tolerance: 20%
4. Protect Foreground Color: Unchecked
5. Sampling: Continuous

The Background Eraser Tool: Start by brushing just outside the hair. Don't worry if your Brush Shape overlaps the hair a little because the Background Eraser Tool should leave it alone. You may want to increase magnification for accuracy. You may also want to brush or paint small bits of the background at a time. You should see the hair remain in place and the background color turn to transparency.

The Background Eraser Tool: Continue to remove the background immediately around the woman using the Background Eraser Tool. You will have to reduce the Brush Diameter to something like 5px for the neck area (and even smaller for the earrings.) Around the neck area you may also need to reduce the Tolerance (if you don't have a steady hand). Note how the background and the flesh color at the neck are very similar, which could confuse the Background Eraser Tool.



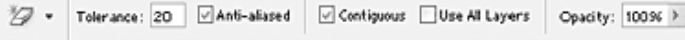
The Background Eraser Tool removes the background image data around the hair with ease.

Don't bother using the Background Eraser Tool to remove the remainder of the background as you can remove it quickly by using the Magic Wand Tool to select the remaining image data and pressing the [DELETE] key to remove it. Don't worry if you see a little bit of the background here and there in patches throughout the image, we'll look at a method of finding and removing them later in the chapter. Save your image for use later (or you can use the image we've saved called backgroundErased.psd. Your image should look this:

The Magic Eraser Tool: The Magic Eraser Tool erases entire areas of color with a single {Click} rather than {Clicking}, holding, and dragging, which we have to do if we're using the Eraser Tool or the Background Eraser Tool. It operates in a similar manner to the Magic Wand Tool, except that rather than making Selections, it erases pixels.

Magic Eraser Tool

Options: You can set Tolerance, Anti-aliased, Contiguous, Use All Layers, and Opacity as required.



Magic Eraser Tool Options (con't)

Tolerance: Tolerance affects the range of Colors removed based upon the Color you {Click} on in the image. A low value restricts erasure to a small range of similar Colors. Higher values increase the range of Colors.

Anti-Aliased: Check Anti-aliased to ensure that the edges of the areas that remain after erasure are smooth.

Contiguous: Check Contiguous to erase colors that are uninterrupted by colors outside the range established by the Tolerance level. Uncheck Tolerance to erase all the colors within the entire image established by the Tolerance level.

Use All Layers: When checked, Use All Layers permits the Magic Eraser Tool to erase a range of colors within all the Layers of the image.

Opacity: If Opacity is set to anything below 100%, the Magic Eraser Tool will not erase the color but merely change the Opacity of the color.

Magic Eraser Tool: Open **eraseBackground.psd**.



eraseBackground.psd

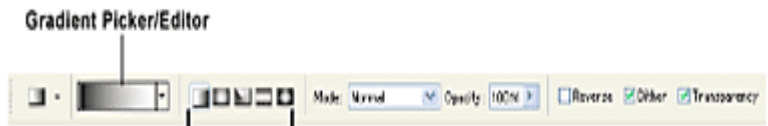
Remove the background from the image again. Experiment with the Magic Eraser Tool. Note how some of the woman's face may be erased when you {Click} in the area close to her left shoulder. Change the Tolerance level or, as is common when working with Photoshop, use a combination of Tools to achieve your goal.



The Gradient Tool

The Gradient Tool is used to create gradient colors and patterns. Gradients are gradual shifts from at least one color to another or one color to transparency. The effect is similar to the way the sky shifts from dark blue to a lighter blue as you look toward the horizon. Gradients can also consist of multiple colors, much like a rainbow.

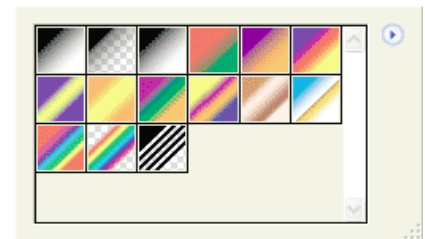
Gradient Tool Options: Options include Gradient Picker/Editor, Gradient Type, Blend Mode, Opacity, Reverse, Dither, and Transparency. A preview of the gradient appears in the Gradient Picker bar.



Gradient Type: Linear, Radial, Angle, Reflected, Diamond

Gradient Picker/Editor: To select a preset Gradient, {Click} on the drop down arrow. All available Gradients are displayed. Select the Gradient you desire by {Clicking} on the Gradient Swatch. A description of the Gradient appears when you hover your mouse pointer over a Gradient Swatch.

Note that the first two (2) Gradient Swatches (top row) are Foreground to Background and Foreground to Transparent. The Color of each will change according to your currently selected Foreground and Background Colors.



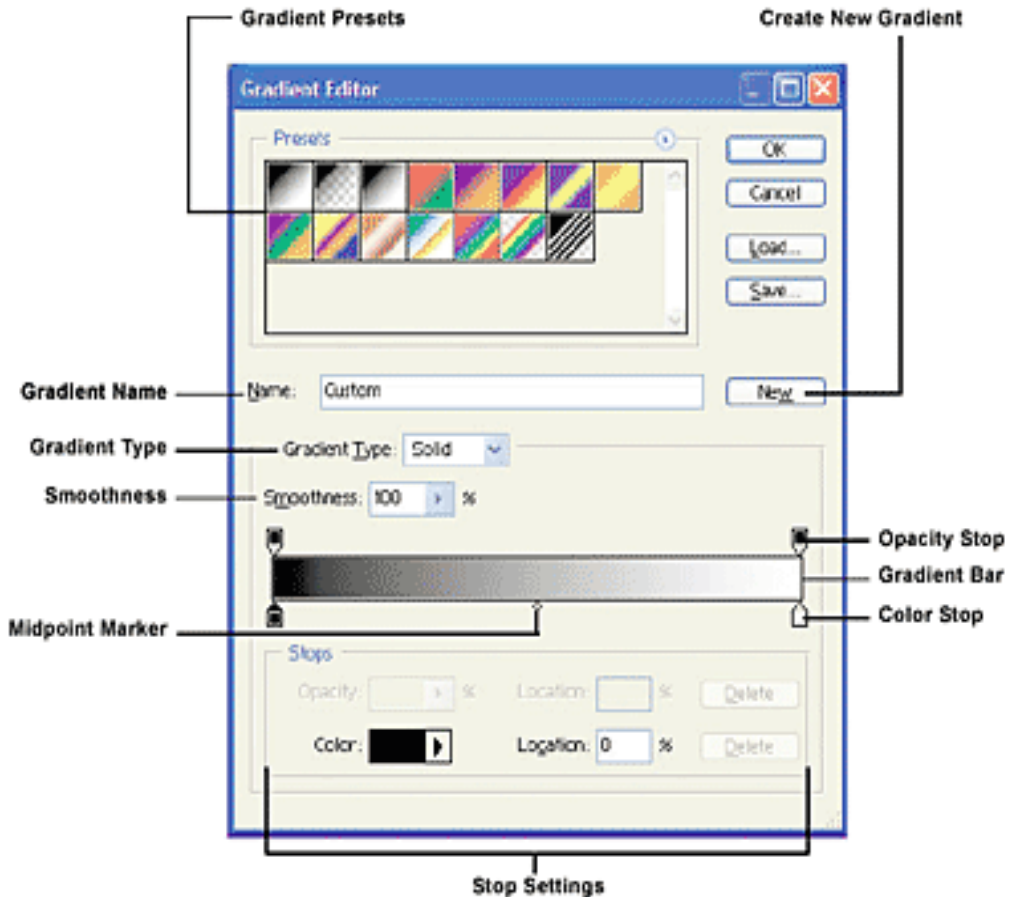
Open **blank.psd**.



Select various Gradients and try them out to see how they appear. Try to vary the length and angle of each Gradient.

Creating Custom Gradients

To create your own Gradient, {Click} on the Gradient Picker/Editor itself. The Gradient Editor appears.



To create a new Gradient, select an existing Gradient Preset and modify it.

Creating Custom Gradients (con't)

To change a color select one of the Color Stops situated at the bottom of the Gradient Bar and {Double-Click} on it. Select a color from the Color Picker.



Note
To make a Color Stop dynamic, meaning it will pick up whatever your current Foreground or Background Color is, select the Color Stop and then select either Foreground or Background from the Color field in the Stop Settings Area.

To add additional Color Stops to the Gradient {Click} on an empty spot beneath the Gradient Bar. To modify the location of Gradient colors drag the Color Stops and Midpoint Markers back and forth as you desire or input specific values into the fields in the Stop Settings Area. To delete a color simply select it's Color Stop and hit the [DEL] key or drag up or down on it and it will disappear.

To add Transparency {Click} and adjust the Stops at the top of the Gradient Bar (which displays Alpha information rather than colors) and adjust the Opacity Slider at the bottom of the dialog box. {Clicking} and dragging the Stops and Midpoint Markers effects the placement of Transparency.

Creating Custom Gradients (con't)

Adjust the Smoothness Slider to increase or decrease the smoothness of your Gradient. You can also choose a Gradient Type from the Gradient Type drop-down Menu. Solid is the default while Noise creates a Gradient that randomly mixes the color across a selected range. Adjust the various Sliders in the dialog box to find a noisy Gradient that suits your needs.

If you wish you can use percentage figures to precisely position the Stops and the Midpoint Markers by adjusting the location fields in the Stop Settings Area. When you have finished creating your custom Gradient, give in an appropriate name and {Click} the New button. Your custom Gradient is added to the Gradient Presets.



Note
If you wish to use it again you should save the new set of Gradient Presets. {Click} Save. You will save a.grd file. Give it an appropriate name. By default, it is saved in the location you installed Photoshop in under Presets/Gradients. To load a Gradient set, {Click} Load in the Gradient Editor dialog box.

{Click} OK to finish. Try out your custom Gradient.

Gradient Type: Select from Linear, Radial, Angle, Reflected, and Diamond.

Linear Gradient

Linear (straight line) transition from one point to another. Can contain multiple colors and transparency levels. Can be placed at various angles.



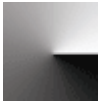
Radial Gradient

A circular transition from one point to another from one point to another. Can contain multiple colors and transparency levels.



Angle Gradient

A counter-clockwise transition from one point to another. Can contain multiple colors and transparency levels. Can be placed at various angles.



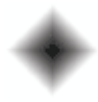
Reflected Gradient

Linear gradients are created from the starting point. Each gradient moves away from the starting point.



Diamond Gradient

A diamond shaped transition from one point to another. Can contain multiple colors and transparency levels. Can be placed at various angles.



Blend Mode: Set the Blend Mode for the Gradient. This is similar to the same setting for Layers or the Painting Mode setting for the Brush Tool.

