## Introduction to <br> 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 publication 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 form within PageMaker itself. PageMaker can handle text better than Illustrator and PhotoShop and also give you the flexibility of graphic control not available in world processors

## NEW FEATURES IN PAGEMAKER 6.5

## DOCUMENT LAYERS

Layers allow you to place elements on 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 imitations, 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 INTERGRATION

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 you 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

## Basic of Pagemaker

## 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.


## 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. The view the rulers select View > Show Rulers.

## Master Page Icon:

The Master Page icon showed 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 pages in black. Clicking a particular page icon will display the selected page.

## Plasterboard:

Surrounding the page is an area of white space called the Plasterboard. It is used to store graphics and texts as you work. Items you place on the plasterboard 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. select.

Export: Export command lets you export you publications into the format you


## 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 Page 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 column of equal size.

Auto Flow: Auto Flow is used to flow the text onto the pages of the publication 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.

Layout
Layout Menu


## 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.

| Type Typ | Type Menu |
| :---: | :---: |
| Font | - |
| Size | - |
| Leading | - |
| Type Style | - |
| Expert Kerning. . | ng.. |
| Expert Tracking | ing |
| Horizontal Scale | ale |
| Character... | ${ }^{\top}$ |
| Paragraph... | -M |
| Indents/Tabs... | ... ${ }^{\text {I }}$ |
| Hyphenation... |  |
| Alignment | - |
| Style | - |
| Define Styles... | ... ${ }^{3}$ |

## 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.


## UTILTIES MENU

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

| Utilities Uti | ties |  |
| :---: | :---: | :---: |
| Plug-ins |  | Add cont'd line... <br> Balance Columns... <br> Build Booklet... <br> Bullets and numbering... <br> Change Case... <br> Create Color Library... <br> Drop cap... <br> EPS Font Scanner... <br> Global Link Options... <br> Grid Manager... <br> Keyline... <br> Publication Converter... <br> QuickTime Media... <br> Running Headers \& Footers... <br> Save For Service Provider... <br> Word Counter |
| Find... | -F |  |
| Find Next | ^G |  |
| Change... | 人H |  |
| Spelling... | $\wedge_{L}$ |  |
| Book... |  |  |
| Index Entry... | ^Y |  |
| Show Index... |  |  |
| Create Index... |  |  |
| Create TOC... |  |  |
| Define Colors... |  |  |
|  |  |  |

## 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.

| View View Menu |  |
| :---: | :---: |
| $\checkmark$ Display Master Items |  |
| $\checkmark$ Display Non-Printing Items | Alt^N |
| Zoom In | ${ }^{+}$ |
| Zoom Out | へ- |
| Actual Size | ${ }^{1}$ |
| Fit in Window | ${ }^{0}$ |
| Entire Pasteboard | Sh^0 |
| Zoom To |  |
| Hide Rulers | - R |
| Snap to Rulers | Alt^R |
| Zero Lock |  |
| Hide Guides | - |
| $\checkmark$ Snap to Guides | Sh^; |
| Lock Guides | Alt^; |
| Clear Ruler Guides |  |
| Bring Guides to Front |  |
| Hide Scroll Bars |  |

## 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 Style: 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 toggle 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

| Window Mindow Menu |  |
| :---: | :---: |
| Arrange Icons |  |
| Tile |  |
| Cascade |  |
| Hide Tools |  |
| Hide Control Palette | ${ }^{\prime}$ |
| Show Colors | ${ }^{\text {J }}$ |
| Show Styles | ${ }^{\wedge} \mathrm{B}$ |
| Show Layers | ค8 |
| Show Master Pages | $5 h^{\wedge} 8$ |
| Show Hyperlinks |  |
| Plug-in Palettes | - |

## UNDERSTANDING PAGEMAKER TOOLS

## TOOL BOX

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 rules 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 creating a free flowing text box.

## ROTATE TOOL

Rotate too 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 45 degree intervals, i.e., horizontally, vertically or diagonally.


## BOX TOOL

Box tool is used to draw a box.


## RESTANGLE 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 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.


## OENING 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.
- Select the printer "HP Deskjet on LPT1"


## - Click OK.

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


## 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.

## 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 percentage 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 comer 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 Deming. 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 number 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 proportionate larger than standard sizing, fewer than $100 \%$ make it proportionate 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 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 Layers Palette is used where a multiple layers document structure is required. Layers allow you to separ4ate 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 Masters. It displays a list of available master and apply masters 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 Page 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 Preference.

In the Preferences menu select general.


## GRIDS, RULERS AND GUIDES

## 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 column per page. Column guides control the flow of text and represented by dark blue lines.

Ruler Guides: Ruler Guides are also nonprinting guidelines which 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 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 publication 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.

$|$| $\checkmark$ Display Master Items |  |
| :--- | ---: |
| $\checkmark$ Display Non--Printing Items |  |
| Alt $\wedge \mathrm{N}$ |  |
| Zoom In | $\wedge_{+}$ |
| Zoom Out | $\wedge_{-}$ |
| Actual Size | $\wedge_{1}$ |
| $\checkmark$ Fit in Window | $\wedge_{0}$ |
| Entire Pasteboard | $5 \wedge^{\wedge} \wedge 0$ |

## INSERTING PAGES

- Click Layout.
- Choose Insert Pages.



## 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.


## CREATING NEW DOCUMENT

## 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 Pallet Click on the Top right arrow to display the Palette Menu.

| - ${ }^{\text {x }}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Layers Master Pages |  |  |  | - |
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|  |  |  |  |  |
| Appling | Master Page | 戒 | 峦 |  |

## Working with Text

## TEXT BASICS

## ENTERING TEXT

In Page Maker, 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.



## PLACING TEXT

- $\quad$ Click on Edit menu.
- Select Edit Story.
- Type "Demo for Placing Tex ". Click on Story.
- $\quad$ Select Close Story.

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


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


## TEXT OBJECTS, STORIES AND EDITORS

Understanding test objects and stories: Text in PageMaker is part of a story. A story can be a single letter or several page 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.

## 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, and Underline, Reverse, and 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.


## KERNING AND TRACKING

PageMaker provides three types of kerning.

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.

## 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.

## 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 Text paragraph.
- Click on the Type menu.
- Select Paragraph Options



## SETTING TABS

In this exercise we shall see how to set tabs.

- Select the Text tool.
- Click on the Type menu.
- Select Indents/Tabs.


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


Drag the right indent by 1 inch.


## Click OK.

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


## 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 wor4ds 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 use 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, h $\backslash$ the most favorable break is marked by a single tilde ( $\sim$ ) 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.


## 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".


## ROTATING TEXT

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

- Select the text
- Type 45 degrees and press Enter.

The frame has been rotated by 45 degrees.


## ADDING COLOR TO TEXT

In this Exercise, we shall see how to change the color of a text.

- Select the text.
- Click on the Window menu.
- Select Show Colors.

- Select blue from the Colors Palette.
- The Text Color has been changed to blue.



## ADVANCED TOPICS

## CREATING HYPERLINKS

Let us create a hyperlink. Click on the File menu.

- Select New.
- Document Setup dialog box opens. Click the Page Size Pop-up menu.



## 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 form 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 form 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.


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 Page 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 wont 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.


## Working with Graphics and Layer

## GRAPHICS

## LINE TOOL

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

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


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.

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.



## 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.


Now draw a Circle using an Ellipse Tool Point the Cursor on C and hold down the Shift key and drag the mouse button down to Point D to draw a Circle.


## POLYGON TOOL

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

- Select the Polygon Tool.

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 Polygon Tool.


Click Element menu.


Select Polygon Settings.


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

Enter 30\% for star inset 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 COLORS

In this exercise you will learn how to round the corner of a rectangle using "Rounded Corners" option.

- Select the Pointer Tool.
- Click the Rectangle to select it
- Click Element menu.
- Select Rounded Corners.

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


## - Click OK.

Click anywhere outside the rectangle on the screen


You can now see the change in the corners of the rectangle. You can also modify a square in the same way.

## 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 papercolored 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.

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


You can now see the imported image on your screen.


## TRANSFORMING OBJECTS

## TRANSFORMING A RECTANGLE

In this exercise you will learn to transform a rectangle.

- Select the Pointer Tool.
- Click the Rectangle to select it.

Now you can see the change in Control Palette at the bottom of the work area using which you can transform the rectangle. In the Control Palette change the Rotation to 25 degrees and press the Tab Key.


Change the Skew angle to 25 degrees and Press the Tab Key. Click the width column


Change the width to 5 inches and press the Tab Key.


Change the height to 5 inches and press the Tab Key.


- Click the Apply button.

You can now see the transformation in the rectangle. In the same way you can transform any object using the control palette.


## RESIZING AN ELLIPSE

In the exercise you will learn how to resize and ellipse.

- Select the Pointer Tool.

Click the ellipse drawn with the Pointer Tool and select it to display the sizing handles.

Click and drag handle shown to increase the height of the ellipse.


## 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.

Click the Graphic to select it and display the Sizing Handles.
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.

## WORKING WITH COLOURS

## ADDING COLOR TO A GRAPHIC SHAPE

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

- Select the Pointer Tool.

Click the Polygon drawn on the Work area using the Pointer Tool to select it.


- 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 t 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 form the drop-down Tint list.


In this way you can easily add color to the Squares, Rectangles, Ovals and Circles in PageMaker.

## WORKING WITH COLORS

You can customize a color by using three color models i.e., RGB, HLS (hue, lightness, and saturation mode) and CMYK provided by Page-Maker. RGB is used to blend
percentages of red，green，and blue．HLS is used for increasing or decreasing the lightness and saturation of the hue as percentages of 100 to create the color．Using CMYK you can mix four primary colors cyan，magenta，yellow，and black in varying percentages of 100 to get different color combinations．All this can be done by selecting the new color icon at the bottom of the color palette or by selecting new color form the color palettes fly－out menu．


## CREATING AN RGB COLOR

In this exercise，you will learn to create an RGB Color．
－Click the Color Palettes fly－out menu．
－Select New Color．．．Option．

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|  $\square$ $\square$ |  | \％ |  |
| $\square$［Paper］ |  |  | $\wedge$ |
| ［Black］ |  | $\square \square$ |  |
| ［Registration］ |  |  |  |
| Blue |  | $\square \square$ |  |
| Cyan |  | $\square \square$ |  |
| Green |  | ［回 |  |
| Magenta |  | $\square \square$ |  |
| Red |  | $\square \square$ |  |
| Yellow |  | $\square \square$ |  |
|  |  |  | $\checkmark$ |
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| New Color... |
| :--- |
| Delete "Blue" |
| Duplicate "Blue" |
| Color Options... |
| Convert to Process Color |
| Import Colors... |
| Remove Unused Colors |
| $\checkmark$ Display Color Model Icons |
| $\checkmark$ Display Color Type Icons |

The Color Options dialog box appears on the screen. Here you can see text boxes of three different Colors, and Slide bars to enter Values for Red, Green, and Blue. Enter " 250 " fro Red and press the Tab Key. Click the green dialog box.


Enter " 60 " for Green and press the Tab Key. Click the blue dialog box.


Enter " 160 " for Blue and pres the Tab Key.


You can see a preview on the Right-Hand side of the dialog box, showing the resulting color in the top half and the original color setting in the bottom half. Enter "Pink" in the name dialog box and press the Tab Key.


Click OK.
You can see that the name of the Color created is displayed in the Colors Palette


## EDITING, COPYING, REMOVING AND REPLACING COLORS

Editing: To edit a color, double-click on it in the colors palette. This opens up the color options dialog box. In this box change the values for the color and in the Libraries list box select the matching system you like. Click OK.

Copying: To copy a color from one document to other you can use Import Color option from the color palettes fly-out menu.

Removing: To delete a color, select the color and use Delete option from colors palette's fly-out menu.

Replacing: To replace a color first you select the color you want to replace and choose color option from the colors palette fly-out menu then you change the name of the color to the exact name of the color you wish to replace it with and click OK.


## REPLACING COLORS

In this exercise you will learn how to replace a color.

- Select the "Red" Color in the Colors Palette.

－Click the Colors Palette fly－out menu．
－Select Color options from the colors palette fly－out menu．
Enter the name of the Color to the exact name of the Color you want to replace with．Enter＂Green＂in the Name dialog box and press the Tab Key．

－Click OK．
－A confirm dialog box appears on the screen．Click OK．
Now you can see in the Colors palette that there is no Red color option since all the items in Red are changed to Green Color．

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## GROUPING AND UN－GROUPING OBJECTS

Grouping is usually used to create shapes by combining different shapes and for working on multiple objects at the same time. In this exercise you will learn to group the objects.

- Click Edit menu.
- Select the option "Select All".

Now you can see that both the Rectangle and Oval drawn on the Work area are selected. Click Element menu.


- Select "Group" option.

Now the objects are grouped and any change you make will modify both the object. To check this you click the fill button in the colors palette.

- Select Green color

You can now see that both the objects are in Green color. To ungroup the objects you just have to go the elements menu and select "ungroup" options.


## LOCKING OBJECTS

You can lock individual objects in place in order to help preserve the design of your pages through all stages of 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.


Now point the cursor on the Circle and try to drag it. You won't be able to move the object since it is locked. To Unlock the Object you just have to select "Unlock" option from Element menu.