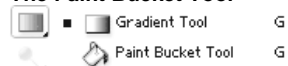
Opacity: Set the overall Opacity of the Gradient.

Reverse: Check Reverse to reverse the Gradient.

Dither: Check Dither to make the transition from one color to the next as smooth as possible.

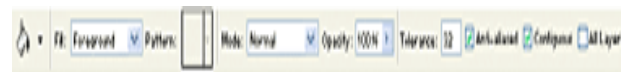
Transparency: Check Transparency to enable any transparency settings in the Gradient patterns. Uncheck to disable Transparency. Experiment with the Gradient Tool. Load other Gradient Presets and see how they function. Try using a black and white Gradient in a Layer Mask.

The Paint Bucket Tool



The Paint Bucket Tool replaces a color or range of colors with either the current Foreground Color or a Pattern. It also fills transparent areas and Selections. Simply select a Color and {Click} in the area you wish to fill or replace. You may have to set some options to get the desired effect.

Paint Bucket Tool Options: Options for the Paint Bucket Tool include Fill Source, Pattern, Fill Mode, Opacity, Tolerance, Anti-aliased, Contiguous, and All Layers.



Paint Bucket Tool Options (con't)

Fill Source: Select either Foreground to fill with the current Foreground Color or Pattern to fill with a Pattern.

Pattern: If you have selected Pattern from Fill Source you can select your fill Pattern here.

Fill Mode: This is identical to Blend Mode when using Layers.

Opacity: Set the Opacity of the fill.

Paint Bucket Tool Options (con't)

Tolerance: When you {Click} on a pixel that is any particular color (such as red for example) and you are replacing that color with the current Foreground Color that might be yellow for example, any pixels in the surrounding area that are also red or a similar shade of the red pixel you have {Clicked} on will be filled (or not) depending on the Tolerance level you set. Higher numbers will fill a greater range of colors while lower numbers will limit the range. This is similar to the Tolerance setting for the Magic Wand Tool.

Anti-aliased: Check Anti-aliased to make the edge of the fill smooth.

Contiguous: Check to fill pixels in the immediate color range (affected by your Tolerance level) of the pixel you have {Clicked} on. Uncheck to fill all the colors in the image within the color range you've selected **All Layers:** Check All Layers to fill colors across all Layers.

Paint Bucket Tool

Open *backgroundErased.psd*.



backgroundErased.psd

Recall earlier in the chapter we used the Background Eraser Tool in combination with the Eraser Tool to remove the background around the woman. When we remove a background from an image with only one (1) Layer, the background is erased to Transparency. Sometimes its difficult to see if you've removed all of the background. We're going to use the Paint Bucket Tool to add a new background color and make sure we've removed all of the original background at the same time. Execute the following steps:

1. Create a new Layer. Recall that by default, when you create a new Layer, its created above the currently selected Layer. Drag the new Layer beneath the current Layer (the one with the woman on it) and rename it background.
2. Name the Layer with the woman on it customer.
3. Choose the following Foreground Color with the Color Picker: Red - 222; Green - 0; Blue - 0.
4. Select the Paint Bucket Tool.

Paint Bucket Tool

5. Select the background Layer.
6. Fill the background Layer with the Foreground Color.
7. Take a look at the image. You should notice some artifacts or left over elements of the original background we removed earlier. Furthermore, there are areas around the hair that need to be erased as well.
8. Use the Eraser Tool and the Background Eraser Tool to remove the last bits of the original background. You'll probably have to switch between one and the other Tool frequently, as well as zooming in and out of the image, and using very soft-edged brushes as you erase, particularly around the hair. It will take some time.
9. Save the image if you like.

The Blur Tool



Use the Blur Tool to blur areas of the image by painting over them. The Blur Tool behaves very much like the Brush Tool, except rather than paint color you paint blurriness

Blur Tool Options: Blur Tool Options include Brush Preset Picker, Effect Mode, Strength, and Use All Layers.



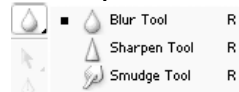
Brush Preset Picker: Select a Brush with which to blur with.

Effect Mode: Select from a number of different options which will affect the color over which you apply the blur strokes. This is similar to the Blend Mode used for Layers.

Strength: Set the Strength of your stroke. A higher value will increase the degree of blurriness.

Use All Layers: Check Use All Layers to blur the image data you paint over throughout all Layers. Try using the Blur Tool on an element of the toys image to see the effects.

The Sharpen Tool



Use the Sharpen Tool to sharpen soft edges in an image. The Sharpen Tool functions similarly to the Blur Tool except of course it sharpens rather than blurs. The Sharpen Tool increases the contrast in colors over the area you stroke. If you're not careful, color banding or a halo can occur. You'll have to experiment with it and try out different Effect Modes. The Options for the Sharpen Tool are identical to those of the Blur Tool. The Blur Tool and the Sharpen Tool are referred to as the Focus Tools.

Try using the Sharpen Tool on any of the images in this chapter to see how it works.



The Smudge Tool :

Use the Smudge Tool to create a finger painting effect within your image. The Smudge Tool functions like many of the Brush related Tools in that you select a Brush, some options, and paint over areas of an image. **Smudge Tool Options:** The Smudge Tool Options are identical to the Blur Tool Options with one addition. In addition, the Smudge Tool has a Finger Painting Option.



Finger Painting: Check Finger Painting to mix the current Foreground Color into the smudge as you paint.

The Dodge Tool



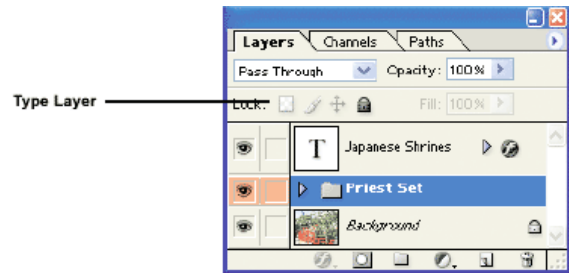
Use the Dodge Tool to lighten areas of the image by painting over them. The Dodge Tool works similarly to the other Brush Tools. Grouped together with the Burn Tool, these Tools are referred to as the Toning Tools. **Dodge Tool Options:** Select a Brush Shape from the Brush Preset Picker Select the Range, Exposure, and if you like, you can enable the Airbrush capabilities.



T

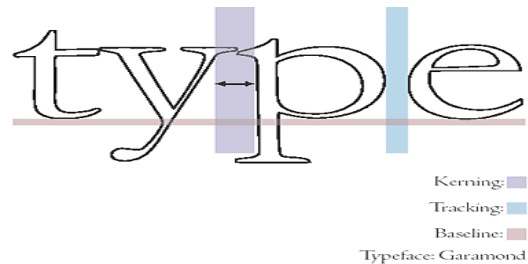
The Horizontal Type Tool

Use the Horizontal Type Tool (or the other Type related Tools) to create text in Photoshop. For the Internet you'll be using type to label buttons and as elements of typographic design. Select the Horizontal Text Tool and {Click} in the Image Window. Begin to input your text. To make a paragraph, {Click}, hold, and drag a Paragraph Box in the Image Window then input your text into the Paragraph Box. Photoshop creates a new Text Layer (indicated in the Layers Palette by a capital "T" in the Layer Thumbnail. The text you input into a Type Layer appears as the Layer Name.



Typographic Terminology

Before you begin to create and manipulate type in Photoshop, you should know some of the basic typographic terminology that some of the options in Photoshop use. Examine the following example:



Typeface: A typeface is a full set of characters (uppercase, lowercase, numerals, special characters, etc.) designed in a specific Style. For example, the same word, presented using different typefaces, can look quite different:

typeface typeface typeface typeface

Typefaces are also often referred to as Fonts. The look of your text is very much a key in the design of your images.

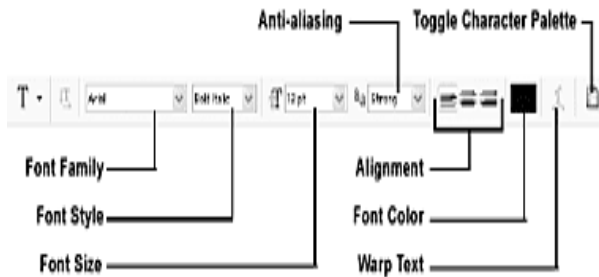
Kerning: Kerning is the space between a particular pair of characters. Each typeface may have particular Kerning values so that some characters are closer to each other than others, depending on their shape. For example, the capital letters A and V, when placed together, have complimentary shapes and are often placed closer together than A and N.

Tracking: Tracking is the space between characters in a line of text. The space between characters, regardless of the particular characters, is uniform when using Tracking. It can easily be confused with Kerning. Remember that Kerning is a very specific measurement of spacing between particular pairs of characters, whereas Tracking is the measurement of spacing between all characters.

Baseline: The Baseline in text is an imaginary line that the characters effectively sit upon. Lower case text, such as the "p", has a descender, which descends below the Baseline.

Horizontal Type Tool Options

In Photoshop you set and adjust Font Family, Font Style, Font Size, Justification, and so forth by selecting options from either the Options Bar or the Character Palette. Let's examine the Horizontal Type Tool Options.



Font Family: Select the Font Family (also referred to as Typeface or Font) you wish to use for your text. Photoshop will list all the currently active fonts on your system.

Font Style: Select the Font Style you wish to use. Common Font Styles include Bold, Italic, Underline, and Regular. Available Font Styles differ depending on the Font Family you've selected. However, the Character Palette has options for apply Font Styles that are normally unavailable to a particular Font Family.

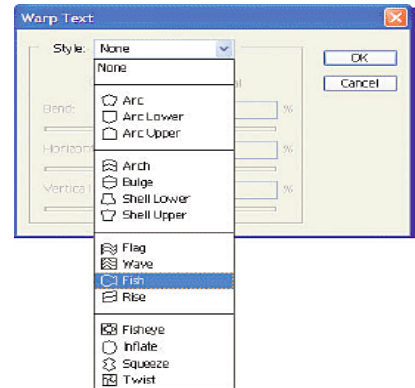
Font Size: Select or input Font Size to set the size of your text. The Font Size is measured in points, which is the traditional measurement for print and within common computer applications such as word processors. When we get to ImageReady, we can use Font Sizes in pixels, which may be more useful, depending on how you like to work, for web development. If you highlight your text by {Clicking} and dragging over it, any changes you make to the Font Size changes the size of the font. Alternately you can select the Type Layer itself in the Layers Palette, select the Horizontal Text Tool and then make changes to the text without highlighting but modifying the options.