## 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 cerates 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


## WORKING WITH LAYERS

## LAYERS

In PageMaker 6.5 there is layers, which are normally only found in high-end graphic packages. This allows you to organize your document into a series of overlapping layers, controlling their stack order, appearance and locking preferences.

## USING LAYERS

In this exercise you will learn to use Layers.

- Click Window menu.
- Select Show Layers.
- Click Layers palette fly-out menu.
- Select "New Layer" option.


New Layer...
Delete "Default"...
Merge Layers
Layer Options...
Hide Others
Lock Others
Paste Remembers Layering
Select Target Layer
Delete Unused Layers..

New Layer dialog box opens up. Click OK.


The New Layer added is displayed on the Layer Palette with Green Color icon and the name Layer 2. Click the Layers Palette fly-out menu.


## Select "New Layer" Option.

| New Layer... |
| :--- |
| Delete "Default"... |
| Merge Layers |
| Layer Options... |
| Hide Others |
| Lock Others |
| Paste Remembers Layering |
| Select Target Layer |
| Delete Unused Layers... |

New Layer dialog Box opens up. Click OK.

| New Layer | $x$ |
| :---: | :---: |
| Name: Layer 3 | OK |
| Color: $\triangle$ Blue $\quad$ | Cancel |
| V Show layer 「 Lock layer |  |

The new Layer added is displayed on the Layer Palette with Blue Color icon and the name Layer 3. Click Layer2.


- Click File menu.
- Select Place from the drop down menu.
- The place dialog box opens up. Double-Click "Bouquet.tif ".

- Move the Pointer to the Work area and Click it.

You can now see the imported image on your Screen. Now click on the icon showing an eye next to Layer2 to hid the Layer.


Click Layer 3.


- Select the oval tool.
- Click Element menu.
- Select Stroke.

- Select 6pt.
- Draw an Oval.
- Now select the Text Tool.

- Click inside the Oval and type "Happy". Press the Tab Key.

- Type "New" and Press the Tab Key.

- Type "Year" and Press the Tab Key.

- Select the entire text using the Text tool.
- Select Blue color from the colors palette.

- Click anywhere Outside the Selection.
- Unhide Layer 2.

| -x |  |  |  |  |
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| Layers Master Pages |  |  |  |  |
| \% ${ }^{1}$ | $\square$ Layer 3 |  | 1 |  |
| 9 | $\square$ Layer 2 |  |  |  |
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| Layer | targeted | G | 目 |  |

Now from this exercise you learn to place text and graphics together using Layers.


## MOVING OBJECTS BETWEEN LAYERS

In this exercise you will learn to move objects between Layers.

- Click Layer 2.


Drag it on top of Layer 4 and release the mouse Button．Now in the Work area you can see the Red Circle in Layer 2 coming in front of all other objects．

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| Layers Master Pages |  |  |  |  |
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| 9 | $\square$ Layer 2 |  |  |  |
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| Layer 2 targeted |  | 目 | 宜 |  |

－Select Layer 4.

－Now hold down the shift Key and select Layer3．

－Drag both the layers on top of Layer 2.

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| Layers Master Pages |  |  |  |
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Now again you can see the red circle going back of other objects. In this way you can move the objects between Layers.


## LAYER OPTIONS

The Layer Options dialog box can be used to rename the layer select the different color, show/ hid layer and lock/unlock layer. When you use show/ hid option the objects in that particular layer will be hidden/ shown and when you use lock/ unlock layer, the layer gets locked that is you will not be able to work on that layer. To do this you have to first click on the layer you want to work on and then select Layer Options from the Layer palettes fly-out menu.


## STACKING ORDER

Stacking is used to arrange a number of objects overlapping in the same Layer. There are four ways of stacking objects, they are Bring to Front, Bring Forward, send back ward and Send to Back. Bring to front moves the object in front all the objects. Bring Forward moves the object one position toward the top of the stacking order and Send Backward moves the object one position toward the bottom of the stacking order. To do this select the object you want to move and select the option you like from the Arrange drop-down menu.


## USING PHOTOSHOP PLUG-INS

Photo Shop Plug-ins are used to give special effects to the graphics. In this exercise, you will learn to use Photoshop Plug-ins.

- Select the pointer tool.
- Select the image on the screen using the pointer tool.

- Click Element menu.
- Select Image.
- Select PhotoShop Effects.


The PhotoShop Effects dialog box opens up. Enter "New" in the Save New File as dialog Box and press the Tab Key.

Click the Photoshop effects drop-down list.
Now from the PhotoShop Effects drop-down menu. Select "Glowing Edges".

- Click OK.

The Glowing Edges dialog box appears on the screen. In this you can see the preview of the changed image. Click OK.


You can now see the difference in the image after giving the PhotoShop Effect. In the same way you can change your image in many ways by selecting different effects from the Photoshop Effects drop-down list.

## Importing Text Features

## IMPORTING TEXT FEATURES

## HTML

When you import a HTML file, HTML format is mapped to PageMaker styles, hyperlink information is retained; graphics are imported as inline or independent.

## MICROSOFT WORD

When text is imported from a word document table of contents, index, character spacing, width, kerning, and tracking, page breaks tables and source of style is also imported into the publication.


## PAGEMAKER 5.0-6.0 STORIES

When you import publications from older versions of PageMaker you can place selected stories as one list stories only over a specified length and preview the story.


## TEXT-ONLY (ASCII ANSI)

When you import text from text files have the option of removing extra carriage returns between paragraphs, retain tab-delimited tables, replace spaces with tabs, import text as Courier and import text with no conversion.

```
E Untiled Notepad 回区
File Edit Format View Help
Access Time The time required to tetrieve a
data frim the computer memory.
Adress A unique representation fo a memeoy locati
Address bus A set of wires used to transmmit
Address. One wire is used for each bit in the adc
Algorithm represents a sequence of preuisetatior
instructions to slove a problem.
ALU Arithmetic logical unit of a computre what
performs artimetic and logical opertions.
Applet A SMALL CODE FO java program embedded in t
document
ASCII ameieicam standared code for information
Interchange. This code is a string of seven bits
code character.
```


## IMPORTING HTML FILES

- Select the Text tool.
- Click on the page where you want to insert the imported page.
- Click File
- Select Place from the File Menu.
- The Place dialog box appears. Select the ReadMe.html file to import.
- Click Open to place the document.




## IMPORTING SPREAD SHEET

If you are using a spreadsheet application that supports object Linking and Embedding, you can link or embed an entire spreadsheet, a specified range, or a graphic. You can also import a text, space or tab delimited form of a spreadsheet, and then format and edit it in PageMaker. PageMaker has a limit of 40 tabs per paragraph and use tabs to separate spreadsheet columns.

## IMPORING PHOTO CD

The Kodak Photo CD is a standard for importing images.. When you import a Photo CD image, the filter takes into account both image size and the resolution you specified in the Document Setup dialog box, and then assigns the optimum default resolution.

## IMPORTING QUICKTIME MOVIE FRAME

PageMaker allows you to import any frame of a QuickTime movie into your publication as a linked TIFF image. By default the frame is imported in RGB color format at a resolution of 72 dpi . When you export the file to PDF or to a HTML format, the output file will include a link to the QuickTime movie.

## ACQUIRING A TIFF IMAGE

PageMaker supports TWAIN, a cross-platform interface that lets you create a TIFF image, using a device such as a scanner, video-capture board, or digital camera attached to your computer and imports the image into your publication without leaving PageMaker.

## OBJECT LINKING AND EMBEDDING

Object linking and Embedding is a standard for exchanging data between applications. PageMaker can import OLE objects from other applications. You can link and embed any objects as long as the source application supports it.

## MANAGING LINKED FILES LINKS MANAGER

There are three commands in PageMaker, which allow you to manage links. The Links Manager command lets you view or modify links for single and multiple objects throughout a publication.


## LINK OPTIONS

The Link Options command or option lets you view or modify updating options for an individual object or for link defaults.

| Link Options |  |
| :---: | :---: |
| File: 20.JPG |  |
| V Store copy in publication <br> $\nabla$ <br> V Update automatically <br> V Alert before updating | OK |

## LINK INFO

The Link Info command r option lets you view or modify a selected object's link to its original file.


## EXPORTING OPTIONS

PageMaker can export text in several file formats, listed in the Export dialog box. The formats listed are used by other applications, which retain the type specifications, indents, and tabs set in your document. In addition to the already listed export formats PageMaker files can be exported in either RTF (Rich text format) or DCA/RFT format. Rich Text Format retains the most formatting. If Your word processing application doesn't support these formats, use the text-only (ASCII) format.


## EXPORTING TEXT

- Click on the text frame.
- Click File.
- Select Export
- Select Text.


The text export options dialog box appears. Enter "document" as a filename and click the save as type drop sown box.


- In the Save as type box select Text only.
- Click Save.

The story is saved in the text only format in the specified file.

## EXPORTING GRAPHIC

You can export almost any kind of imported graphic in a publication in any one of four formats: TIFF, JPEG, GIF89, or DCS. This section explains how to export graphics for general purposes, but note that PageMaker includes export features designed for special publishing tasks; exporting graphics for color separation purposes, or exporting a high-fidelity color image foe editing in Adobe Photo Shop.

## EXPORTING TO JPEG FORMAT

Select a graphics to export


- Click File.
- Select Export.
- Select Graphic.

Type the file name as "Graphic1.tif" for the exported graphic and Click the Save as type pop-up menu


- From the Save as type pop-up menu select JPEG.
- Click the Settings button


The Export JPEG options settings dialog box appears. Click the Image Quality pop up menu.

- In the Image Quality popup menu select Low.
- Click the Resolution pop up menu.
- In the resolution pop up menu select Screen.
- Click OK.
- Click Save.

The file is saved with the options you have specified.

## Publishing and Printing

## PRINTING YOUR DOCUMENT

## PRINTER

Here choose your printer type if you have loaded the drivers for more than one printer, other-wise 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 1 to 5,2 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 limed 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 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.

Thumbnails: Are an easy way of looking at all the pages in a document, to see the overall design theme. This is used to print miniature editions of the pages as icons with a maximum number of 16 pages per sheet of paper

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 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.

## PUBLISHING ON THE INTERNET

## CREATING A PDF DOCUMENT

If you're creating a publication for distribution on the Word Wide Web, design it for the screen and then use one of two ways given above to prepare the file for the Internet. Use the File>Export> Adobe PDF command to create a PDF file that can be distributed electronically across the Word Wide Web. PDF files can be downloaded, viewed and printed
from several different platforms with the page layout and typography of original document intact.

## CREATING AN HTML DOCUMENT

Use the File> Export >HTML command to create hypertext-linked pages that you can publish on the World Wide Web. If you select the Preserve Approximate Page Layout option in the Export HTML Options dialog box, PageMaker uses HTML tables to replicate the design of each exported page, including the number and width of columns, and the size and position of graphics on the page.


## PUBLISHING A DOCUMENT ON THE NET

PageMaker is used to create documents that can be published on the World Wide Web. You have to first covert the file into ODF or HTML format, to do this click File menu.


- Select Export.
- Select HTML.

The Export HTML dialog box appears on the screen. In this click the file name on the left. You can see the number of pages of the document is displayed on the right- hand side.


In this dialog box you can make the changes in the file using Edit and Options buttons and also specify the location to which the file has to be exported using Export Files to Location button. Click Export HTML


The file will be converted to HTML format.

## Introduction to Corel Draw 9

Before you dive in and start creating your own graphic images, you need to understand a few basic concepts about what CorelDRAW does- - both on your screen and behind the scenes. That's what this section is about.

Now you might be asking yourself, "Do I really need to know what's going on behind the scenes in CorelDRAW 9?" Not necessarily, but a basic understanding of the unique way CorelDRAW creates images will help you to design images and transform those images to hard copy or web page output.

CorelDRAW is different from bitmap graphic design packages. CorelDRAW is a vector-base program, which means that it creates and handles images as mathematically defined vectors. Vectors are objects with both magnitude (size) and direction (angles, curvature, and so on). The files that store CorelDRAW images consist of lists of lines, with information on their location, direction, length, color, and curves.

Just A Minute: The majority of graphic design program are bitmap-based, which means they define images as enormous lists of dots, called pixels. Some of the more popular bitmap-based programs include Photoshop, PHOTO-PAINT, and Image Composer.

Defining images as series of vectors is a more efficient way to work with tem than defining images as huge number of individual pixels. This is because even a simple object might have thousands of pixels, each individually defined, whereas the same image might be defined more-rationally as a small number of curve segments. Therefore, CorelDRAW 9 vector image files are smaller than comparable bitmapped image files.

In addition to creating more compact files, CorelDRAW's vector-based images have other important advantages. You can easily resize a CorelDRAW image to a thumbnail sketch or icon or a billboard- sized graphic.

CorelDRAW is a vital and irreplaceable graphic tool capable of creating any graphic image file you will ever need. For one thing, many images are still destined for hard copy, and CorelDRAW's vector-based images are great for printed output. And CorelDRAW's vector-based tools provide the most powerful array of features for designing images. CorelDRAW can then easily translate those images into bitmap formats. In fact, CorelDRAW has a powerful capacity to transform objects into both of the widely recognized web-compatible bitmap file formats: GIF and JPEG. So, in that sense, CorelDRAW is the best of both worlds with unparalleled design tools, plus the capability to covert images to bitmap formats as needed.