Anti-Alias: You can select various levels of Anti-aliased text. Choices consist of None, Sharp, Crisp, Strong, and Smooth. You'll find that Sharp and Crisp are particularly useful for small text.

Alignment: Select from Left Align, Center, and Right Align to set the Alignment of your text. The Alignment of your text, even if it is a single word or line of text, can affect how multiple Type Layers are aligned. You should experiment with Alignment to see how it operates in Photoshop.

Font Color: Select a Font Color by {Clicking} on the Font Color Swatch. The Color Picker appears.

Warp Text: Warp Text allows the user to customize the appearance of text and still maintain the ability to edit it at all times. With a Type Layer selected or text itself selected, {Click} on the Warp Text button. The Warp Text dialog box appears. Select a Warp Style from the Style drop-down menu.

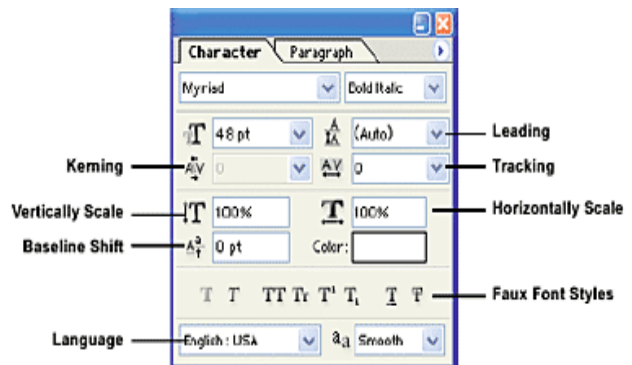


Warp Text (cont): The Warp Style effectively places an shape or envelope around your type. For example, in this image, the text "warped text" appears without a Warp Style and is repeated with the Fish Warp Style applied to it. Once you've applied a Warp Style, you can modify it by changing the options in the Text Warp dialog box. Modify orientation along the Horizontal or Vertical axis and change Bend, Horizontal Distortion, and Vertical Distortion values. You'll have to experiment with each Warp Style to learn how each affects your type.



Toggle Character Palette: {Clicking} the Toggle Character Palette button launches the Character Palette, which is grouped with the Paragraph Palette. Each of these Palettes gives you identical settings to those found in the Options Bar as well as some additional options.

Kerning: To modify the Kerning between two specific characters (letters), place your cursor between the two characters, do not highlight any characters. The Kerning field will become active. Select Metrics to set automatic Kerning. You can input your own value or select one of the presets. Negative values move characters closer together. Positive values move characters further apart.

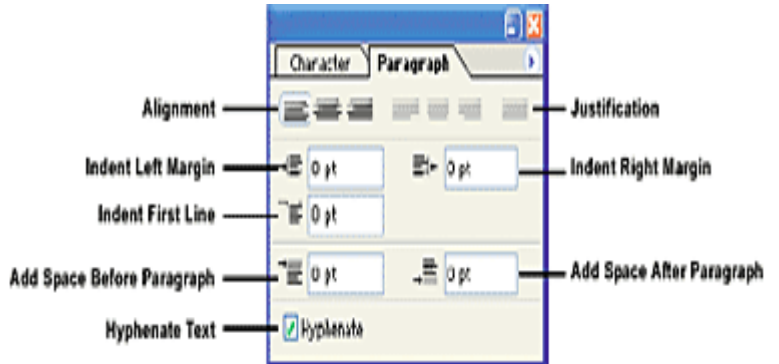


Leading: Leading is the amount of space between lines of text. If you've written papers or produced any sort of documents you may set the spacing to double-spaced then you'll understand Leading. If you have input text with multiple lines you can set the Leading as you wish.

Tracking: To modify the Tracking, highlight the text you wish to modify. Select Auto to set automatic Tracking. You can input your own value or select one of the presets. Negative values move characters closer together. Positive values move characters further apart.

The Paragraph Palette

The Paragraph Palette features enhanced options to control text you've input that is more than one line (such as a paragraph or caption.)



Alignment:

Select from Left Align, Center, and Right Align to set the Alignment of your text.

Justification: Select from Justify Last Left, Justify Last Center, Justify Last Right, and Justify All.

Indent Left Margin: You can set where the Left Margin is within the Paragraph Box by inputting a value in this field.

Indent Right Margin: You can set where the Right Margin is within the Paragraph Box by inputting a value in this field.

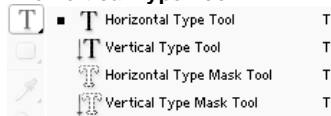
Indent First Line: If you want the first line of your paragraph to be indented, set the value here.

Add Space Before Paragraph: If you have multiple paragraphs, you may want to add some space just above the area where the paragraph begins. To do so, input a value in this field.

Add Space After Paragraph: If you have multiple paragraphs, you may want to add some space just below the area where the paragraph begins. To do so, input a value in this field.

Hyphenate: Check Hyphenate to enable hyphenation.

The Vertical Type Tool



Use the Vertical Type Tool to input text in a vertical orientation.

The Notes Tool



As you produce images, you may be working in a collaborative environment or you may be working alone. In either case, it can be very helpful to leave notes attached directly to an image so that whenever you edit that image, you can familiarize yourself with any tasks or issues you may have. To create a note, select the Notes Tool and {Click} anywhere within the Image Window. A pop-up Notes Box appears. Input your note.

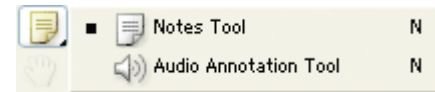
The Notes Tool (con't)

Close the Note by {Clicking} the Close Box at the top right of the Note. A small Note icon remains in the Image Window. To open it, {Double-Click} it. To remove it, {Right-Click} and select Delete Note. You may find that keeping Notes in this manner is more efficient than keeping paper notes that can be easily misplaced.



Audio Annotation Tool

If you have a microphone, you can attach a sound clip rather than a typed Note using the Audio Annotation Tool.



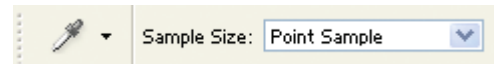
The Eyedropper Tool



As you edit and produce images, you may want or need to match colors precisely. Of course photographic images can often consist of millions of colors. Picking one color from millions is simple with the Eyedropper Tool. Simply select the Eyedropper Tool and {Click} on the color you wish to sample in the Image Window. The Foreground Color changes to the color you've sampled. Hold or press [ALT] to change the Background Color rather than the Foreground Color.

Eyedropper Tool Options

By default, the Sample Point is set to Point Sample to sample the color of a single pixel. You can also select a wider range. The average value within the range is sampled. Select from 3 by 3 Average or 5 by 5 Average.



Using Guides and the Grid for Alignment

Often you will want elements within your image positioned relative to each other. To align elements, such as a series of buttons or type you have two options, using Guides or using the Grid.

Using Guides

To create Guides you must make the Rulers visible. Select View/Rulers. The units of the Rulers depend on the setting you selected in File/Preferences/Units & Rulers. Because you're developing for the Internet, it's a good idea to select Pixels as the basic unit. Make a Guide by passing the pointer over either the horizontal or vertical Ruler and {Click}, hold, and drag the Guide over the image. {Release} to drop the Guide at the desired point. By default, the Guide is blue in color. Change the color by selecting Edit/Preferences/Guides, Grid and Slices or {Double-Click} the Guide itself. Make sure Snap to Guides is enabled by selecting View/Snap To/Guides.

Using Guides (con't)

Open *toys.psd*.

Create a Vertical Guide at approximately 50 pixels from the left of the image. Create two (2) Type Layers, one with the text "Japanese Souvenirs" and one with the text "Children's Toys." Select the "Japanese Souvenirs" Type Layer and drag it toward the Guide. Notice how the edge the letter "J" snaps against the Guide. Guides ignore the transparent areas of a Layer and use image data to snap too. Select the "Children's Toys" Type Layer and drag it toward the Guide, just below "Japanese Souvenirs". Now both Type Layers are perfectly aligned.



Tip

To place a Guide at a precise point, select View/New Guide. The New Guide dialog-box appears. Select Orientation (Horizontal or Vertical) and input the Position you wish the Guide to be placed at in the Position field.

Using Guides (con't)

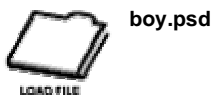
To discard a Guide {Click} and drag the Guide off the image into the Ruler. To move a Guide hold the [CTRL] key over the Guide and drag whenever you are using a tool other than the Move Tool. Holding [CTRL] and [ALT] simultaneously switches the orientation of the Guide. You can use multiple Guides. To discard all Guides select View/Clear Guides.

Using the Grid: The Grid works in a similar fashion to Guides in that the content of your Layers will snap to the lines of the Grid. Select View/Show/Grid to display the Grid. Make sure that Snap to Grid is also enabled under View/Snap To/Grid. A light gray Grid covers the image. To adjust the Grid setting select Edit/Preferences/Guides, Grid and Slices. By now it should be evident to you that Photoshop is a very powerful and complex program that is easy to use. Because there are numerous image editing options and many different ways to achieve imaging goals first time users might find the program overwhelming. We've reviewed many of the fundamental elements you'll need to put into practice when creating images for the Internet. We're going to use many of these techniques in the chapters ahead to create actual images for the web, including static images, buttons, navigation bars, banners, and animated GIFs.

Filters: Filters are a set of pre-built effects that you apply to entire images, individual Layers, or Selections. Images must be in RGB mode to access Photoshop's full range of Filters.

Applying Filters: To apply a Filter, isolate the area of the image you wish to apply it too. For instance, if you want to apply a Filter, such as Blur, to an entire Layer you would select the Layer in the Layers Palette. If you wanted to apply the Blur Filter to a part of the image data on a Layer, you would make a Selection on that Layer and apply the Filter.

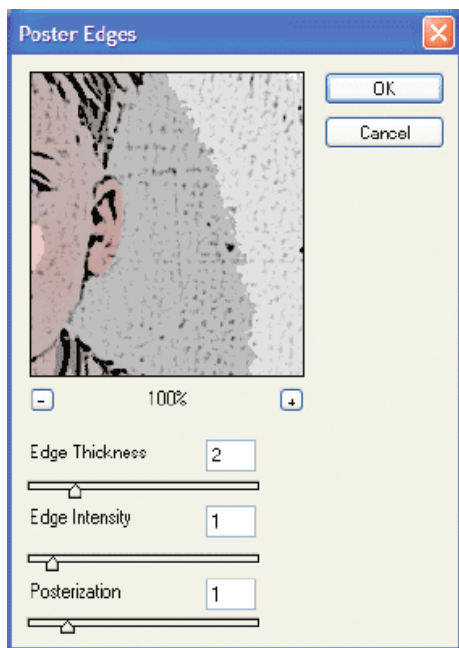
Open *boy.psd*.



A photograph is transformed into a painting.

Filters (con't)

Select Filter/Artistic/Poster Edges. The Filter dialog box appears with the title of the currently selected Filter. A set of Options accompanies most Filters (not all Filters have Options). Options change depending on the nature of the Filter.



In this case, the Options we have are Edge Thickness, Edge Intensity, and Posterization. Filters usually have a Preview Window in the dialog box so you can see the effects of the Filter on your image and the effects that changing the Options cause in real-time. Note that you can change the Magnification of the Preview Window but {Clicking} the positive (+) and negative (-) buttons accordingly. You can also move the image around with the Preview Window. In this case, make sure you have the following settings:

- Edge Thickness: 2
- Edge Intensity: 1
- Posterization: 1

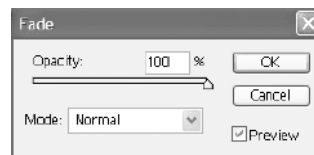
{Click} OK.

Filters (con't)

Photoshop applies the Filter to your image and the History Palette creates a History State. You've effectively changed a photograph into a painting.

Fine-Tuning Filters with Fade

Once you've applied a Filter you can fine-tune it by selecting Edit/Fade Filter Name, where Filter Name is the name of the last Filter you applied. In this case we select Edit/Fade Poster Edges.



Fade controls include Opacity, Mode (Blend Mode), and Preview. Input an Opacity value or use the slider to reduce the strength of the Filter's effect on your image. Experiment with different Blend Modes to affect the manner in which the Filter is applied to the image. Check Preview to display your changes in real-time. {Click} OK to make the changes.

Adjustment Filters: Filters are not limited to apply effects. There are a wide range of Filters available to you. As you learn and use Photoshop, you'll become familiar with many of them. Learning and using Filters (also referred to as plug-ins) is largely a process of experimentation to view how particular Filters affect an image and what type of Options you can use for each of them. Let's take a look at one of the Adjustment Filters.

Open *statue.psd*.



Examine the image. It's definitely blurry. Select Filter/Sharpen/Unsharp Mask. You can set the following Options: Amount, Radius, and Threshold. We've used the following settings:

- Amount: 50%
- Radius: 1.0 pixels
- Threshold: 0 levels

Use these settings as your own. Once you've applied the Filter the image should appear sharper.

As we progress through the manual, we'll be creating buttons, navigation bars, and GIF animations, and we'll put some Filters to use. Recall that Layers have Layer Styles, which are essentially specialized Filters linked to Layers, though of course Layer Styles can be disabled whereas applying Filters is a destructive operation We'll be using these effects as well. Some of the Layer Styles can

be applied to Type Layers, but to apply Filters to Type Layers you'll have to {Right-Click} the "T" icon in the Type Layer and select Rasterize Layer. Effectively you'll be converting the type to a bitmap so that you won't be able to edit your type after rendering it. However, you'll be to apply Filters to it.

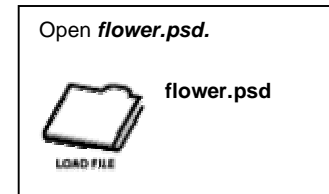
ADJUSTING IMAGES

In addition to modifying or adjusting images with Selections, Filters, Layers, using Blend Modes, and using the various Tools, Photoshop also allows you to adjust a wide variety of color properties, such as tone, saturation, balance, and contrast. Controls for adjusting these image qualities are located under Image/Adjustments. Adjustment controls include Levels, Auto-Levels, Auto-Contrast, Auto-Color, Curves, Color Balance, Brightness/Contrast, Hue/Saturation, Desaturate, Replace Color, Selective Color, Channel Mixer, Gradient Map, Invert, Equalize, Threshold, Posterize, and Variations. Before using these controls however, you should examine the image's Histogram.

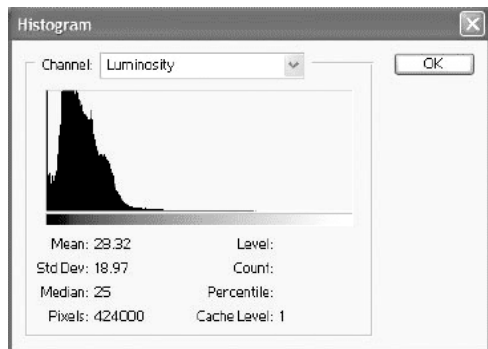
Histogram

The Histogram represents the pixels of an image in graph form. It charts how many pixels an image contains and their distribution in terms of dark tones to bright tones. Dark tones are charted to the left and bright to the right. Dark tone areas are referred to as Shadows. The area in between dark and bright tones is referred to as Midtones. Bright tone areas are referred to as Highlights.

The image is clear, but the colors are dull. This image could use some adjustment. Start by examining the Histogram by selecting Image/Histogram.



Histogram (con't)



By examining the Histogram of an image, you can instantly see the Tonal balance of the image and use that information as a basis for your adjustments. For this image, most of the pixel information is concentrated left of the middle of the graph (the Midtones area.) As a result, we can see that the image is primarily dark in tone. The image's Tonal range is unbalanced. We'll make adjustments to create a better balance.

Histogram (con't)

Channel: Select from Luminosity, Red, Green, or Blue when working with RGB images. Luminosity is a composite of the Red, Green, and Blue Channels.

Mean, Std Dev, Median, Pixels: The values listed in the left hand column of the Histogram display the average brightness value of the image (Mean), the range of variance from the mean (Std Dev), the middle brightness value (Median), and the number of pixels used to calculate these numbers. If you're viewing a Histogram for the entire image, all the pixels are used. If you're viewing a Histogram for a Selection, the numbers of pixels within the Selection are used.

Level, Count, Percentile, Cache Level: {Click} and drag to highlight particular areas of the Histogram to get values for Level (the selected area's brightness level), Count (the number of pixels in the selected area), and Percentile (the percentage of pixels within the selected tonal range.) Cache Level is set in File/Preferences/Memory & Image Cache. If Use cache for histograms is checked, the Histogram is based on the Cache version of the image. For absolute accuracy uncheck Use cache for histograms to force Photoshop to use the real image data. This is less of a concern for web development because you're working on a low resolution (in terms of density as in 72 ppi) image, which matches the resolution of the Cache version. However, if you are working on higher density images the accuracy of the Histogram is affected.

Histogram (con't)

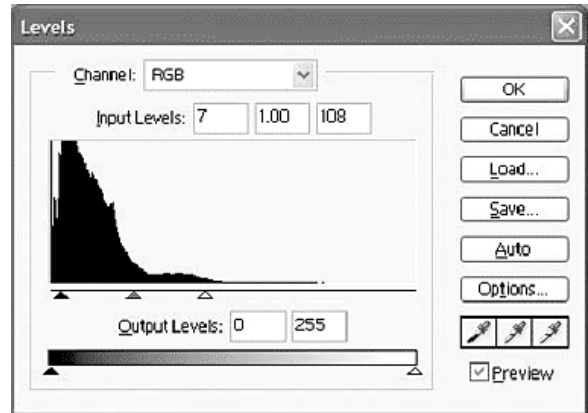
Channel: Select from Luminosity, Red, Green, or Blue when working with RGB images. Luminosity is a composite of the Red, Green, and Blue Channels.

Mean, Std Dev, Median, Pixels: The values listed in the left hand column of the Histogram display the average brightness value of the image (Mean), the range of variance from the mean (Std Dev), the middle brightness value (Median), and the number of pixels used to calculate these numbers. If you're viewing a Histogram for the entire image, all the pixels are used. If you're viewing a Histogram for a Selection, the numbers of pixels within the Selection are used.

Level, Count, Percentile, Cache Level: {Click} and drag to highlight particular areas of the Histogram to get values for Level (the selected area's brightness level), Count (the number of pixels in the selected area), and Percentile (the percentage of pixels within the selected tonal

range.) Cache Level is set in File/Preferences/Memory & Image Cache. If Use cache for histograms is checked, the Histogram is based on the Cache version of the image. For absolute accuracy uncheck Use cache for histograms to force Photoshop to use the real image data. This is less of a concern for web development because you're working on a low resolution (in terms of density as in 72 ppi) image, which matches the resolution of the Cache version. However, if you are working on higher density images the accuracy of the Histogram is affected.

Channel: Select from the composite RGB to modify all channels simultaneously or select Red, Green, or Blue and modify channels on an individual basis. Input Levels/Input Levels Sliders. Input Levels display the range from the Black Point (Shadows) to the White Point, and the Mid Point in between. By default, the range is 256 possible values, from 0 to 255 with the Mid Point being precisely in between. By adjusting these Levels, you can increase or decrease each of the three primary tonal properties, Shadows, Midtones, and Highlights. The Histogram for this image reveals that very few pixels are actually in the Midtones and fewer still in Highlights. Use the Sliders or input the following values into Input Levels:



- Shadows: 7
- Midtones: 1.00
- Highlights: 108

Channel (con't): Make sure that Preview is checked. {Click} OK. The image should look much brighter. Keep in mind that you can make adjustments by Channel. You could adjust each individual Channel or start by adjusting all of them at once (RGB) and then isolate each channel to make finer adjustments. It takes some time to get used to adjusting images in this manner.

Output Levels/Output Levels Sliders: Reduce the tonal range (at default 0 to 255) by adjusting the Output Levels either by input or using the sliders.

Levels Eyedropper Tools

Use the Shadows (Black Point), Midtones (Gray Point), and Highlights (White Point) Eyedroppers to designate pure black, pure medium, and pure white manually by selecting the appropriate Eyedropper and {Clicking} on a point within the image. Select Image/Adjustments/Levels again. Note how the Levels Histogram has changed to reflect the changes we've already made. If you select the Midtones Eyedropper and {Click} on the red part of the flower the Histogram changes to reflect your selection and the color of the image changes drastically as well. In this case, the image is dominated by blue and green tones. The Eyedroppers are generally more useful when changing the tone of grayscale images.

Channel (con't)

Auto: {Click} this button to let Photoshop adjust the Levels for you automatically.

Options: {Click} Options to fine tune the manner in which Photoshop automatically balances Levels if you choose to have Photoshop do the adjustment for you.

Preview: Check Preview to see the affect of your modifications in real-time.

Auto Levels: Selecting Image/Adjustments/Auto Levels causes Photoshop to automatically balance the tonal range of the image. Depending on the image, this feature can work well or not work particularly well. Restore *flower.psd* back to its original state and try it out.

Auto Contrast: Select Image/Adjustments/Auto Contrast to automatically increase the contrast of colors in an image. Colors increase in saturation and edges sharpen.