## CREATE A NEW DOCUMENT

In the main menu, choose File, New.


Page information: The page size and orientation is displayed in the Properties Bar, directly above the work area. CorelDRAW provides many areas on the screen to view and adjust page and object properties. Watch for these information areas as you learn the program, since they can be great time savers.


Open a Second New Document: You can have several documents open in CorelDRAW. Choose File, New and a second blank document will appear. Note that the first document is called Graphic 1 and the second Graphic 2. You can toggle back and forth between an unlimited numbers of open documents, which can be valuable if you are working on a series of similar documents. Warning: Each open document used more RAM and your can cause a system crash by overloading your RAM capacity. Most modern computers will easily handle two or three open documents.

## SAVE A FILE

Choose File, Save As to open the Save Drawing dialog box. It is good practice to save your document early in your design process. CorelDRAW features an excellent autobackup system that works with your document name. Saving your empty document before you start working will guarantee you will not lose your work.


Set File Location: Choose the location where you would like to save your document from the Save In menu. You can use the New Folder icon to create a new directory from this screen.


Name the File: Type the name for your file in the File Name field. Take care with the names you assign to your files. It is not unusual to want to go back to a file many months later. Choose a name that will easily identify this document.

| File name: | Graphici.cdr |
| :--- | :--- |
| Save as type: | CDR - CorelDRAw |
| Sort type: | Default |

Choose File Type: Leave the default setting at CDR- CorelDRAW for most documents. You will be able to open and edit any document saved to this format. If you wish to save an entire document as a different format, use the fly-out to choose your file type. However, to convert objects or documents to another format, it is usually better to use the Export command.

| File name: | Graphic1.cdr | $\checkmark$ |
| :---: | :---: | :---: |
| Save as type: | CDR - Coreldraw | $\checkmark$ |
| Sort type: | CDR - CorelDRAW | A |
|  | CDT - CorelDRAW Template |  |
| Keywords: | GGM - Computer Graphics Metafile CMX - Corel Presentation Exchange 5.0 |  |
| Notes: | CMX - Corel Presentation Exchange |  |
|  | DES - Corel DESIGNER |  |
|  | DWG - AutoCAD |  |
|  | DXF - AutoCAD |  |
|  | EMF - Enhanced Windows Metafile | $\checkmark$ |

Choose CorelDraw Version: For most documents, leave the default setting of Version9. To share files with other users you may have to save your document as an earlier version. CorelDRAW 9 will open files saved by an earlier version, but, for example, CorelDRAW 7 cannot open a file saved as version 9. Note: Some effects may be lost if the earlier version does not support the techniques you have used to create your document.


Save the File: Review all the choices as explained above and choose Save.


Saving Incremental Changes: Choose File, Save or use the shortcut CTRLS to do a mini8 save of your work as you progress. It best to do a full save with File Save As every 4 or 5 times you do a mini save. Choose File, Save As and the Save Drawing dialog box will be presented. Choose Save and you will be asked if you wish to replace the current file of that name. Choose Yes.


## OPENING A FILE

File Types: CorelDRAW9 will open several types of files. The most common is a file created in CorelDRAW, which will have an extension of CDR. You can also open CGM, EMF, WMF, WPG, AL, EPS to mention a few. An even wider range of file types can be imported into a CorelDRAW document. A file that can be opened in CorelDRAW can most often be fully edited, unlike many formats that are imported which can only be placed, repositioned and resized.

| All File Formats | V |
| :--- | ---: |
| All File Formats  <br> AI - Adobe Illustrator  <br> CLK - Corel R.A.V.E.  <br> CDR - CorelDRAW  <br> CDT - CorelDRAW Template  <br> CDX - CorelDRAW Compressed  <br> CGM - Computer Graphics Metafile  <br> CMX - Corel Presentation Exchange 5.0  <br> CMX - Corel Presentation Exchange  <br> CPX - Corel CMX Compressed $V$ |  |

Open File: Choose File, Open.


Choose File Location: Choose the directory where the file you wish to open is located from the Windows selection fly-out near the top of the Open Drawing dialog box.


Choose File Type: If you leave the File of Type selection set to the default which is All File Formats all files that CorelDRAW can open will be listed. It is often easier to specify the type of file you wish to open, i.e., CorelDRAW (CDR) files. Only the CDR files will be listed, which can make it easier to choose the file you need in directory with many files.


Choose File: Select the file you wish to open. You can see the content of the file you have selected if the preview box is checked. Once you have selected the.


## WORKING WITH BACKUP FILES

Save and Backup: Choose File, Save As and name your file (see the Save Document tutorial). CorelDRAW 9 has powerful auto backup capabilities that work in the background and protect your work when you do not remember to save. This function does not activate until you have saved your file the first time. It is excellent practice to save a new document before you start working. The next steps in this tutorial will lead you through changing your backup settings.


Open Options: Choose Tool, Options to open the Options window.


Set Backup Options: Choose Save form the Options list. Make sure the AutoBackup option is checked and specify how often you would like CorelDRAW to backup your files. The backup process stops your work while the file saves. If you have a slow computer, you may wish to change the default setting of 10 minutes to 30 prevent work interruption. Specify where you would like the backup files to be placed. The default is to save to the same directory as the file it is backing up, but you may wish to create a backup file location.


Open a Backup File: Choose File, Open and open the directory where the original file was saved. You should see a file listed that is named Autobackup of "your file name'. Select this file and choose Open. You should rename the file immediately. CorelDRAW does not delete backup files on exit, so periodically you should manually delete backup files to save disk space.


## SET PAGE SIZE/ORIENTATION

Open Page Layout Window: Choose Layout, Page Setup to open the Page Layout Window.


Set Page Size: Choose Size from the Options list. Select preset page size from the paper fly-out, or set width and height values manually. You can also choose the unit of measure for the page size from the fly-out bedside the Width setting.


Set Page Orientation: Choose Portrait (taller than wide) or Landscape (wider than tall).


Save Your Setting: Choose OK to save all settings you have adjusted on the Layout Options screen.


Add Page Frame: Open the Layout Option window as above. Choose Add Page Frame if you would like to have a rectangle outlining the edge of your page. Without this checked, the page area is shown on the screen, but there is no printed definition of the page area. If you are going to be proofing your pages at a reduce size, this setting will define the edges of the page area exactly. Choose OK to save changes.

## Add Page Frame

## FILE MANAGEMENT

Graphic File Management: It is important to manage files for any computer application, bit with graphic files; you must keep an organized system Graphic file sizes are many times larger than regular files, and can quickly fill even a large hard drive. The best way to know which files are important and which can be deleted is to work with your own directory system, rather than saving files to the program default directory. Look at the properties for this single sample CorelDRAW file - 1.2 MB .

Create a Folder: Choose File, Save As, and the Save Drawing Window will open. Foe this exercise, we will create a directory on the Desktop right form the Save As screen. Click on Desktop in the Save in fly-out. Click on the Create New Folder button. A new folder icon will appear on the screen with the name New Folder highlighted.


Name New Folder: Type the name you wish for your new folder. Your new text will replace the New Folder label. Click off the folder in an empty part of the screen to deselect the folder. You can now double click on the folder to make this your active folder. Confirm that the new folder name appears in the Save In window.


Delete File: You can also delete files from the CorelDRAW Open and Save as Windows. Right click on a file to bring up the menu. Choose Delete, and an alert will appear. Choose yes, and the file will be sent to the Recycle Bin.


Rename a file: Right click on the file you wish to rename. Choose Rename from the pop-up menu. Type in the new name.


## IMPORT AND EXPORT FILTERS

Import File: Choose File, Import to open the Import window.


Import/Export File Types: (We will discuss how to import files in a future lesson.) The list of file types in the Files of Type Window reflects the import filters you have installed in your copy of CorelDRAW 9. These are the file types you can import into a CorelDRAW document. Some types, like WMF and AI will be editable. Others like TIF or GIF can be placed and printed, but cannot be edited directly with CorelDRAW. File types can be added through the Options window.

| All File Formats | $\vee$ |
| :--- | ---: |
| All File Formats |  |
| AI - Adobe Illustrator |  |
| CLK - Corel R.A.V.E. |  |
| CDR - CorelDRAW |  |
| CDT - CorelDRAW Template |  |
| CDX - CorelDRAW Compressed |  |
| CGM - Computer Graphics Metafile |  |
| CMX - Corel Presentation Exchange 5.0 |  |
| CMX - Corel Presentation Exchange |  |
| CPX - Corel CMX Compressed |  |

Open Option Window: Choose Tools, Options to open the Options window.


Add Filter: Choose Global, Filter from the Options list. You will see three types of filters listed in the first box to the right of the list: Raster, Vector and Text. The box on the right indicates the filters that are currently installed. To add a graphic filter, expand the raster or vector file type and choose the file type you wish to add. Click on Add.


Remove Filter: Click on the file type you wish to remove in the List of Active Filter and click Remove


## VECTORS AND BITMAPS

Graphic File Type: There are two basic types of graphic files: Bitmap and Vector. Although you cannot always tell by looking at an image whether it is a bitmap or vector type, they are very different and created in a totally different way this can be confusing, but understanding the difference is essential to understanding computer graphics.


Bitmap Images: Bitmap Images are constructed from a series of pixels, or tiny squares. Sometimes the squares are all filed with one color, forming a solid image, bit more often, each pixel contains a unique color Look the example at the left. On the left is the way we see an image. On the right the outlines are drawn to represent the pixels.


Vector Images: Vector images have no pixels. They are displayed or printed with mathematical positioning. A vector image contains messages like, draw a rectangle, this size and at this place on the page. The example here approximates how the design is created. Compare it to the bitmap example of the same image.


File Size: Vector files are usually considerably smaller than a bitmap file of the same image, since there is less information required to achieve the same results. The exception is in photographic type images where color changes with almost every pixel. This type of file is
best created and edited in a bitmap program. The two images here look the same. The one on the left is a bitmap, size 122,888 bytes. The one on the right is vector, size 11,227 bytes.


Resizing: Bitmap images lose quality if they are scaled to a larger size. There is simply not enough information to maintain the quality -basically the pixels just get bigger. With vector images, the mapping is all that changes. Instead of calling for a rectangle 2 "by 1 ", scaling to twice the size simply changes the rectangle to 4 "by 2 " with no quality loss and no file size increase. See the example here which simulates bitmap scaling on the left and vector on the right


CorelDraw Vector/Bitmap: CorelDraw is essentially a vector construction program. It has a few borrowed capabilities from Corel Photo Paint integrated into the program, but for the most part, it is a vector program. Corel Photo Paint creates and edits bitmap file types. The two works together to provide all you need in computer graphics.

Bitmaps in CorelDraw: Bitmaps can be imported, cropped and positioned in CorelDraw. To edit, or change the appearance of the bitmap, use Corel Photo Paint and import the results into your CorelDraw document.

## SET VIEW

Zoom Levels: Open or create a new document. Often you need closer to an object for fine work, or zoom out to see the whole document. The default view is $100 \%$ as shown above. For efficient work, you should learn these shortcuts: F3 zoom out to the previous view and F4 shows all the objects on the page. You will use these shortcuts all the time.


Adjust Zoom from Toolbar: Choose the Zoom Tool from the Toolbox. Click with your left mouse button to zoom in. click with your left mouse button to zoom out. Click and drag over an area to zoom the selected area to fill the screen (shown above).

Adjust Zoom from Fly-out: Click on the Zoom Levels fly-out and choose your zoom level.

| $200 \%$ |
| :--- |
| To Fit |
| To Page |
| To Width |
| To Height |
| $10 \%$ |
| $25 \%$ |
| $50 \%$ |
| $75 \%$ |
| $100 \%$ |
| $200 \%$ |
| $400 \%$ |

Full Screen Preview: Choose View $>$ Full Screen Preview to use the entire screen for your document. This removes all menus and toolbar. To return to the normal view press the ESC key or F9. You can toggle between the full screen view and normal view with the F9 key.

Draft View: Choose View>Draft to speed screen redraws. Note the rough lines. The lower quality is simply on the screen. The object will print and export with full quality, but this setting speeds your work considerably in complicated documents.


Wireframe View: When you are working on shapes, or need extreme accuracy, choose View>Wireframe.


## WORK IN WIREFRAME VIEW

Set Wireframe: Choose View>Wireframe to remove the all color and fill from your work. This setting only affects the screen display. Your document will still print or export in full color. Wireframe is valuable for fine alignment and working with objects that are closely overlapping.


Preview Wireframe: Use the F9 key for full screen preview or toggle between Normal/Enhanced and Wireframe View with SHIFT F9.


Preview Selected Only: Choose View>Preview Selected only to view only the item that is actively selected in your document. This saves screen draw time and lets you isolate only the part of the document you require at one time.


Simply Wireframe View: Choose View>Simply Wireframe for very complex documents. This view shows only the very basic elements without control objects. For simple to intermediate items, there is little or no difference between Wireframe and Simple Wireframe View.