Auto Color: Select Image/Adjustments/Auto Color to automatically balance the colors within an image.

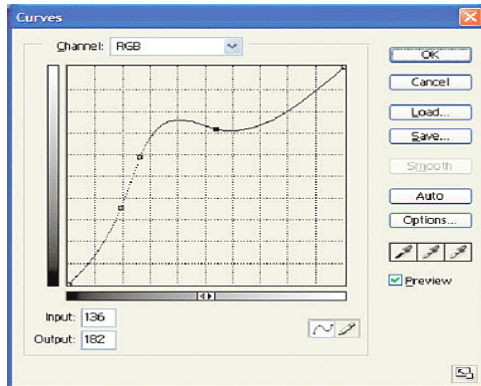
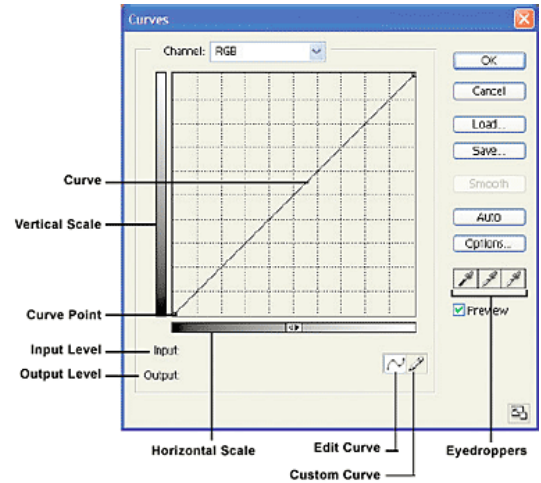
Curves: Use Curves for greater control when adjusting image tone. Curves are very similar to Levels in that you adjust the Shadows (Black Point), Midtones (Medium Point), and Highlights (White Point), except you do so with a curve to which you can add points too for increased accuracy. You manipulate the Curve by {Clicking} and dragging on a point. You add points to the Curve by {Clicking} and dragging on the Curve where there isn't a point or by {Clicking} on the Curve where there isn't a point. Controls for Curves include Channel, Input and Output Fields (visible when you have a Point selected, Edit Curve Button, Custom Curve Button, Black Point, Mid Point, and White Point

Eyedroppers, Auto, Smooth, options to Save and Load Curve settings, the Curve Window and the Curve itself. The controls common to the Levels adjustment work precisely the same in Curves.

Curves (con't)

The Curve is in a straight line, at 45 degrees, indicating it has not yet been manipulated. The Point at the bottom left of the Curve represents the current Black Point while the point at the top right represents the White Point. There is no point in the middle of the Curve by default because you can add points all along the Curve and {Click} and drag them for very accurate and precise control. However, by {Clicking} the center of the Curve you can add a Midtone Point.

{Click} the center of the Curve to add a Midtone Point. Next {Click}, hold, and drag the Midtone Point up and down the Curve, trying to keep the Curve as straight as possible. By doing this you are mirroring Levels controls where you {Click} and drag the Point sliders back and forth. The distance between the sliders or Points changes the tone of the image. With Curves, you have increased control because you can add multiple points between the Black, Mid, and White Points. {Click} twice at different locations on the Curve between the Midtone Point and the Black Point to add two more points. Now {Click} and drag these points back and forth and watch what happens to the image. By {Clicking} and dragging the points to add variance to the Curve more drastic tonal changes occur. It takes practice to get used to using Curves to adjust tone but as you can see it is a much more powerful option than using Levels. At any time, with a Point selected, you can input values into the Input or Output fields.

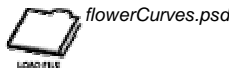


Curves (con't)

Note
To change the Grid in the Curves dialog box, press [ALT] and {Click} simultaneously.

Curves (con't)

In our case, we've applied the following Curve to flower.psd. To view our version, load flowerCurves.psd.



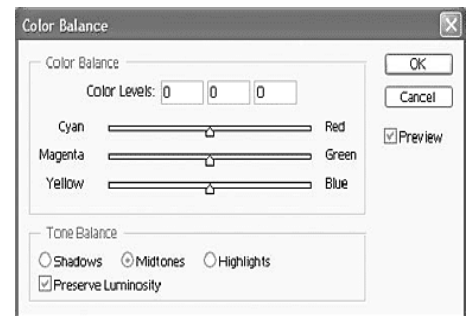
Keep **flowerCurves.psd** open and feel free to try the following procedures on your own version as well.

Custom Curve Button: In addition to using the default Curve, Photoshop permits you to draw your own Curve. Simply {Click} the Custom Curve Button and {Click} and drag inside the Curve Window to create your Curve. Adjust the Curve as you would normally by {Clicking} the Edit Curve Button.

Curves (con't)

Scale: Vertical/Horizontal: The Vertical Scale represents values from 0 - 255 (in RGB Mode) with Shadows at the bottom and Highlights at the top. The Horizontal Scale represents values from 0 - 255 with Shadows at the left and Highlights at the right. You can reverse the orientation by {Clicking} the Arrows in the center of the Horizontal Scale.

Eyedroppers: Use the Eyedroppers to establish the range of tones. For example, use the Black Point Eyedropper by {Clicking} on the darkest point in your image (or whatever you wish to designate as the darkest point). The rest of the image adjusts automatically. Use the other Eyedroppers (Gray Point, White Point) appropriately. Like Levels, using Curves can be a little confusing. Experimentation and practice is the best way to get a solid understanding of how you can use Curves to achieve your goals. **Color Balance** Adjust the Color Balance of an image, Layer, or Selection with the Color Balance controls. Controls include Color Balance fields and sliders for Cyan to Red, Magenta to Green, and Yellow to Blue, Tone Balance (Shadows, Midtones, and Highlights), Preserve Luminosity, and Preview.



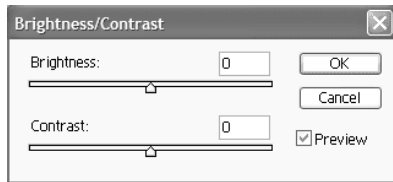
Color Balance Fields and Sliders: Use the Cyan to Red, Magenta to Green, and Yellow to Blue fields (Color Levels) and sliders to adjust color values. As you experiment with them, notice how the color changes in the image. To isolate particular tones within the image use the Tone Balance controls.

Tone Balance: Check Shadows, Midtones, or Highlights to isolate Color Balance changes you wish to make to those particular tonal ranges in the image.

Preserve Luminosity: Check Preserve Luminosity so that Color Balance changes affect only the color of the pixels and not the brightness.

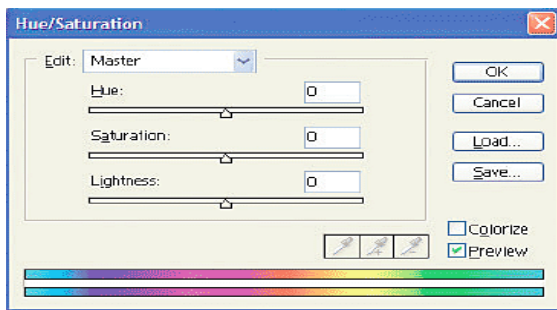
Using *flowerCurves.psd*, input the following values into the Color Levels fields (in order, left to right): -46, -20, +1. Note how combining the previous adjustments we made with Curves with the Color Balance adjustments has greatly improved the tone of this image (compare it to *flower.psd* side-by-side.)

Brightness/Contrast: Use the Brightness and Contrast Sliders or Fields to increase or decrease the brightness and contrast of an image, Layer, or Selection.



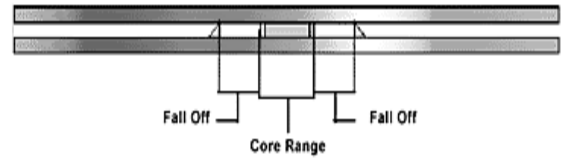
Using *flowerCurves.psd*, increase Brightness by 10 and Contrast by 10.

Hue/Saturation: Use the Hue/Saturation Controls to increase and decrease the Hue, Saturation, and Lightness of an image, Layer, or Selection. From Edit select Master to adjust all the colors or select from a list of color ranges that include Reds, Yellows, Greens, Cyans, Blues, and Magentas.



Hue/Saturation (con't)

When you select a color range, you can adjust the magnitude of that range using the sliders in between the Color Bars at the bottom of the Hue/Saturation dialog box and by using the Eyedropper Tools. For example, select Red from Edit. Note how the Color Bars at the bottom display the range of Reds that will be affected.



You can adjust the Core Range and Fall Off range by sliding the Indicators as needed. Note that you can use the Eyedroppers to adjust the range by (Clicking) on colors within the image to add or remove them from the range. The Fall Off range is used to make your adjustments as smooth and realistic as possible. You can experiment with changing the range if you like.

Hue/Saturation (con't)

For now, keep the range at default and make adjustments to the Reds in the image. We've changed Saturation to +60 and Lightness to -15.

Next move to Yellows. We've changed Hue to -25.

Next move to Greens. We've changed Saturation to +40.

Next move to Cyans. We've changed Hue to -75.

We've left Blues and Magenta unadjusted as most of these colors are in the background. The background of this image is out of focus (blurry) and color adjustments tend to become blocky or band when adjusting blurry areas. In fact, you should notice some pinish patches in the background that appear unseemly. This is bound to happen when making global adjustments (adjustments to the entire image and therefore all the colors within the image that fall within a particular range.) Remember, you can also isolate areas of the image by creating Selections or by selecting content on a single Layer and then make adjustments to the content accordingly.

Hue/Saturation (con't)

If you examine the image now, the Reds and Greens should appear much better than they originally did (compare it side-by-side to *flower.psd* if you like.)

You could go back to Hue/Saturation, isolate the Reds and change the color of the flower to a pink (by increasing Brightness) or yellow (by increasing Hue and Saturation and decreasing Brightness.)

Open *flowerComplete.psd* to view the changes as we've made them to the image.

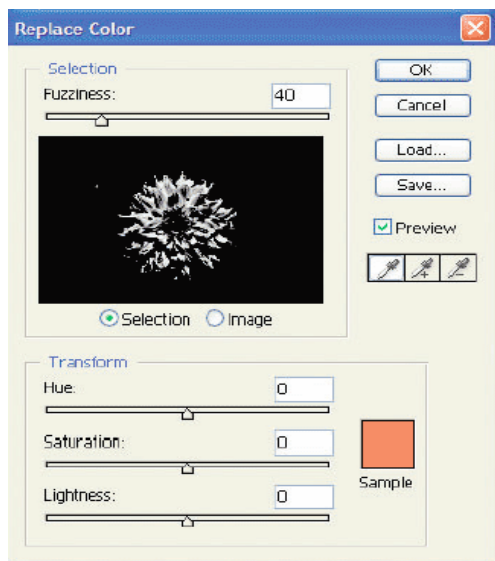


Colorize

Colorize causes the image, Layer, or Selection to take on a duotone effect, where the image is tinted by one dominant color.

Desaturate: Selecting Desaturate removes the color from an image. The image will appear to be in Grayscale Mode but actually remains in RGB Mode so that you can still add color to it and use all the Filters.

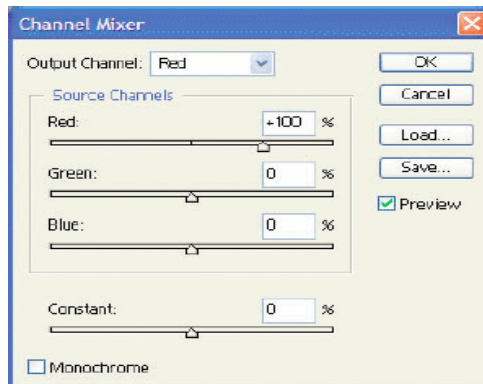
Replace Color: Use Replace Color to change the Hue, Saturation, and Lightness of a particular color or particular range of colors. Use the Eyedroppers to select the color(s) you wish to replace. Replace Color is similar to selecting by Color Range, including Fuzziness, Eyedroppers to select one color, select additional colors, or deselect colors, a Preview checkbox, and the ability to choose either Selection or Image in the Image Box (see "Creating a Selection with Color Range" on page 68.) In addition, Replace Color includes Hue, Saturation, and Brightness Sliders and Fields, and the Sample Box that indicates the currently selected color or base color for the currently selected range.



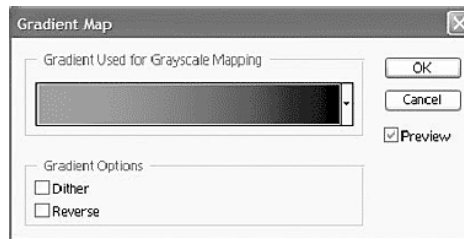
Try using Replace Color on the flower or on different colors within the image.

Selective Color: Use Selective Color to adjust CMYK values for images destined for print. Because you don't use CMYK mode for the Internet you won't have much use for this control. However, feel free to experiment with it. Like other controls, you can isolate a color range and use sliders to modify them.

Channel Mixer: Use the Channel Mixer to adjust the balance of each individual Color Channel in the image. Select the desired Color Channel with the Output Channel drop-down list. You'll notice that sliders for the Source Channels default to a value of zero, except for the currently selected Color Channel, which defaults to a value of 100%. Use the sliders to increase and decrease the percentage values of each Channel to change the tone of the image. Use the Constant slider to add or subtract black or white to the mix. Check Monochrome to convert the Image to a Gray range of colors (the image itself still remains in RGB Mode.)

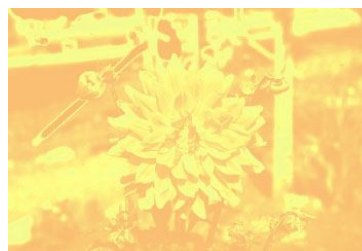


Gradient Map: Use the Gradient Map dialog box to map either a custom or preset Gradient to the grayscale values of an image. The effect is somewhat like that of a Duotone used in print but without the need of converting the image over to a Duotone. The default Gradient consists of the current Foreground and Background Color, with the foreground mapped to black and the background mapped to white (in the Grayscale range.) Choose a Gradient or {Double-Click} on the Gradient Preview itself to edit and create custom Gradients. Check the Dither checkbox to create a smooth Gradient. Check the Reverse checkbox to flip the colors from right to left. In our case we had Red as the Foreground Color and Black as the Background Color, which results in a Gradient from Red to Black.



Gradient Map (con't)

We've selected the Orange, Yellow, Orange Gradient and applied it to the flower image with the following results:



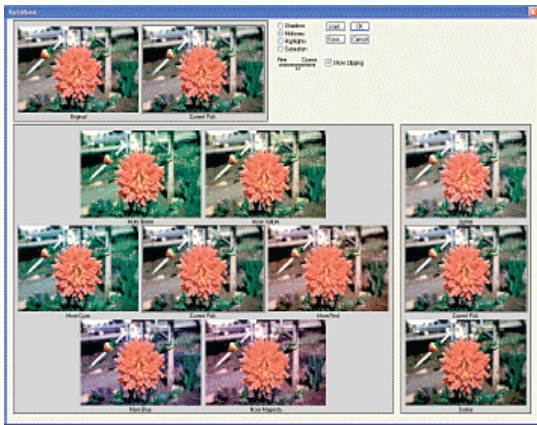
Invert: Use Invert to reverse the colors of the current image, Layer, or Selection. In effect, you make a photographic negative of your image.

Equalize: Use Equalize to make Photoshop designate the lightest pixel and the darkest value as absolute black and white and then adjust the pixels between evenly or equally.

Threshold: Use Threshold on the current image, Layer, or Selection to convert all pixels to either black or white. Adjust the Threshold Level by input a new value or using the slider. Increasing the value adds more black and decreasing the value adds more white. The range is from 0 to 255.

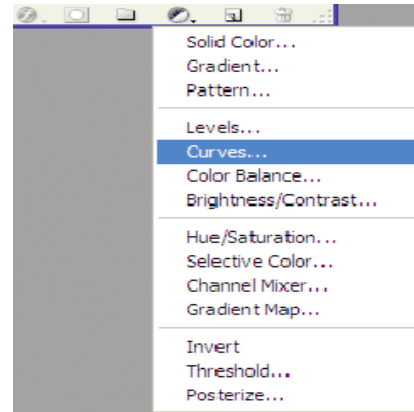
Posterize: Use Posterize on the current image, Layer, or Selection to reduce the amount of colors, and therefore tone. For instance, if you enter a value of 5, the image is reduced to five of the most dominant colors.

Variations: Use Variations to view multiple results of tonal changes for the current image, Layer, or Selection. The Variations dialog box consists of twelve (12) Thumbnails divided into three (3) areas. At the top is the image in its Original form beside which is the image as it appears with modifications. To isolate tones and saturation check Shadows, Midtones, Highlights, or Saturation. Check Show Clipping when adjusting Saturation to ensure you do not over saturate a particular color. Use the Fine and Coarse slider to adjust the amount of each change.



Variations (con't): Execute changes by {Clicking} on the Thumbnails in the Color or Brightness areas. The Color Area consists of Thumbnails to add more Green, Yellow, Cyan, Red, Blue, and Magenta. Continue {Clicking} on the Thumbnails to add color. Lighten or darken the image by {Clicking} on the Lighter or Darker Thumbnails in the Brightness area. {Click} OK to make the changes.

Adjustment and Fill Layers: Photoshop features a powerful Adjustment Layer you can use within the Layers Palette to affect tonal changes to Layers that lie beneath the Adjustment Layer. Thus far, we have been using a destructive method, where the adjustments we make are permanent and are actually applied to the image data on a particular Layer. If we use an Adjustment Layer, we use a non-destructive method of adjusting tone, color, brightness, and so forth. To create an Adjustment Layer select the Layer that you want to affect and {Click} on the New Fill or Adjustment Layer button at the bottom of the Layers Palette. A drop-down menu appears that allows you to choose an Adjustment Type. For Fills select either Solid, Pattern, or Gradient. For Adjustments select either Levels, Curves, Brightness/Contrast, Color Balance, Hue/Saturation, Selective Color, Channel Mixer, Gradient Map, Invert, Threshold, or Posterize.



Adjustment and Fill Layers

(con't): The Adjustments you choose work just like the do through selecting Image/Adjustments/selected Adjustment (where selected Adjustment is the Adjustment of your choice, such as Curves.)

Open *flowers.psd*.

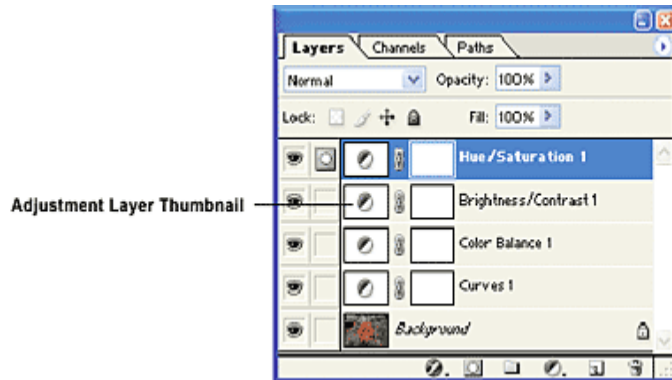


Adjustment and Fill Layers (con't): This is our original, muddy, dark image of the flower that we have been modifying throughout the chapter. Let's do the modifications again, but this time using a series of Adjustment Layers. Execute the following procedure:

1. Create a new Adjustment Layer and select Curves for the Adjustment Type. The Curves dialog box appears.
2. Create 3 Points along the Curve as we did before (see "Curves" on page 162.). Once you've made the Curve (an approximation to the screenshot), you can select each, from the top down, and input the following coordinates:
 - Input: 136 / Ouput: 182
 - Input: 66 / Ouput: 147
 - Input: 48 / Ouput: 90
3. {Click} OK. An Adjustment Layer should be added to the Layers Palette just above the Background Layer.
4. Next, add another Adjustment Layer. Select Color Balance.
5. Input the following values into the Color Levels fields (in order, left to right): -46, -20, +1.
6. {Click} OK.
7. Next, add another Adjustment Layer. Select Brightness/Contrast.
8. Increase Brightness by 10 and Contrast by 10.
9. {Click} OK.
10. Next, add another Adjustment Layer. Select Hue/Saturation.
11. Input the following values for the following colors:
 - Reds: Saturation: +60 / Lightness: -15
 - Yellows: Hue: -25
 - Greens: Saturation: +40
 - Cyans: Hue: -75
12. {Click} OK.

Adjustment and Fill Layers (con't)

We've made all the changes we made earlier, but this time in a non-destructive manner. We should have four (4) Adjustment Layers stacked on top of the Background Layer. The original image has not been modified. We are seeing the modifications through the Adjustment Layers. You can use the Visibility Toggle at any time to disable an Adjustment Layer or {Double-Click} the Adjustment Layer Thumbnail to change the settings you've applied. Furthermore, you can use the Opacity or Fill values for the Adjustment Layer to reduce the effect on the Layers below.