## HINTS FOR LEARNING CORELDRAW

Use Menus: CorelDraw offers so many options and features; it is hard for beginner to know where to start. The temptation to start creating graphics is strong, and can be a great learning method, but there are ways to make your work do double duty as learning time. While you are working, use the menus even though most menu features are available from the Property Bar. When you open a menu, you are exposed to everything in the menu, and discover features you have not considered.

| Layout | t Arrange Effects | Bitmar |
| :---: | :---: | :---: |
| (1) Insert Page... |  |  |
| (1) Duplicate Page... |  |  |
| - Rename Page... |  |  |
| Delete Page... |  |  |
| Go To Page... |  |  |
| Switch Page Orientation |  |  |
| 铒 | Page Setup... <br> Page Background... |  |
|  |  |  |

Learn Keyboard Shortcuts: If you use menus, ply attention to the keyboard shortcuts for the features you select. Shortcuts are listed on the right side of menu items. Learning shortcuts in this way means you are only learning the shortcuts for the features you use most often...very efficient. Hint: Pressing the F1 Key will bring up specific help for many features-a valuable shortcut.


Right Click: There are many hidden menus within CorelDraw. Right-click on everything in the beginning to see what menus may pop up. You may find some popup menus more trouble then other methods to accomplish the same task, but many are great time savers.


Learn to Use Help: Spend some time going through the Help Menu. Reading through the Content listings can help you get an idea how the program is organized. For specific topics, use the Index. What's This is a great little tool when you are learning Corel Draw. Click on Help, What's this. Your cursor becomes a ? and you can them click on anything. If there is a topic associated with that object, a pop-up window will appear with information about that function or object.


## MENU OVERVIEW: PART 1

Main Menu: Click on any of the Menu Items to expand the menu choices. The Main Menu provides all the functions for file management and object control. There are no drawing tools in this section. CorelDraw uses the Toolbar to create new items. This menu sample has been broken into two rows to conserve space. On your screen it is across the top of your screen in one line. Selection that a available to you are shown in black in each menu list. If the choice is gray, that choices is not available to you.

```
Effects Bitmaps Text Iable Tools window Help
```

File Menu: Click on File to expand the menu. This menu provides the options for file management, obtaining images through import or scanning and export. Anything that deals with a new file element coming from another source, or being sent to another source as a file is controlled here. Note the fly-out symbol beside Acquire Image and others. This indicates that there are more choices within that option. Click on the fly-out symbol to expand your choices.


Edit Menu: Click on Edit to expand the menu. Edit menus are fairly consistent through all Windows application. Cut, Copy and Paste are always located here, as are delete, duplication and search tools. The Edit menu provides tools for selected objects. Note the Properties at the bottom of the menu. This selection provides detailed information about the selected object.


View Menu: Click on View to expand the menu. This menu office viewing quality options (zoom is not included here but is offered through the Toolbar). You will also find the controls here for setting up grids and guidelines and how objects relate to these properties. You also have ruler control options with this menu.


Layout Menu: Click on Layout to expand menu. The Layout menu provides page management controls. Add, delete pages, move around a multi-page document... all is controlled from this menu Note the Page Setup Option. This selection provides control for all page properties.

| 9 | Insert Page．．． |
| :---: | :---: |
| 龟 | Duplicate Page．．． |
| $\underset{\text { \％}}{\substack{\text { ¢ }}}$ | Rename Page．．． |
| 7 | Delete Page．．． |
| 4 | Go To Page．．． |
| 呵 | Switch Page Orientation |
|  | Page Setup．．． <br> Page Background．．． |

Arrange Menu：Click on Arrange to expand the menu．Arrange offers a collection of tools to make your work aleasier and more accurate．This is where you will find controls to transform objects numerically（as opposed to editing with the mouse），Order， arrange，group and position objects．This is the main object control menu．

|  | Transformations |  |  |
| :---: | :---: | :---: | :---: |
| － | Clear Transformations |  |  |
|  | Align and Distribute |  | ， |
|  | Order |  | ， |
| 骂： | Group | Ctrl＋G |  |
| L | Ungroup | Ctrlt ${ }^{\text {d }}$ |  |
| $\overrightarrow{4}_{4}^{*}$ | Ungroup All |  |  |
| － | Combine | CtrltL |  |
| 7 | Break Apart | Ctrri＋K |  |
| ¢ | Lock Object |  |  |
| f | Unlock Object |  |  |
| fir | Unlock All Objects |  |  |
|  | Shaging |  |  |
| 6 | Conyert To Curves | Ctrrl＋Q |  |
| I | Convert Outine To Object | Ctrl＋Shift＋Q |  |
|  | Close Path |  | ， |

Effect Menu：Click on Effect to expand the menu．This set of menu potions applies special effects to your objects．Here you will find the Artistic Media setting，which applies special effect outlines and the Lens effect，which provides effects like transparency．

Bitmaps Menu：Click on Bitmaps to expand menu．CorelDraw is primarily a vector editing program，but this menu provides simple bitmap effects without opening a new program．You can convert any object to a bitmap and apply simple effects．Note that the Edit Bitmap selection will open CorelTrace．


Text Menu: Click on Text to expand menu. As the name implies, this is where you find the tools for managing your text. Click on Writing Tools to find tools similar to those found in word processors. You do not use this menu to enter text, since that is done through the Toolbar, but for working with the words, rather than the appearance of text, this is the place.


Tools Menu: Click on Tool to expand menu. The Tool menu presents a selection of windows you can open to handle many of the same tasks that you do with the Main Menu and the Toolbar settings. The dedicated windows can help when you are working with one property or function, and need to accomplish several different operations. The windows do take up screen space, but they can be collapsed when you are not using them. As you learn to use the program; try working from the Tools windows to see if they save you time.


Window Menu: Click on Window to expand menu. When you are working on more then one document, but working on more then one document, but working back and forth, this menu can help you keep things organized. You can tile (arrange side by side or up and down) or cascade (layered on top of each other) your documents. This is also where you control your dockers (see Dockers) and Color Palettes. Simply, this is the menu that will help you make the most of multiple windows.


Help Menu: Similar to all Windows help menus, you have the choice of an Index presentation of help topics in Help Topics, Contents or index style in Help Topics, Index. If you need information about your copy of CorelDraw or your system resources, go to About CorelDraw.

| Help |  |
| :---: | :---: |
| 国 | Help Topics... |
| - | Welcome screen... |
| 83 | CorelTUTOR... |
| क? | Insights from the Experts... |
|  | Hints |
| *? | What's New? ... |
|  | Highlight What's New |
| ? | Working with office... |
| อ | About Coreldraw... |
| 通 | Corel Support... |
| $2^{?}$ | Updates... |

Expanding Menus: Click on Main Menu item to expand menu. Click on a choice with an arrow indicating a sub menu exists. Watch for these sub menus as you work in CorelDraw, since what you are seeking may be on a second level, invisible in the main list. CorelDraw offers so much that it is important to gain an understanding of where different effects and actions are likely to be found.


## DOCKERS OVERVIEW

What is a Docker? Docker windows are designed to speed work for the most common tasks. Done through the Toolbar or Main Menu, but Dockers provide easy access. Some Dockers allow you to save settings which helps automate repetitive tasks. Docker windows can be "docked" or attached different spots on the screen, or "undocked" and positioned anywhere. They can be easily closed or minimized to save screen space when not needed.


Open Docker: Click Window, Dockers and choose View Manager. The View Manager window will appear, attached to the right hand side of your screen.


Collapse Docker: Click on the Collapse Doker double arrows in the top left hand corner of the Docker window. To restore the window to full size, click on the double arrow symbol, or anywhere on the Docker window tab.


Resize Dockers Window: Position your mouse over the outer edge of the Docker window. The cursor will change to a double arrow in the right spot. Click and drag to the desired size. Release mouse button.


Change Docking Position: Click the border of the Docker window and drag to the top or bottom of the screen. As you are dragging the Docker, note how a gray border in a square shape appears. Continue dragging until the outline pops into place along the edge you wish attach the Docker. The outline will snap to a new shape when it is docked. Release the mouse, and the Docker is attached to the new side. Dockers on the top or bottom edge of the screen will be wider then long when open, and take up a lot of the workspace.


Undock Dockers Window: Click and drag the Docker window to the middle of your work area. A square outline will appear on your screen. Release your mouse where you would like to place the Docker window. You can move the "undocker" Docker anytime by clicking and dragging. The Docker remains in the same spot as you change your zoom levels. You can also minimize an "undocked" Docker.


Multiple Dockers: Open the Docker window you require. Drag the Docker to the Dockers to the edge you would like them to be displayed. You can drag several Dockers into the same space. While minimized, they do not take up much screen space. Experiment with placing Dockers in different locations to find the best combination for fast access to functions and reasonable workspace.

| YCoreDRAW X4-[Graphic3] |  |  |  |  | X |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9 File Edit View Layout Arrange Effects Bitmaps Iext Table - 0 X Tools Window Help |  |  |  |  |  |
|  |  |  |  |  |  |
| Letter |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## SET PAGE SIZE/ROENTATION

Open Page Layout Window: Choose Layout Page Setup to open the Page Layout Window.

Set Page Size: Choose Size from the Options list. Select preset page size from the Paper fly-out, or set width and height values manually. You can also choose the unit of measure for the page size form the fly-out besides the Width setting.


Set Page Orientation: Choose portrait (taller then wide) or Landscape (wider then tall)

Save your Settings: Choose OK to save all settings you have adjusted on the Layout Options screen.

Add Page Frame: Open the Layout Option window as above. Choose. Add Page Frame if you would like to have a rectangle outlining the edge of your page. Without this checked, the page area is shown on the screen, but there is no printed definition of the page area. If you are going to be proofing your pages at a reduced size, this setting will define the edges of the page area exactly. Choose OK to save changes.

```
Add Page Frame
```

Property Bar Page Settings: You can also set the page size and orientation on the Property Bar above the workspace. Set paper size in the Paper Type/Height dialog box. Choose Portrait or Landscape orientation right beside the paper Width/Height dialog box.


## PAGE LAYOUT (BOOKLET)

Open Options Window: Click Layout, Page Setup from the Main Menu. The Options window will open.

Open Page Layout Window: Select Page, Layout from the Options List.


Select Page Layout Type: Click the Layout selection box to display the type of document you would like to create. (For this tutorial, we will create a booklet with pages printed on both sides and final size $81 / 2$ " x 51/2".) Choose Booklet. Check the facing Pages box
(meaning pages printed on both sides) . Note the illustration beside the selection area. This diagram shows how the page will be put together when the document is complete.


Select Page Size for Booklet: Choose Page Size from the options list and specify Landscape, Letter. A booklet of this type is compiled by folding the printed letter size page in the middle, forming $81 / 2$ " $\times 51 / 2^{\prime \prime}$ pages, therefore page must be set to andscape orientation.


Create Document: Click OK to return to the document. Insert the number of pages you require, but the number must be a multiple of 4 if you are using facing pages.(See Insert Page tutorial in this series.) Keep in mind that each page on the screen only covers half a page when printed. In the screen shot here not that the Paper is specified as Letter, or $81 / 2$ " x 11 ", yet the ruler shows the size of the page to be $51 / 2$ " $\times 81 / 2$ ".


## LABEL SETUP

Open Options Window: Click Layout, Page Setup from the Main Menu. The Options window will open.

Specify Paper as Labels: Click Labels in the Size dialog area.

| Label |  |
| :---: | :---: |
| Normal Paper Labels |  |
|  |  |

Choose Label Type: Locate the manufacturer of your labels and click on the +beside their name to expand the selection of label types. Identify the product number of your labels, which should be clearly marked on your label packaging. The illustration beside the label list shows an approximation of the highlighted label sheet.


Customize Labels: Click on the Customize label button. You can adjust Label Size, page Margins, Gutters and how many rows and columns will be printed on a sheet. This is commonly used to adjust for different margins in printers, or if you are not able to find the exact model of label you wish to use. Click on OK to save custom setting.


Create Labels: Click OK to return to the workspace which will now show one label. Note the ruler illustrating the size of the page which is the same as the size of one label (2"x 4" in this example). When you print, the information on your label will be repeated on every label according to the label settings you specified in the Options window.


## SETTING PAGE BACKGROUND

Open Options Window: Setting the page background can simulate paper color or pattern. You can choose whether or not the pattern prints and export, or simply represents the color your page will be when printed. Click Layout, Page Setup from the Main Menu. The Options window will open.

Choose Background Window: Choose Background from the Options List.


Create Solid Background: Choose Solid Background and click on the fly-out to select the color. Choose one of the colors presented or click on other to view the full selection of CorelDraw color options. The color you choose will appear in the fly-out sample.


Create Patterned Background: Click Bitmap and select browser to locate the pattern you desire for your background. The Files of Type list shows the file types you can use as your background. Choose the file and click Open. Click OK to return to your document which will now have the chosen background.


Customize Patterned Background: Open Options window as in Step 1. Your patterned background will still be checked, with the filename listed in the Source section. You can choose to have the file linked outside your document if the background file is large (reduces file save time as you are working). Click Linked in the Source section. You can also
specify a custom size for your background repeat, although most times this is not advised. It is better to adjust your pattern before you import it as a background.


Printing with a Background: Click the Print and Export Background checkbox to turn off the printing and export for your background. You can see the pattern or color as you work, but it will not print or be included in export backgrounds.

```
Print amad Expuort B.ankgrounad
```

Working with Backgrounds: When you specify a background, it will appear on every page in your document. You cannot edit the background from within the document. The background will not show when you are working in Wireframe view, and will be jagged when working in Draft view.


## SETUP GUIDELINES

Create a New Guideline: Click on the vertical ruler and drag a vertical guideline onto your page. Position the guideline where you require and release mouse button. Click on the horizontal guideline in the same way.