NOTE

Note

By default, Adjustment Layers affect all the Layers below them. If you are working with on a file with multiple Layers you may wish to link particular Adjustment Layers with particular image Layers. To do so, select the image Layer you wish the Adjustment Layer to be linked to. Next, place the mouse pointer between the image Layer and the Adjustment Layer and press the [ALT] key. A link icon will appear. Press the mouse button to link the Adjustment Layer to the image Layer.

OPTIMIZING IMAGES FOR THE INTERNET

Creating a Logo in Photoshop

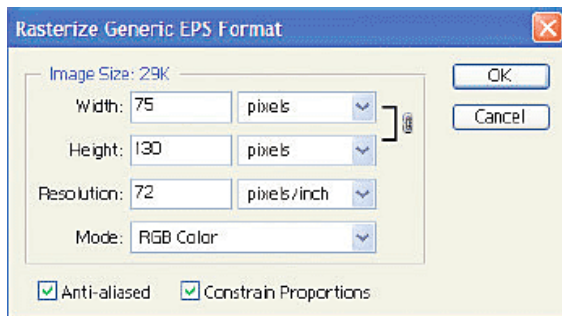
Most logos are actually created in vector-based programs such as Adobe Illustrator because vector-based artwork is scalable and suitable for print. In most cases, you are given a copy of a company's logo in either Encapsulated Postscript (.eps) or Illustrator format (.ai.) However, since we are working exclusively in Photoshop we will create a logo within Photoshop, using external media as well as Type and a Vector Shape.

Importing Vector Image Files: If you are creating a logo, it's highly recommended that you do so in a program like Adobe Illustrator or Macromedia Freehand (among others) because it is much easier to repurpose, for print, for video, and in our case, for the Internet. With the exception of Macromedia Flash and the emerging (at the time of publication) SVG format, the browsers still only support bitmap images natively. If you need to publish a logo to the Internet, you'll most likely be taking a vector file and importing it into Photoshop. To do so, simply select File/Open and select the appropriate file type. In our case, we're going to import an Adobe Illustrator (.ai) file.

Open ***kimono.ai***.



Creating a Logo in Photoshop (con't): When you import an Illustrator image, the Rasterize Generic EPS Format dialog box appears. To rasterize means to translate the vector information of a file into a grid of columns and rows filled with pixels, in other words, to take vector information and convert it into bitmap information. Options include Width and Height (in various units), Resolution, Color Mode, Anti-aliased, and Constrain Proportions.



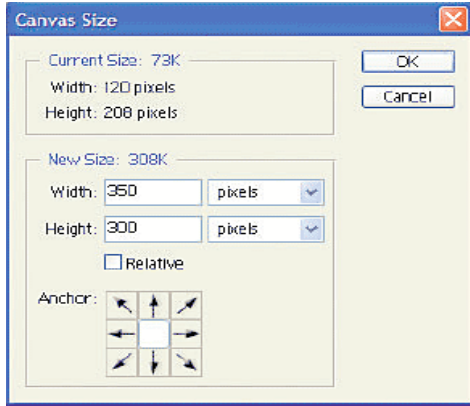
Recall that vector images are resolution independent. You are given the opportunity to set your dimensions, resolution, and so forth before the vector data is converted to a bitmap. As a result, you could import it again and again for different projects that require larger versions. In our case, input a width of 120 pixels. If Constrain Proportions is checked, the Height field adjusts automatically. It is very important that proportions, particularly for logos, be maintained. Set Resolution to 72 ppi and Mode to RGB because we will be publishing the image to the Internet. Make sure Anti-aliased is checked to create smooth edges. {Click} OK. The image is converted to a bitmap and appears with a transparent background. You should recognize it from previous exercises.

Creating a Logo in Photoshop (con't)

Examine the image. You'll notice that it is composed of solid colors and sharp edges. This type of image is typical of vector-based artwork. Notice also that unlike opening a bitmap image, which defaults to a "Background" Layer, vector images default to "Layer 1" with the image data surrounded by transparency. Rename the Layer "***kimonoGirl***".

Adding a Vector Shape

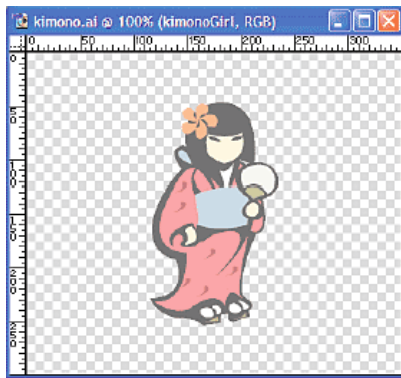
Our next step involves adding the components that will make up the completed logo. In this case, we're going to start by making the canvas of the Image Window larger. To do so, select Image/Canvas Size. The Canvas Size dialog box appears.



Input a Width of 350 and a Height of 300 pixels. Note the Anchor section. By {Clicking} on the various Arrows you can change the orientation that the canvas expands to. We want it to expand evenly on all sides so we accept the default centered orientation. This is a quick way of changing the size of the canvas or Image Window without modifying the size of pixel content. We could have just as easily created a new image and dragged the image of the kimono girl into it.

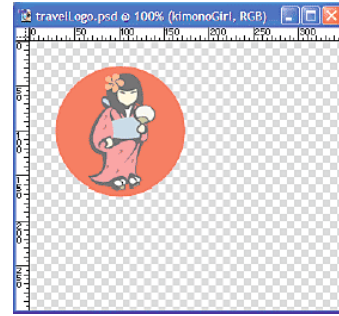
Adding a Vector Shape (con't)

You should have an Image Window that looks like this:



Next we are going to change the scale of the kimono girl and add a Shape to mimic the rising Sun.

If you wish, you can open *travelLogo.psd* and work with that file.



Creating a Logo in Photoshop

Select the "risingSun" Layer. Make sure the Foreground Color is still red and the Background Color is pure white (R: 255, G: 255, B: 255.) Add a Gradient Overlay to the Ellipse (Gradient Overlay is a Layer Style) using the following settings:

- Blend Mode: Normal
- Opacity: 100
- Gradient: Foreground to Background
- Reverse: Checked
- Style: Linear
- Align with Layer: Checked
- Angle: 90
- Scale: 100
- {Click} OK. The image should appear as follows:

Next select the Horizontal Text Tool. Set the font to Verdana, Bold, 90 pt, Smooth, and White for the color. Input a capital "T".

Apply a Stroke (another Layer Style) to the text. Use the following settings:

- Size: 3
- Position: Outside
- Blend Mode: Normal
- Opacity: 100
- Fill Type: Color
- Color: Black (R: 0, G: 0, B: 0)

Place the Type Layer in between the "kimonoGirl" and "risingSun" Layers. Position it like this (approximately):



Creating a Logo in Photoshop

Next, select the Horizontal Text Tool and change the color to black and the size to 60, but keep the same font (if you still have the Type Layer you just created selected, you will change the settings of that Type Layer, make sure to select a standard Layer first.) Input "ravel" and position it accordingly:



Next, set the Tracking to – 80.

Create two new Type Layers, one with the letter “J” with the same settings as the letter “T” except the color will be (R: 204, G: 51, B: 51), and one black, with “apan” (same settings as the “ravel” Type Layer, including the Tracking.) Position them accordingly:



Creating a Logo in Photoshop

Next, you should Crop the image as tightly as possible. In addition, let's add a Drop Shadow to the kimono girl with the following settings:

- Blend Mode: Multiply
- Opacity: 75
- Angle: 120
- Use Global Light: Checked
- Distance: 5
- Spread: 0
- Size: 5
- Contour: Linear
- Anti-Aliased: Checked
- Noise: 0
- Layer Knocks Out Drop Shadow: Checked

Go ahead and do so and save your image if you like. For the next section, we'll all use the same image.

Load **travelLogoFinished.psd**.



travelLogoFinished.psd

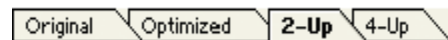
Once you have created your image as desired, it's time to save it for the Internet. To do so within Photoshop, select File/Save for Web. The Save for Web dialog-box appears.



The Save for Web dialog box consists of Tabs (Original, Optimized, 2-Up, 4-Up) to control how many Optimization Previews of the image you can see (from 1 to 3 at a time.) A set of Hand, Slice, Magnification, and Eyedropper Tools, and Image Compression Options (Image Type, Color Reduction, Dither Type, Compression, Colors, Dither Percentage, Transparency, Matte, Interlaced, and Web Snap) are included. Output Settings, a Color Table, Color Table Options, Image Size, Magnification Level, Info Bar, and Info Bars at the bottom of each Preview Window are also included. We will cover the Slice Tool and Output Settings later in the manual so focus your attention on the other features of this dialog box for the time being.

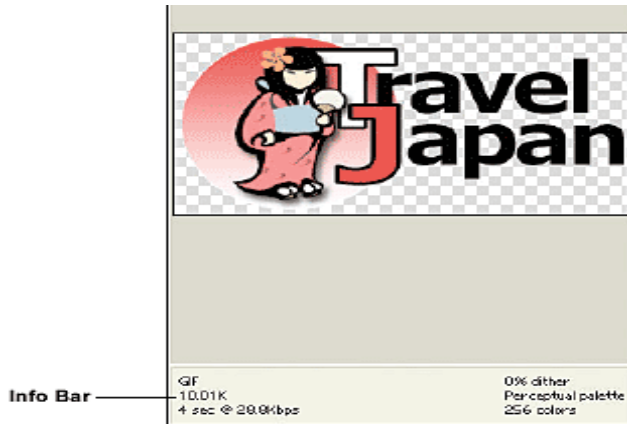
Preview Windows

Select from Original, Optimized, 2-Up, and 4-Up to see various versions or your image in the Preview Windows.



You'll be applying various compression and file-type settings to your image. Photoshop gives you a real-time preview of what the image looks like with a particular set of compression options in contrast to the Original version of the image (the Photoshop native, uncompressed version.) {Click} on the 2-Up Tab. Two (2) Preview Windows result, one titled "Original" in the Info Bar at the bottom, which includes the File Size, and one titled with the currently selected Image Compression options, including File Type, File Size, Projected Download Time, Dither percentage, Palette, and Number of Colors.

Depending on your current Image Compression options the new version of the image should be dramatically smaller than the native Photoshop version.



This Preview Window displays the image as a GIF.
Note the information in the Info Bar.

Compression Options: Photoshop has numerous Compression Options you can apply to an image to prepare it for the Internet. Select from a list of pre-set Compression Options by selecting Settings which include GIF, JPEG, and PNG variations. At this point PNG is not fully supported by the browsers. Most of the newer browsers will support displaying PNG files, but may not support the Transparency features. Its highly recommended that you test any use of PNG files before you commit to using the format. There are a few things to consider when selecting an appropriate compression option:

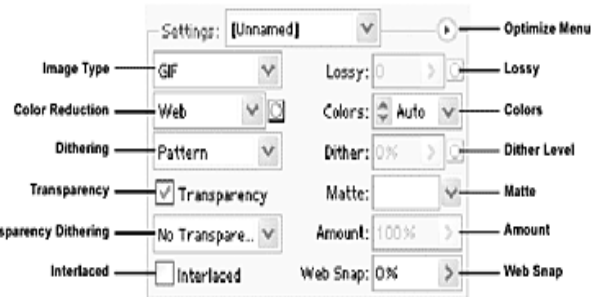
- Nature of the Image: Solid Colors, Sharp Edges, Photograph
- Target Audience Bit-Depth: 8-bit display or higher?
- Target Audience Bandwidth: Low, Medium, or High?

If the image is made up of predominantly solid colors and sharp edges, such as the image we are working with, then GIF is the best format because file size will be significantly smaller than using JPEG. JPEGs are 24bit images with over 16 millions colors and are much more suited to photographic images which tend to be made up of a wide variety of colors, tones, and little, if any, patterns.

Compression Options (con't): Select each of the pre-set GIF Compression Options and examine the image and the image size. When you can, it's advisable to use the Web-Safe Color Palette to ensure that people using 8-bit displays see the image as you do. More and more users have 24-bit color displays so the Web-Safe Color Palette is becoming less of an issue than they were in the past. We will, however, employ them in this example to see how they work. Select GIF Web Palette from Settings. You'll notice that certain colors shift slightly from the original (the face, the obi (sash), and fan.) In addition if you examine the Gradient, you can see banding (a series of different color stripes) rather than a gradual shift from one color to another. In many cases, when you are creating images of this type that are not logos these color shifts are acceptable. However, your client may not agree to slightly different colors for a logo. At present, if you examine the Color Table you'll notice that there are only 37 (this number may vary slightly) colors in the compressed version of the image. To adjust these settings, such as adding more Web-Safe Colors you'll have to build Compression Options yourself.

Building Compression Options for GIF and PNG-8

If none of the pre-set Compression Options is useful to you, you can customize options by using the drop-down settings. The following options are available for GIF and PNG-8: Optimize Menu, Image Type, Color Reduction, Dithering, Dithering Level, Lossy, Colors, Matte Color, Transparency, Transparency Dithering, Transparency Dithering Amount, Interlaced, and Web Snap.



Building Compression Options for GIF and PNG-8 (con't)

Image Type: Select from GIF, JPEG, PNG-8, and PNG-24 for the Internet. In this case, we would select GIF because of the nature of the image. If you select JPG or PNG-24 the Compression Options will change.

Lossy (for GIFs only): Lossy compression discards data from the image to reduce file size. The higher the Lossy value the more data lost. Usually the higher the value the more the image itself degrades. Try it out and examine the results. Note that this option will not be available if you select particular Dithering options or if Interlaced is checked.

Color Reduction and Colors: Select from the following Color Reduction algorithms: Perceptual, Selective, Adaptive, Web, Custom, Black & White, Grayscale, Mac OS, and Windows. For the Internet, Perceptual, Selective, Adaptive, Web are the most common. The Colors option works in tandem with Color Reduction. You can select or input the number of colors you wish to use depending on the selected algorithm. The Auto option appears in Colors when the Web algorithm is selected. Both Photoshop and ImageReady will attempt to use the least amount of colors possible to maintain the highest quality. You are free to change the amount of colors yourself. Select each option and examine the results for our image. Note the colors in the Color Table.

Building Compression Options for GIF and PNG-8 (con't)

Dithering and Dither Level: Dithering encompasses a variety of techniques to simulate color that cannot be generated or is not available (GIF can only support a maximum of 256 colors.) You can select from the following Dithering methods: No Dither, Diffusion, Pattern, and Noise. Dithering creates patterns to trick your eye into seeing colors that are not there. The Diffusion method is the least noticeable. You can also modify the level of the Diffusion method by increasing or decreasing the value of the Dither Level. Select each method and examine the effect they have on our image.



Our image with No Dithering selected using the Web-Safe Color Palette.



Our image with Pattern Dithering selected using the Web-Safe Color Palette.

Building Compression Options for GIF and PNG-8 (con't)

Transparency and Matte: Check Transparency if you wish to generate a Transparent GIF. By default, any transparent area in the Photoshop file will be transparent. The Transparency in GIF images can produce images with rough edges. You can use the Matte options to select a color to which the edges can be Anti-aliased to (with Transparency enabled or not.) Select from None, Eyedropper Color, White, Black, or Other. You can use the Eyedropper Tool in the Save for Web dialog box to sample a color from the image. Selecting Other launches the Color Picker.

Transparency Dithering and Amount: Use Transparency Dithering to set the Dithering for partially transparent pixels in PNG-8 images. Use Amount to control the level of Dithering.

Interlace: If you check Interlace the GIF image will appear to download faster as a broken-up or low resolution version of the image is displayed until the full image has been uploaded. Be aware that it does increase file size.

Building Compression Options for GIF and PNG-8 (con't)

Web Snap: Increasing the value of Web Snap will cause colors to shift closer to the Web-Safe Color equivalents. Using Web Snap is not necessary if you've selected Web for Image Type.

For our image use the following settings:

- Image Type: Gif
- Color Reduction: Perceptual
- Dithering: No Dither
- Transparency: Unchecked
- Lossy: 0
- Colors: 256
- Matte: White
- Web Snap: 0

Building Compression Options for GIF and PNG-8 (con't)

If these are settings you'll use frequently, {Click} the Optimize Menu and select Save Settings. Name your settings appropriately.

Otherwise, {Click} Save. Save your image as studentTravelLogo.gif. Now its ready to be used in a web site. If you like, you can load our version, **travellLogo.gif** to view it.



Note
Usually, you save your Internet-ready image to the appropriate folder within your web site. When you are done saving the optimized version of the file, you are returned to Photoshop where you can continue to work on the image. At this point you should save the image because the optimization settings you selected are saved with it as well. Keep a copy of your original Photoshop file, also referred to as the Production file. Make changes to this file and re-optimize the image for the Internet after you've made your changes.

Building Compression Options using JPEG

JPEG or PNG-24 images are usually photographic images, due to the complexity of a photograph and the number of potential colors. You can use GIF or PNG-8 compression methods with photographic images and still get good visual results, but the file size tends to be quite large. Let's examine compression options for photographic images.

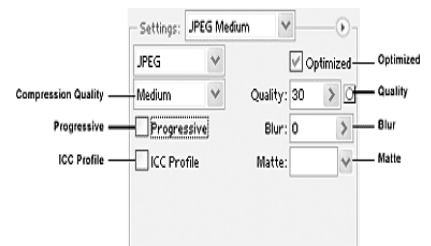
Open **mijajima.psd**.



Select File/Save for Web.

Building Compression Options using JPEG (con't)

Select GIF for Image Type and try out the various settings you tried with logo image we created. Note the file size of the compressed version of the image and the color banding that can occur. Next, select JPEG from Image Type. The optimization options change from those we had with GIF. Options include Compression Quality, Quality, Progressive, ICC Profile, Optimized, Blur, and Matte.



Building Compression Options using JPEG (con't)

Compression Quality and Quality: Compression Quality and Quality are really the same thing. With Compression Quality you can select from Low, Medium, High, and Maximum. Each setting will change the value of Quality. The value of Quality affects both the file size and visual quality of the image. Lower values reduce both and higher values increase both. You have to test various Quality levels until you strike a balance between file size and appearance.

Progressive: Check Progressive to force the image to be displayed in steps or progressively in a browser. This will give users the ability to see a low-resolution version of the image as it loads. This feature is not supported by all browsers.

Building Compression Options using JPEG (con't)

ICC Profile: Check ICC Profile to embed the ICC Profile with the file. Some browsers may support color correction and in future perhaps all browsers may support this option. This option will increase the file size slightly. Consult Photoshop Help or your Photoshop manual for more information on setting up color management.

Optimized: Check Optimized for maximum compression. Older browsers may not support this option.

Blur: At times, adding a very slight blur to the compressed image helps to reduce the file size and mask compression irregularities or artifacts (the lower the Quality value the more artifacts you may see, such as banding and corrupted areas within the image.)

This is identical to apply a Gaussian Blur Filter to the image. Set Quality to 10 and examine the sky around the edge of the structure. You should see compression artifacts.

Building Compression Options using JPEG (con't)

Matte: Because JPEG does not support Transparency, you'll need to specify a color to fill any transparent or partially transparent areas with. Use Matte to do so. Go ahead and try various settings and examine the results. Use the Hand Tool in the Save for Web dialog box to move the image around within the Preview Window.

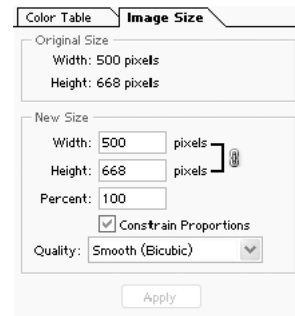
When you're done, select the following settings (but do not press OK yet):

- Optimized: Checked
- Quality: 30
- Blur: 0
- Matte: None
- Progressive: Unchecked
- ICC Profile: Checked

Building Compression Options using JPEG (con't)

Matte (con't)

Examine the file size: 56.85k in our case. Still rather large. This is due to the fact that dimensions of the image itself are rather large. Reduce the dimensions, reduce the file size. Recall that you want to keep the original in its original form. Rather than reducing the scale of the original image, simply select the Image Size tab beside the Color Table tab.



Our original image is 500 x 668 pixels. Let's reduce the dimensions by inputting a different Width or Height into the appropriate field in the New Size area. Alternately, you can input a percentage value into the Percent field.

By default, the proportions are constrained to maintain the aspect ratio of the image. To disable, uncheck Constrain Proportions.

Building Compression Options using JPEG (con't)

Matte (con't)

You can also select a Quality setting for Image. Input 200 in the Width field or 40 into the Percent field and {Click} Apply. The file size has been reduced from 56.85k to 11.27k.

{Click} Save. Save the file as studentMiyajima.jpg.

If you like, you can view our version by loading *miyajima.jpg*.



There you go! You've just created two (2) Internet-ready images. But that is only the beginning. You'll need to experiment with a number of images to get to know how the compression options operate with different images (differences in colors, content, and so forth.) Try out the images included in the exercises.

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UNITS AT A GLANCE

UNIT- I

PAGEMAKER 6.5..... 01 to 41

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UNIT- III

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