Move a Guideline: Choose the pick tool and click on the guideline. It will turn red to show it is selected. Move your cursor over the guideline and the cursor will turn to a single double-ended arrow. Click and drag to a new location. While it is moving. Your cursor will change to two double - ended arrows and the moving guideline will be blue. Position and release your mouse button. The guideline turns red. Click off the guideline and the guideline will again turn blue which indicates it is no longer active.


Rotate Guideline: Double click on guideline. It will turn red and curved, double-ended arrows will appear at each end of the guideline. Click and drag on the rotate guideline. You can restrain the angle of the new position to 15 degree increments by pressing your CTRL key as you move the guideline. Position and release mouse button. You can also
move the center of rotation be clicking and dragging the center target on the guideline to a new position.


Snap Objects to Guidelines: Choose View, Snap to Guidelines in the Main Menu. This will assign a magnetic quality to your guideline. When an object is moved close to the guideline it will snap into place without exact positioning. To remove the snap to guidelines property, choose View, Snap to Guidelines again.


Turn Guidelines off: Choose View, Guidelines to turn the guideline display off. Repeat to turn guideline display on. Guidelines in place when the display is turned off.


Set Guidelines Numerically: Choose View, Guidelines Setup. Choose Horizontal, Vertical or Slanted from the Options list. Enter the numerical position where you would like to place a guideline and click Add. You can add several guidelines at one time. Click OK when complete.


Change Guideline Color: Choose View, Guideline Setup from Main Menu. Click on color fly-out and choose a new color for guideline, or choose other for the full range of CorelDraw color models.


## CREATE A GRID

Grid Setup: Choose View, Grid and Ruler Setup form the Main Menu. Choose Grid from the Options List.


Set Grid Frequency: Decide how many grid increments you require for your page. If you require more than one grid increment per inch, choose Frequency and enter the number of Horizontal and Vertical increments per inch. If you require grid lines to appear at 1 " or greater intervals, choose Spacing and enter the spacing you desire between grid lines.

| Grid |  |  |  |
| :---: | :---: | :---: | :---: |
| - Frequency |  |  |  |
| Spacing |  |  |  |
| Frequency |  |  |  |
| Horizontal: | 4.0 | $\stackrel{\sim}{*}$ | per inch |
| Vertical: | 4.0 | へ | per inch |
| $\square$ Show grid |  |  | Show grid as lines |
| $\square$ Snap to grid |  |  | Show grid as dots |

Change Grid Display: Choose View, Grid and Guidelines Setup from Main Menu. Choose Grid and show Grid as Dots. Grid lines are easier to follow as you work, but viewing the grid as sots does not affect the visual appearance of your work area as much as solid lines. You can change back and forth between these options.


Set Snap to Grid: Choose View, Snap to Grid to force your objects to snap to the Grid when you place them close to a grid line. This maker exact positioning very fast. Choose View, snap to Grid to turn off Snap to Grid.


## SET WORKSPACE RULERS

Open Options Window: Choose View, Grid and Ruler Setup or right click on the ruler to open the Options Window.

|  |  |
| :---: | :---: |
| $\checkmark$ | Rulers |
| Grid |  |
| $\checkmark$ | Guidelines |
|  | Show |

Set Ruler Units: choose Rulers from the option List. Choose the units you wish to have displayed on your ruler from the Units fly-out. If you want different Units for the vertical and horizontal rulers; remove the check mark beside same Units for Horizontal and Vertical rules and select units separately.


Turn Ruler Display Off: Choose View; Rulers to turn ruler display off. Choose View; Rulers to turn ruler display on again. If you are not using the rulers in your work; you can again workspace. by working with the ruler display off; turning display on only when necessary.


Set Zero Point for Rulers: Click and drag the icon at the intersection of the horizontal and vertical rulers (highlighted with a yellow rectangle in the illustration above). Position the cross-hairs where you would like the zero point for the ruler to be. In this sample, the zero point has been moved to the upper left corner of the rectangle.


Set Scale: Choose View, Grid and Ruler setup or right click on the ruler to open the option Window. Click on Edit Scale. With this setting you can set the scale for the document, i.e., each inch on the page represents 10 " in "World measure." The ruler will show the actual or "world" measure. This allows you to work in a scale like 10.1, and yet gives you $1 / 10$ the page size to deal with. Use this for large projects like drafting home plans, designing billboards, etc.

## EDIT PAGE PROPERTIES

Insert Page: Choose Layout, Insert Page to open Insert Page window. Enter the number of pages you wish to add and the position in the document for the new pages. You can also specify page size and orientation for the new pages. This will not affect pages already in the document. You cab also insert a single page by right clicking on the page tab in front of or behind where you would like the new page. Choose Insert Page Before or Insert Page After as appropriate.


Delete a page: Choose Layout, Delete Page from the Main Menu to open the Delete Page window. Specify single or multiple pages to delete. You can also delete a single page by right clicking the page tab for the page you wise to delete. Choose Delete Page from the pop-up menu.


Name or Rename Page: Choose Layout, Rename Page from the Main Menu. Type in the name you wish for the page. The CorelDraw default page names are the page number, i.e., Page 1, Page 2,etc. Rename Page allows you to enter your own names for pages, which can help organize your work when you are working with multiple pages. You can also rename a page by right clicking on the page tab at the bottom of the screen and choosing Rename Page.


Resize Single Page: Choose Layout, Resize Page to open the Resize Page window. Choose your new page size. This change will apply only to the current page, and will not affect the rest of the document. You can also resize a page by right clicking on the page tab at the bottom of the screen and choosing Resize page.

Single Page Orientation: Choose Layout, Switch Page Orientation to change the orientation of the current page. This change will apply only to the current page, and will not affect the rest of the document. You can also change page orientation by right clicking on the page tab at the bottom of the screen and choosing Switch Page Orientation.

| Rename Page... |
| :--- |
| Delete Page... |
| Go To Page... |
| Switch Page Orientation |
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Show Printing Area: Choose Layout, page setup to open the Options window. Choose Page from the Options List. Click on Show Printable Area to turn on print margin guides for your page. The printable area is determined by the current Printer on your system. This is a valuable setting that will ensure that you place objects in an area on the page that your printer will be able to print. Your margins may look very different from the sample above, since printable areas differ widely from printer to printer.


## COLOR PALETTE OVERVIEW

What is a Color Palette?: Look to the right hand edge of your CorelDraw screen. If there have been no changes made to your default settings, you will see a series of rows of colors as shown in the sample above. This is an open color palette. CorelDraw offers powerful color management and working tools, and the Palette display is the key to all color work.


See Color Name：Hold your mouse over any color without clicking to see the name highlighted．


Scroll Color Selection：Click on one of the arrows at the bottom of the color palette to reveal more Color．


Close Current Palette：Choose Window，Color Palettes，None to close all palettes．Or，you can right click carefully on the border of the color palette（it may take some practice to find the exact spot）and open the color palette popup window as shown above． Choose Close Palette．

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|  | Dockers |  |
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| 5 | Close |  |
| 展 | Close All | $\checkmark$ |

## PRESET COLOR PALETTES

Open Preset Palette: Choose Window, Color Palette and a list of the preset palettes will be palette will be presented. Click on any preset palette to open. The palette will open and attach to the right edge of your screen. You can have several Palettes open at one time.


About Preset Palettes: Preset palettes provide convenient color collections for general or professional use. Uniform Colors and the CorelDraw palette are for general use, usually for printing to a desktop printer. The Pantone and TruMatch palettes are professional color collections used for commercial printing. The Netscape Navigator and Internet Explorer models feature colors for Internet use. You can access preset palettes in most CorelDraw functions that allow color choice, ass in the UNIFORM File Window above.


Open Palette Browser: Choose Window, Color Palettes, Color Palette Browser. The Browser. The browser is a Docker window that gives you window that gives you
fast access to all color palettes available. Click the square beside the palette you wish to open and it will open beside any other open palettes. Click again to uncheck the palette and close. Like all Dockers, the Color Palette Browser can be minimized when not in use.


Set Color Palette as Default: Open the color palette you wish to make your default. Right click on the color palette border to open the popup window. Choose Set as Default Palette

## CREATE COLOR PALETTE

Create New Palette: Choose Window, Color Palettes, and Palette Editor to open the Palette Editor window.


Name New Palette: Click on New Palette icon (highlighted to open New Palette window. Choose where you would like to save the new palette in the Save In window (usually saved to the default directory foe easy access: C:<br>Program File\Corel\Grahics*\Custom\Palettes, where * represents the program version). Type the name
you would like for your Palette in the File Name window. Click Save. Your new palette will appear in the Palette Editor window.


Add Color to New Palette: Click the Add Color button. The Select Color button. The Select Color window will open presenting all CorelDraw color choices. Choose the first color you would like to add to the palette from one of the preset palettes. Click Add to Palette. Add more, or click close to return to the Palette Editor Window. The sample above shows 7 colors added to the palette New Palette. You can also add your own names to colors by selecting the color and changing the name near the bottom of the screen.


Edit Palette Color: Click on the color you would like to edit. Click on the Edit Color button and choose a replacement color.


Close Palette Editor: Click on OK at the bottom of the Palette Editor Screen to close Palette Editor.

## OPEN COLOR PALETTE

Close Open Palettes: Choose Window, Color Palettes, None to close all currently open palettes. It is unusual that you would need more than one palette open at a time.


Open Custom Palette: Choose Window, Color Palettes, and Open Palette to open the Open Palette Window. Find the directory where the color palette is saved. CorelDraw palettes have the extension cp 1 following the name. Click on the palette you wish to open and click Open. Your chosen palette will appear on the screen at the right edge.


Edit Custom Palette: Right click on the palette border to open Editor. You can add or edit colors easily form the screen in this way. Add or Edit color and click OK to close the palette Editor. The changes will be reflected in your screen display

Close Custom Palette: Right click on palette border. Choose Close Palette. You can also Choose Window, Color Palettes, None to close all Palettes.

## CUSTOMIZE PALETTE DISPLAY

Open Options Window: Right click on the color palette border to open Option window. This takes you directly to the Customize Color Palette setting so skip Step 2. You can also choose Layout, page Setup.

Palette Customize Window: Choose Workspace, Customize, and Color Palette from the Options list. Click on the + to open hidden choices.


Change Swatch Appearance: Click on Large Swatches for larger color swatches and wide borders to increase the size of palette borders. Click OK to complete.

Set Color Row Display: Open Palette Customize as above. Set number in Minimum Palette Rows When Docked. The number indicates the number of color rows showing in the screen palette display. A higher number gives you more color choice without scrolling, but takes more screen space. Click OK to complete. The sample above is set to 6 rows, but since there are only five in the open palette, only 5 rows display.
"No Color" Well: Open the Palette Customize window as above. Note the Show "No Color" Well in the Color Well section. This refers to the color well in the upper left corner of the palette as shown highlighted with a yellow square above. This should remain checked as it is a great time saver when working with objects. One click on this swatch removes either fill or outline.

## MOVING A COLOR PALETTE

Move Palette to Workspace: Click on border of palette and drag to desired location on your workspace. A gray shaded square indicates the shape and size of the palette to aid with placement. Release mouse button to complete. Click and drag on the title area of the palette to move to different location.


Resize floating Palette: Move mouse over any border of the palette. When the cursor changes to a double-ended arrow, you can click and drag that side to make the palette larger or smaller.


Move Palette and "Dock" : You can "dock" a palette on any edge of the screen. Click on palette border and drag to bottom, top or left edge. A gray shaded square appears when the palette is over the workspace, and will change to a long rectangle when it is in docking position along the new edge. The sample above shows one palette docked on the bottom of the screen with a different palette docked just below the menu. It is rare that you would require two palettes for one document though.

Close Palette: Click on the x to close a free floating palette. Right click on docked or free floating palette border to open pop-up window. Choose Close Palette. Or close all palettes by choosing Window, Color Palette, None.

## OUTLINE/FILL WITH PALETTE

Draw Rectangle: Choose the Rectangle Tool from the Toolbox. Click and drag on the page to create a rectangle.


Check Option Setting: Right click on palette border to open pop-up menu. Choose Customize. Make sure the Set Outline option is checked in the Mouse Button 2 section: With this option set, you can set the outline on any object with your right mouse button.

Set Outline Color: Choose Pick Tool from Toolbox. Click desired outline color with right mouse button.


Set Fill Color: Choose Pick Tool from Toolbox. Click desired fill color with left mouse button.


## OBJECT OVERVIEW

What is an object? : In CorelDraw, an object is any item you create or import into your document. It may be a rectangle, a circle, text, a photograph. All work in CorelDraw is done through selecting an object. Various effects can be applied to an object depending on the type of object and the tool you have selected. For this tutorial, choose the Rectangle Tool and create a rectangle. (See Rectangle Tool tutorial in this series.)


Pick Tool Selection: Choose the Pick TOOL from the Toolbox and click on the rectangle. Note the 8 square "handles" that surround the square. These handles indicate that the object is active. You can resize the rectangle proportionately by clicking and dragging on the comer handles. The side handles resize only in one direction.


Move Object: Click and drag anywhere on a filled object, or on the outline of an object that has no fill to move. Release mouse button when object is in desired position. Click anywhere offs the rectangle to deselect.


Rotate Object: Double click on the rectangle. Note how the handles change to double-ended arrows. This indicates that the object can be rotated or skewed. Click and drag on corner handles to rotate. Press the CTRL key while you rotate to constrain the rotation to 15 degree increments. Note the target-like icon in the middle of the rectangle when the rotate selection is active. Click and drag this icon to change the point of rotation. Click off the rectangle to deselect.


Skew object: Double click on the rectangle and the double-ended selection arrows will appear. Click and drag on one of the side handles to skew the rectangle. Release mouse button when desired effect is created.


Shape Tool Selection: Delete the distorted rectangle. Draw a new rectangle. Choose the Shape Tool from the Toolbox and click on the rectangle. Note the selection now appears as four corner handles and dotted lines. This indicates that the object is active with the Shape Tool. Click and drag on one of the corner handles. Note how the corners become round. The Shape Tool and Pick Tool have very different functions with objects.


Node Selection: Choose the Freehand Tool from the Toolbox. Click and drag to create a curved line. (See Freehand Tool tutorial.) Release the mouse button. Choose the Shape Tool. There should be three or four blank squares along the line. These are nodes, and can be moved individually. Click on a node. Note how it becomes black, indicating that this node is active. The dotted lines coming from the node control the shape of the line (see next step). Drag the selected node a short way. Note how the line shapes changes.


Controlling Curves: Click and drag the handle at the end of the dotted line coming from the node. This is a control point. As you drag the control point, note how the shape of the line changes. The blue line in the sample above shows the progression of the line shape as you drag the control point. Release the mouse when you have the shape you desire.


## PICK TOOL OVERVIEW

Choose the Pick Tool: Click on the Pick Tool in the Toolbar. The Pick Tool is the main selection tool in CorelDraw. When using any other tool, you can change to the Pick Tool by pressing your keyboard spacebar (CTRL spacebar when using the Text tool in Edit Mode.)


Resize Object with Pick Tool: Draw a rectangle and fill with any color. Click and drag on the corner handles to charge the size o the rectangle proportionately. Click and drag handles in the middle of any side to change the size of the rectangle in that direction only.


Move Object with Pick Tool: Click and drag anywhere the rectangle to move. The outline of the object will follow the mouse on the screen for easy positioning. Release mouse button when object is in desired position.


Status and Property Bar Features: As you move or otherwise transform your objects, pay attention to the property bar above your workspace. in the sample above not the $\%$ value which represents transformation as you are resizing an object. As soon as your mouse button, this value returns to $100 \%$. It is excellent practice to pay attention to this information, as you will learn to use it for fast, precise positioning and resizing work.

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Resize Text with Pick Tool: Choose the Text Tool from the Toolbox. Type the word "Sample." Choose the Pick Tool. Click and drag on the bottom right corner handle to
increase the size of the text. Note the Property Bar as you resize the text. The Object Size, Position and Scale Factor Change, but toward the right end of the Property Bar, the Font Size change as well. You can also change text size with the Text Tool.


Pick Tool Properties: Right click on the Pick Tool to open a pop-up menu. Choose Properties. You can control personal choices for the Pick Tool from this screen. Choose Treat All Objects as Filled for easy selection of objects with no fill. If you are just learning CorelDraw, it is advised to leave the other feature as they are. Tutorials and the manuals assume the default settings are in place.


## SHAPE TOOL OVERVIEW

Choose the Shape Tool: Click on the Shape Tool in the Toolbox.


Advanced Shape Tool Features: Click on the triangle at the bottom right corner of the shape tool to open the Shape Edit Features pop-up. This menu offers advanced function that will not be covered in this basic tutorials, but you should be familiar with the location of all tools in the Toolbox. The tools in the menu are Shape Tool [default], Knife Tool, Eraser Tool and Free Transform Tool.


Select Nodes with Shape Tool: the shape Tool works with Nodes within objects. Selected Nodes are shown filled with black. You can select more then one node by holding down your Shift Key as you select the second, third, etc. or, marquee (click and drag) select over the nodes you wish to select.


Shape Tool with Text: Select the Text Tool and Type "Move." Select the Shape Tool. Select the "e" by clicking in the square to the lower left of the letter. The square will now be filled with black. Click and drag on the square to move the letter. You can use your CTRL key as you move to constrain the move along the text baseline. You can also change the size, color and many other properties of individual letters by selecting with the Shape Tool.


Shape Tool Properties: There are no properties for the Shape Tool.

| Options |  |  |
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|  | $\dagger$ Text A | Spiral Tool |
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## ZOOM TOOL OVERVIEW

Choose the Zoom Tool: Click on the Zoom Tool in the Toolbox. The Zoom Tool controls the view on your workspace and is one tool you should learn well. In CorelDraw, much of your work will toggle between close-up work and working with the entire design. Time spent learning to navigate zoom options will be repaid many times over as you work.


Mouse Zoom In: Place any object on your screen. Choose the Zoom Tool and click on the object with your left mouse button. The object will zoom in. Repeat to zoom closer. Where you click will become the center of the screen when zoomed.


Mouse Zoom Out: Click on the screen with your right mouse button. Note how the cursor icon changes from +to -. Click again to repeat. Mouse zoom out will return you to your previous view.


Marquee Zoom: Click and drag your mouse over the area of the document you would like to have filled the screen. Marquee selected zoom is usually much faster when you need to work on sections of your document and require a close view.


Zoom Property Bar: Select Zoom Tool. Note the Property Bar above your workspace. These tools provide one click access to the following (from left to right): Zoom Tool, (see step0), Zoom In, Zoom Out, Display actual size, Zoom to Page, Zoom to Page Width, Zoom to Page Height, View Manager Docker window.


Drop down View Selection: Locate the Zoom Levels fly-out box just below the Main Menu. This selection provides fast access to preset Zoom Levels. Click on the triangle to expand selection list and click on desired view level.


Pan Tool: Click on the triangle at the bottom right corner of the Zoom Tool to choose the Pan Tool. You can also click on the Pan Tool icon in the Property Bar. Click and drag anywhere on your workspace. the Pan Tool will move your document in the screen. The Pan Tool will move your document in the screen. Allowing you to scroll or position any portion of the document. This only affects the view, not any positioning of your objects.


Tool Properties: Right click on the Zoom or Pan Tool to open the Zoom, Pan Tool Property's window. You can change your right mouse button to provide a menu, but I do not advise this. The right muse button is more valuable as a tool for changing view. Previous

CorelDraw version user: You can check the Use Traditional Zoom Fly -out option, as this the Property Bar tools into the fly-out as with earlier versions. However, the Property Bar provides access with one click, compared to two for the fly-out access.


## FREEHAND TOOL OVERVIEW

Choose Freehand Tool: Click on the Freehand Tool in the Toolbox. This is your freehand drawing tool and is used to create drawn objects that are not variations of rectangles, spirals or circles.


Draw Curved Line: Choose Freehand Tool. Click and drag to draw the shape you desire. You can release the mouse button and still continue with the same object, by clicking close the last node in the section you have just completed. The new line will automatically join to the end of the last one. In the sample above, the yellow rectangle highlights where the line was stopped and the started again.


Draw Straight Line: Click and release your mouse button to place the initial node for your line. Move your cursor to the desired end for your line. Click the mouse to place the end node. You can constrain the line to 15 degree increments by pressing your CTRL key as you position the end node (use this to create a straight line). You can also join a new line to this object as in step 2.


Create Closed Shapes: Choose Freehand Tool. Click and drag in an approximate circular shape, but do not bring the end all the way to the starting point as in the top sample above. Click a color in the color palette at the right edge of the screen. This should fill your object with color, but since the ends are not closed, the fill does not show. Look at the bottom right of your screen to note that the color status area shows that the object is filled.


Click on the Auto- Close button in the Property Bar above your workspace (icon shown highlighted with a yellow rectangle in a cutout from the Property Bar). Your object should fill as the end points are joined.


Change Outline: Find the Outline section of the Property Bar above your workspace. Click on the fly-out to select desired outline size or style.


Freehand Tool Fly-out: Click on the triangle in the bottom right corner of the Freehand Tool to open the Fly-out tool options. This presents other freehand tools, but all outside the scope of this basic tutorial.


Freehand Tool Properties: Right click on the Freehand Tool to open the Freehand/Bezier Options window. Most of these controls are for advanced features. The Autojoin can be increased if you would like. CorelDraw to automatically join nodes that are further apart.


## RECTANGLE TOOL OVERVIEW

Choose Rectangle Tool: Choose Rectangle Tool from the Toolbox.
Create Rectangle: Choose Rectangle Tool. Click and drag to create rectangle of the shape and size you desire.


Create Square: Choose Rectangle Tool. Click and drag with the CTRL key pressed down to constrain the rectangle to a square. You can also hold down the SHIFT key to have the rectangle drawn from the center out, rather then the top left corner, or use both the CTRL key and the SHIFT key together to create a square drawn from the center.


Create Rounded Corners: Draw a rectangle. Choose the Shape Tool. Click and drag on any corner handle to shape the corners. Release mouse when you achieve the desired corner roundness.


Rectangle Tool Properties: Right click on the Rectangle Tool to open the Rectangle Tool Options window. Use the slider to set the Corner Roundness.


## ELLIPSE TOOL OVERVIEW

Choose Ellipse Tool: Chose Ellipse Tool from the Toolbox.


Create Ellipse: Choose Ellipse Tool. Click and drag to create ellipse of the shape and size you desire.


Create Circle: Choose Ellipse Tool. Click and drag with the CTRL key pressed down to constrain the ellipse to a circle. You can also hold down the SHIFT key to have the ellipse drawn from the center out, rather than the top left corner, or use both the CTRL key and the SHIF key together to create a circle drown from the center.


Ellipse Tool Property Bar: Choose the Ellipse Tool and draw a circle. Make sure the circle is selected and locate the ellipse controls above the work screen. From left to right the tools are: Ellipse, Pie, Are, Starting and Ending Angles and Clockwise/ Counterclockwise Arcs or Pies.


Create a Pie Shaped Graphic: Draw or select an ellipse. Fill with any color. Click on the Pie icon. Change the value in the Starting Angle to 45 and in the ending angle to 325. You should have the same results as the left sample above. Duplicate your ellipse and click on the Clockwise/Counterclockwise icon to reverse the Pie shaping. Fill with a different color. The new pie will fit perfectly into the original.


Create an Are: Draw or select an ellipse. Click on the Are icon. Change the value in the Starting Angle to 40 and in the ending angle to 295 . You should have the same results as the left sample above. Duplicate your are and click on the Clockwise/Counterclockwise icon to reverse the are shaping. The new are (right above) will fit perfectly into the open space of the original.


Ellipse Tool Properties: Right click on the Ellipse Tool to open the Ellipse Tool Options window. You can set the Ellipse Tool to default to the Pie or Arc ellipse types
here. Instead of transforming on the screen as we did above, the Ellipse Tool will initially draw an Arc or Pie if you have specified that in the Options window.


## SPIRAL TOOL OVERVIEW:

Choose Spiral Tool: Choose the Spiral Tool from the Toolbox. Note the position in the Toolbox. The Polygon or Graph Paper Tool may be showing, and you will have to click on the triangle in the bottom right corner to open the fly-out. Choose Spiral Tool.


Draw a Symmetrical Spiral: Choose Spiral Tool. Choose number of revolutions for your spiral from the Property bar above the workspace. Click on the Symmetrical icon. (A symmetrical spiral has equal distance between spiral revolutions.) Click and drag on the workspace to create spiral of desired size. Hole your CTRL key down as you drag to create a spiral with a circular shape. Hold your SHIFT key down to have the spiral drawn from the center.


Draw a Logarithmic Spiral: Choose Spiral Tool. Choose number of revolutions for your spiral from the Property Bar. Click on the Logarithmic icon. (A logarithmic spiral increases the spacing on each revolution.) Choose the Spiral Extension Factor from the Property Bar. A lower number reduces space difference between revolutions. Click and drag on the workspace to create spiral of desired size. Hold your CTRL key down as you drag to create a spiral with a circular shape. Hold your SHIFT key down to draw spiral from the center.


Spiral Properties: Right click on the Spiral Tool to open the Spiral Options window. Although the Option window does not provide any features that are not available in the Property Bar, there is a preview of the resulting spiral which could save time. Also, setting properties in the Option box create a default style, which could save time if you have many spirals of one type to create.


## POLYGON TOOL OVERVIEW

Choose Polygon Tool: Choose the Polygon Tool from the Toolbox. Note the position in the Toolbox. The Spiral or Graph Paper Tool may be showing, and you will have to click on the triangle in the bottom right corner to open the fly-out. Choose Polygon Tool.


Create Polygon: Choose Polygon Tool. Click and drag on the workspace to create a polygon of the size and shape desired. Locate Number of Points on Polygon button on the Property Bar. Increase or decrease number as desired. The changes in point numbers are instantly reflected on your object.


Create Star: Choose Polygon Tool. Click on the Polygon/Star button in the Property Bar (highlighted with yellow rectangle). Click and drag on the workspace to create star of size and shape desired. Locate Number of Points on Polygon button on the Property Bar. Increase or decrease number as desired. The changes in point numbers are instantly reflected on your star.


Polygon Properties: Right click on the Polygon Tool to open the Polygon Options window. The Option window only provides features that are available in the Property Bar, but there is a preview of the resulting Polygon or star, which could save time. Also, setting properties in the Option box create a default style, which can save time if you have many polygons or stars to create.

## GRARH PAPER TOOL OVERVIEW

Choose Graph Paper Tool: Choose the Graph Paper Tool from the Toolbox. Note the position in the Toolbox. The Spiral or Polygon Tool may be showing, and you will have to click on the triangle in the bottom right corner to open the fly-out. Choose Graph Paper Tool.


Create a Grid: Choose the Graph Paper Tool. Determine the number of columns and rows you require for your grid and enter number in the Graph Paper Column and Rows box in the Property Bar. Click and drag to create a grid of the size and shape you desire.


Color the Grid: Choose the Pick Tool from the Toolbox. Click anywhere on the grid to select. Click on any color in the color palette to fill the grid with one solid color.


Color One Cell: The grid is created from several small rectangles grouped together. To fill one cell, choose the Pick Tool and, with the CTRL key pressed, click on the cell is selected. Click on any color in the color palette to fill the cell.


## SET LINE SPACING

Enter Sample Text: Choose Text Tool. Click on workspace to initiate Artistic text. Type three lines of text, with at least two words in each line using the Enter key to create new lines.


Edit Line Space with Mouse: Choose Shape Tool. Click on sample text to select. Locate the line space adjustment icon in the bottom left corner of the selection, which is highlighted with a yellow rectangle in the illustration above. Click and drag on this icon to adjust line spacing.


Edit Line Spacing with Menu: Choose Pick Tool. Select text. Choose Text, Format Text from the Main Menu. Click on the Space Tab. Enter line spacing you desire. You can use $\%$ of point size, $\%$ of character size or point size to specify your spacing. You can preview by clicking on the Apply button at the bottom of the window. If the window is hiding your text, you can click and drag on the blue title bar at the top of the screen to move. Click OK to save changes.

Select a Line of Characters: Choose the Shape Tool from the Main Menu. Click on your sample text to select. Note the small squares at the base of each letter. Marquee select one line of text (clicks and drag over the nodes to select as shown in the sample above).


Line Spacing with Characters: Click and drag on one of the black nodes to move the line of text and increase or decrease spacing. Note how the outline of the characters shows the new position of the line allowing you to place the text accurately.


Paragraph Line Spacing: Create a Paragraph Text sample with at least three rows of text. Pull down on the bottom handle to create a text box that is longer than the text. Choose the Shape Tool from the Toolbox. Click on the text to select. Click and drag down on the line spacing icon to increase the line spacing. If the last line of text goes out of view, pull on the handle again to increase text box size.


Numerical Paragraph Spacing: Choose the Pick Tool. Choose Text, Format Text from the Main Menu. Click on Space. Set line spacing as with Artistic Text. With Paragraph Text, you can also set the spacing between paragraphs. When the Enter key creates anew paragraph, this setting will be automatically applied. Choose to have a space before or after paragraph and enter the value you desire. Click OK. This setting will apply to all paragraphs in the text box.

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## SET CHARACTER SPACING

Enter Sample Text: Choose Text Tool. Click on workspace to initiate Artistic text. Type at least three words of text.


Mouse Edit Character Space: Choose Shape Tool. Click on sample text to select. Locate the character space adjustment icon in the bottom right corner of the selection, which is highlighted with a yellow rectangle in the illustration above. Click and drag on this icon to adjust on this icon to adjust character spacing.


Menu Edit Character Space: Choose Shape Tool. Click on sample text to select. Locate the character space adjustment icon in the bottom right corner of the selection, which is highlighted with a yellow rectangle in the illustration above. Click and drag on this icon to adjust character spacing.


Menu Edit Character Space: Choose Pick Tool. Select sample text. Choose Text, Format Text from the Main Menu. Click on the Space Tab. Enter character and word spacing you desire. The sample above uses Character Spacing of $75 \%$ and Word Spacing of $200 \%$. You can preview by clicking on the Apply button at the bottom of the window. If the window is hiking your text, you can click and drag on the blue title bar at the top of the screen to move. Click OK to save changes.


Select Individual Character: Choose the Shape Tool from the Main Menu. Click on your sample text to select. Note the small squares at the base of each letter. Marquee select on word (click and drag over the nodes to select as shown in the sample above). When selected, the nodes will be black.


Move Individual Characters: Click and drag on one of the black nodes to move the line of text and increase or decrease work spacing. Press your CTRL key to the text to the baseline. Note how the outline of the character shows the new position of the characters allowing you to place the text accurately. This method can be used with individual characters as well and is often used to kern text (manually adjust characters to fit snugly and remove gaps, or provide more space as required).


## EDIT INDIVIDUAL CHARACTERS

Enter Text: Click on the Text Tool in the Toolbar. Type the word "Sunday" as Artistic Text. Change the font to Book Antiqua (or any simple font) and the font size to 36 . Note: The illustration is magnified dramatically.


Select Single Character: Choose the Shape Tool from the Toolbox. Click on text to select. Note the small squares (nodes) at the bottom left corner of each character. Click on the node to the left of the latter " S ". The node will turn black, signifying that it is now selected.


Change Character Font Size: Make sure the Shape. Tool is active and the " $S$ " is selected. Choose font size 72 form the Font Size fly-out in the Property Bar above the workspace.


Change Character Font: Make sure the " $S$ " is sleeted and the Shape Tool is active. Choose a fancy font form the Font List in the Property Bar above the workspace.


Move Character: Make sure the Shape Tool is active and the " $S$ " is selected. Note: The selection node for the " $S$ " may not be clearly visible, since the font shape and size will have changed the position. Look carefully and you will find it. If the node is on a part of the character, if will show as solid white. Click and drag o nth selected node to move the letter " S ". Note how the outline of ht letter follows the mouse allowing you to accurately place the character.

Edit Character Color: Make sure the Shape Tool is active and the " $S$ " is selected. Click on desired color in the color palette. The selected character will fill with the chosen color.

## CREATE COLUMNS

Create Paragraph Text Box: Choose Text Tool from the Toolbox. Click and drag to create a Paragraph Text. Box approximately 6" X 4. As you drag to create the box, look to the center bottom of your screen. The size of the area you have defined in displayed.


Create Columns: Choose the Pick Tool and make sure your text box is selected. Choose Text Format Text from the Main Menu. Click on the Frames and Columns Tab. Change the Number of Columns to 2. Note how there are now 2 Columns in the illustration at the right side of he window. Change the Gutter value to 25 . Again note the change in the illustration. Click OK.


Enter Text in Columns: Choose the Text Tool and click inside text box to place the cursor. Import or type enough text into your column to fill the first column and go into the second column. (This is not necessary for the following steps, but helps to see changes.)


Change Frame Size: Choose Pick Tool and select the text box. Click on the corner handle and drag to change the size of the frame (outside boundaries of the text box). Note how the columns stay divided equally with a .25 gutter as specified when we defined the columns.


Remove Column Equal Width: Right click on the text box to open a pop-up menu. Choose Format Paragraph Text to open the Format Text window. (You can also choose Text, Format Text from the Main Menu). Click Equal Column Width to deselect that option. Click OK.


Create Unequal Columns: Chose Text Tool and Select the Text box. Click and drag the left gutter line, moving the line left to the desired position for the first column. Click and drag on the second gutter line to move the line to approximately .25 from the first gutter line. Note how the cursor changes to a double-ended arrow. The text in the second column will fill the space when the mouse button is released. You go back to the Format Text Menu to fine tune any values.


Moving the Text Box: Choose the Pick Tool. Select your text box. Click and drag to position the text box. With the Pick Tool active, you can treat your text box with columns just like any object. If you need to edit text or make changes to the Columns, choose the Text Tool.


## LIND TEXT AREAS

Enter Text: Choose the Text Tool from the Toolbar. Click and drag on the workspace to create a text box. Enter or import more text than the box can hold. (Increase the size of the ox while you type in text and then reduce it to continue with this tutorial.) Choose the Pick Tool. Cote the arrow at the bottom of the text box indicating that there is more text to place.


Create New Text Box: Choose Text Tool and create another text box to receive the extra text from the first box we created.


Link Text Boxes: Choose the Pick Tool and click on the first text box to select. (The second box seems to disappear, but don't worry, it is still there.) Click on the triangle at the bottom of the first text box. Move your cursor to where you created the second text box. Although the boundaries are invisible, your cursor changes to a large, black arrow when your are over a text box. Click while the large arrow is showing to link the boxes and place the text.


Work with Linked Boxes: Notice the blue line that joins the two text boxes. You can move either box, or the link remains. If you resize either box, the text adjusts accordingly. Try reducing the size of the original box, and watch the text that no longer fits. It will flow into the second box.


Delete a Links Box: Choose the Pick Tool. Select the box you would like to delete. Press the DELECTE key on your keyboard. The text box you selected will be removed, but the text will flow to the remaining box. Note that the text in the remaining box in the sample now begins with the text that was in the box we deleted.


Breaking Links: Choose the Pick Tool. You can break the link between the text areas without deleting the text box that contains them. Select the box you would like to remove form the link. Choose Arrange, Separate from the Main Menu. The selected text box will be removed form the link and emptied. All the text is now contained in the other box.


## CHECK SPELING

Spell Check as You Type: CorelDraw notifies you of spelling errors as you type. When a word is not found in the dictionary, the word will be underlined in red. The underlining disappears as soon as the word is spelled correctly, and is only visible when the Text Tool is active.


Spell Checker: Choose the Pick Tool from the Toolbox. Select the text you would like to spell check. Choose Text, Writing Tools, and Spell Check to open the Spell Checker Window. Or right click on your text to open the pop-up. Chose Spell Check. When an unknown work is discovered, the word is highlighted in the document and you are presented with a suggested correction, and a list of other options. Choose the correct word, or type the correction into the Replace With window.


Spell Check Full Document: Choose the Pick Tool and select text any where on the page. Right click to open pop-up and Choose Spell Checker or choose Text, Writing Tools, Spell Checker or from the main menu. Choose Document in the Check fly-out in the bottom right hand corner of the Spell Checker window.


Add Word to Dictionary: Select the word you would like to add to the dictionary. Right click to open pop-up or choose Text, Writing Tools, Spell Check to open Spell Checker window. Click on the Add button in the Spell Check window. The word will no longer appear as a spelling error.


Disable Auto Capitalization: CorelDraw automatically capitalizes the first letter in a sentence. When working on stylized text, though, this can be a problem. To disable this feature, choose Text, Writing Tools, Type Assist to open the Options window. Click on Capitalize First Letter of Sentences to deselect this option. Click OK.


## CUSTOMIZING TYPE ASSIST

Open Options Window: Choose Text. Writing Tools Assist. The Options window opens with Type Assist Highlighted in the Options List.


Select Editing Tools: Check any of the editing tools to turn them off in the Type Assist window. The tools that are listed here are all used to make typing faster, and in most cases you will want to leave them selected. The Capitalize First Letter of Sentences selection though can be a problem when working with stylized text.

| QuickCorrect |
| :--- |
| $\square$ Capitalize first letter of sentences |
| $\square$ Correct two initial, consecutive capitals |
| $\square$ Capitalize names of days |
| $\square$ Automatically hyperlink |
| $\square$ Change straight quotes to typographic quotes.ates) |
| $\square$ Replace text while typing |

Replacement Text List: The Replacement Text portion of the Type Assist window provides a listing of the most common typing errors and the automatic correction for them. The word as typed is listed on the left with the replacement word on the right. Click on any listing to edit or delete that entry (a common typing error for a word may be the same as your company name).


Add Replacement Text: Enter text you would like to have replaced in the replace window. Enter the text you would like to have replaced in the With window. In this example, the word resume is replaced with resume. Click the Add button to add your listing.


## TEXT TOOL OVERVIEW

Choose Text Tool: Choose Text Tool from the Toolbox. This tutorial is an introduction to the powerful text formatting tools available in CorelDraw. For more information on specific techniques, see individual tutorials in this series.


Artistic Text: Artistic text is used for short passages and when you need total flexibility to stylize text. With the Pick Tool Selected, Artistic Text is like any object. Choose Text Tool. Click on the workspace where you wish your text to start. Type your text. (See Artistic Text in this series.)


Paragraph Text：Paragraph text creates a mini word processor in your document．Although stylizing text is easier with Artistic Text，Paragraph Text gives provides automatic rapping to new lines，unlimited text capacity，columns and the ability to link text areas together．Choose Text Tool．Click and drag to create a text area．Type your text in this area．（See Paragraph Text in this series．）


Property Bar for Text：the Property Bar offers one click access to many text features．Learn to use the Property Bar when you are working with text for efficient editing and stylizing．Note that the sample above has been split into two lines for illustration purposes．On your screen，it will stretch across the top of your workspace in one line．

| O Arial |  |  |  |  | $\sim$ | 150 pt |  | $\sim$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5 | 25 | 0 | 金 | ミ三 |  | 2A | abx |

Text Menu：Choose Text from the Main Menu ．Most editing tools can be accessed though thin menu．

| $a b l$ | Edit Text... | Ctrl + Shift + T |
| :---: | :---: | :---: |
|  | Insert Symbol Character | Ctrl+F11 |
|  | Insert Formatting Code |  |
|  | Fit Iext To Path | Alt+F12 |
|  | Align To Baseline |  |
|  | Straighten Text |  |
|  | Paragraph Text Frame |  |
|  | Writing Tools |  |
| aA | Change Case... | Ctrl+F8 |
|  | Make Text Web Compat |  |
| 凨 | Convert To Artistic Text |  |
| $\begin{aligned} & \mathrm{abc} \\ & \# \% \end{aligned}$ | Text Statistics... |  |
| TT | Show Non-Printing Char |  |
| A | whatTheFont?!... |  |
| 汹 | Font List Options... |  |

Format Text: Choose Text, Format Text to open the Format Text window. This is a one-stop place for nearly every text function in CorelDraw. When you have several formatting tasks to perform on the same text, this option is often the most efficient method.

## CREATE ARTISTIC TEXT

Place Your Text: Click on the Text Tool in the Toolbar. As you move your mouse back over the page, the cursor changes to a crosshair with the letter "A." This indicates that the Text Tool is active. Click where you would like your text to start, and a cursor appears on the page at that point.


Choose Your Font: Click on the Font List fly-out arrow to expand the list. Move your mouse over font names to see a sample. You can also move through the list with the up and down arrows on your keyboard. Click to select and font name will appear in the Font List window. Choose font size from Font Size List.


Enter Your Text: Type your text. When you stop typing, selection handles will appear around the text, but note the cursor inside the handles. The cursor indicates that this text is active.


Enter Multiple Lines of Text: Use your Enter key to create a new line. Artistic text does not automatically wrap text. For large text passages, use the Paragraph Text method. (See Paragraph Text)


Change Your Text: Make sure the Text Tool is selected. Click inside text at the place you would like to edit. Use your keyboard Backspace key to delete text to the left of the cursor and your Delete key to delete text to the right of the cursor. Type in new text. You can also click and drag to highlight a selection of text. Type your new text to replace the highlighted text.


Change Font: Highlight all text you wish to change. Choose font from Font List and font size from Font Size List.


Work With Text as an Object: Choose the Pick Tool and click on text (if it was selected with the Text Tool, remain selected). Note that there is no cursor in the text area, which indicates that the text is not active and has become an object. You can return to the Text Tool and edit your text at any time, but when Artistic text is selected by the Pick Tool, it is like any other CorelDraw object.


Change Font as an Object: Select the Pick Tool. Click on text to select. Choose font from Font List and font size from Font Size List.


## SET DEFAULT FONT AND SIZE

What is Default Font? : Default describes the characteristics of the text that is automatically selected when you use the Text Tool. You can save a lot of time by changing your default font to one you will use frequently for the document. Artistic and Paragraph Text can have different default values. You can easily change font and font size from the screen, or access many default options through the Options window.


Change Default Font: Choose the Text Tool from the Toolbox and make sure nothing is selected in your document (or set default text before you ad an object). Choose the desired font from the Font List. A pop-up window will appear asking if you wish to have the new font default applied to Artistic or Paragraph Text. Choose either or both as appropriate.


Change Default Font Size: Choose the Text Tool from the Toolbox and make sure nothing is selected in your document (or set default font size before you add an object). Choose the desired font size from the Font Size fly-out, or type in a value. A pop-up window will appear asking if you wish to have the new font size default applied to Artistic or Paragraph Text. Choose either or both as appropriate.


Open Options Window: Choose Layout Page, Setup from the Main Menu to open the Options window. You can change many default text options through this screen. Choose Document, Styles from the Options list.


Choose Text Defaults: Choose Default Artistic Text or Default Paragraph Text and click the Edit button. All text options appear. Choose the options you require for that type of text. Click OK. You can also change default text fill and outline by clicking on the Edit button for the Fill or Outline sections.


## ALIGN ARTISTIC TEXT

Align Text in Same Object: Click and drag on the vertical ruler to place a guide near the center of your page. Choose the Text Tool and click along the guide to place the cursor. Choose text, Format, or CTRL T to open the Text Format window. Choose Align and click on Center. Type some text. Note how the word balances around the guideline. The spot where you click your mouse to start the text forms the axis for text placement .repeat, but choose Right align. Not how all the characters are place to the left of the guideline.


Align and Justify Text: Repeat the exercise above, but create two lines of text (use the keyboard Enter key to create a new line). Using Text, Format Text from the Main Menu, or CTRL T, try all alignment options. If you are starting your text at the guideline, your sample should resemble the sample to the left. Text in red notes the type of alignment that was used for that sample.


Select Separate Text Objects: It is common to have several different areas of Artistic Text that you would like to align. This is accomplished in the same way you align any object in CorelDraw. Choose the Pick Tool and hold your SHIFT key down while you click on all objects you would like to align. All objects will align to the last item you select, so choose the one that is in the correct position last.


Open Align Window: Choose Arrange, Align and Distribute from the Main Menu to open the Align and Distribute window.

Choose Alignment: Choose Align Left, Center or Right for this example. You can preview the alignment by clicking on the Preview button at the bottom of this window. (If the Window block your view of the objects you are working with, click and drag on the blue area at the top of the window to move.) Click OK.

Alignment Results: In this sample, the Heading was chosen last, so all other objects align to the left position of the headline.


Align Vertically: Select the objects you wish to align as with the previous example. Choose Arrange, Align and Distribute from the Main Menu to open the Align and Distribute window. Choose Top, Center or Bottom to align vertically. In this sample, the circle was chosen last and the Bottom align was selected. (Guide placed to show the alignment for this sample and was not used to align.)


## ALIGN PARAGRAPH TEXT

Justify Text in Text Box: Choose the Pick Tool from the Toolbox and select the block of Paragraph text you wish to justify (justify is the tern used to describe how text is aligned). Choose Text, Format Text from the Main Menu. Click on Center. You can preview the alignment by clicking on the Preview button at the bottom of this window. (If the window blocks your view of the objects you are working with, click and drag on the blue area at he top of the window to move). Click OK.

Justify Single Paragraph: Choose Text Tool from the Toolbox. Click in one paragraph to place the cursor. Choose Text, Format Text, Align. Click on Left. Note how only the paragraph containing the cursor was changed.


Align Multiple Text Boxes: Choose the Pick Tool from the Toolbox. Holding down SHIFT key for multiple selection, select the objects you wish to align. Choose Arrange, Align and Distribute to open the Align and Distribute window. Choose Left, Preview if desired and click OK. Note in the sample above how the top paragraph is center justified, but the
text boxes are left aligned. Also, note how the left edges of the text are not aligned. The outlines of the text boxes are aligned.


Vertical Alignment: Choose the Pick Tool from the Toolbox. Holding down SHIFT key for multiple selections, select the object you wish to align. Choose Arrange, Align and Distribute to open the Align and Distribute window. Choose Bottom. Preview if desired and click OK. Note in sample above how the text box bottoms are aligned, but the text is note. When working with Paragraph text, it is a good idea to make sure the text box ends at the same point as the text.


## OUTLINE TOOL OVERVIEW

Create Ellipse Choose the Ellipse Tool from the Toolbox. Click and drag to create an oval shape, longer than it is wide. Choose the Pick Tool. Click on any color in the color palette to fill the oval. This tutorial is a quick tour through outline Tool will do. See individual steps for step-by-step instructions on techniques.

Change Outline Width: Choose Pick Tool from the Toolbox. Select the oval. Choose the Outline Tool from the Toolbox and a fly-out will appear. You out for easy access to
outline settings. The second section of the fly-out contains 6 preset outline widths, including a no outline setting. Click on several to see the result on your oval.


Change Outline Color: Choose the Pick Tool. Right click on any color in the color palette to set a new outline color. You can also set the color through the Outline Tool.

Create Calligraphy Effect: Choose Pick Tool and Select Oval. Choose Outline Tool to open the fly-out. Choose the Outline Pen Dialog icon to open the Outline Pen window. Set Stretch and Angle in the Calligraphy section. This sample uses a $50 \%$ stretch and a 60 -degree angle. Calligraphy for step-by-step instructions and variations.


Set Outline Style: CorelDraw offers many outline styles, form dots to dashes and combinations. Of effects is unlimited. With your object selected, click on the Outline Tool to open the Fly-out. Click on the first icon to open the Outline Pen window. Choose style. Try several variations to become familiar with the styles available.


Outline behind Fill: The default for outlines is in format of the fill. Occasionally, you may want the outline to fall behind the fill. With your object selected, click on the Outline Tool to open the fly-out. Click on the first icon to open the Outline Pen window. Choose Behind Fell near the bottom of the Outline Pen Window. The sample above contains two identical rectangles. The outline width is set to the same value, but the lower rectangle has the outline behind the fill.


Scale Outline with Object: Outline are set numerically, and will remain the same width once set. But often, the proportion between the outline and the fill should remain the same, even if the image is reduced or enlarged. You can set your outline to remain proportional. Choose Scale with Image near the bottom of the Outline Pen window. The sample above contains two identical rectangles, drawn at a small size with a thick outline and enlarged. The lower sample has been set to Scale with Image in the Outline Pen window.


## SET OUTLINE WIDTH

Select Object: click on the Pick Tool in the Toolbar. Click on the object you wish to edit. Note that the fill and outline properties are displayed for the selected object in the bottom right hand corner of the screen. As you work through this tutorial, observe the changes you make.


Choose Preset Outline: Click on the Outline Tool in the Toolbar. Choose a preset outline width in the Toolbox fly-out.


Specify Outline Width: Choose the Outline Tool from the Toolbar and click the Outline Pen Dialog button on the Toolbar fly-out. Specify desired width for outline in the Width window. You can also change the units of measure for the outline with the fly-out beside the Width window. (Cutaway view shown for Outline Pen Dialog Box.)


Remove Outline: Click on the Outline Tool and choose No Outline from the fly-out.


## SET OUTLINE COLOR

Set Outline with the Mouse: Select any object with the Pick Tool. Right click on any color on the color palette to set outline color.


Drag Color for Outline: Click and drag a color from the color palette near the outline edge of an object. There will be a small square with the chosen color beside the cursor. When the cursor moves over an object outline the square becomes an outline. Release the mouse button and the outline color will change to the color from the palette.


Set Color with Fly-out: Select your object with Pick Tool. Click on the Outline Tool to open the fly-out. Choose Outline Color Dialog the second icon in the fly-out. This will open the Outline color window and presents the full range of CorelDraw color options. Choose new color. Click OK.


Change Default Outline Color: The default color for outline in CorelDraw is black. You can change the default so all objects are drawn with your color choice. To change the default, make sure there are no objects selected in your document,. Right click any color in the color palette or choose a color through the Outline Tool in the Toolbox. A pop-up window appears asking which type of objects you would like the new outline color to affect. Choose graphics, since text normally does not have an outline.

Changing outline properties when nothing is selected will modify the attributes used by tools when creating new objects.

Click on the boxes below to choose which tools will receive new default setting.

Graphic
$\square$ Artistic Text
$\square$ Paragraph Text
$\qquad$

## SET OUTLINE STYLE

Set Outline style: Select any object with the Pick Tool. Click on the Outline Tool in the Toolbox to open the fly-out. Choose the Outline Pen Dialog (first in the fly-out) to open the Outline Pen window. Select the style from the Style fly-out.


Edit Style: Open Outline Pen window as in previous step. Select a style that is similar to the one you wish to create. Click the Edit Style button. In the Edit Style window, locate the line of squares and click and drag on the dumbbell shaped icon to increase the work area. This is where you design your style. Click on the squares to toggle back and white. You can see the results in the window below the edit bar. When you are satisfied, click Add to create a new style.


Freehand Tool Style: Choose the Freehand Tool from the Toolbox and create a line of any type. With a line selected, the Property Bar offers a Line Style fly-out for quick access. Select the line with the Pick Tool and choose a style from the fly-out.


Set Default Style: Make sure these are no objects selected in your document. Click on the Outline. Tool and pop-up will appear asking you to choose which items will receive the new default settings. Choose Graphics only for outline style, since this effect is not good for text. Click OK and the Outline Pen window will open. Choose the desired style and click OK. Any new graphic objects will have this style outline when they are drawn.


## OUTLINE CORNERS/LINE CAPS

Set Outline Corner style: Create a rectangle with a thick outline and select with the Pick Tool. Click the Outline Tool to open the fly-out. Choose the first icon to open the Outline Pen window. Choose a Corner style from the Corners section. Click OK. Notice in the sample how the rectangle corner is rounded, reflecting the selected corner style.


Set Line Cape: Create a line with a thick outline width. Select with the Pick Tool. Click the Outline Tool to open the fly-out. Choose the first icon to open the Outline Pen window. Choose a style form the Line Caps section. Click OK. The ends of your line will take
on the shape of the selected line cap style. The sample above shows samples of an identical line with the three line cap style applied. Note how the nodes differ on each style. The open node at he left of each line is the actual start point for that line.


## CREATE ARROWHEADS

Arrowheads Overview: CorelDraw offers easy addition of an unlimited selection of arrowheads. The preset styles will match most need, but there is also an easy to use edit feature for highly specialized arrowheads. The samples above are all simple lines with various arrowheads added. Note the green sample: The selection handles show where the line starts and ends. The curved head and the tail are the added arrowheads symbols. You will need to keep this in mind as you design. Since automated alignment will use the line end point.

Open Outline Pen Window: Draw a line form left to right on your screen. This is important to know which type for symbol to use. There are options to place a symbol at the start and end o the line. Select line with Pick Tool. Choose the Outline Tool in the Toolbox to open the fly-out. Choose the first icon in the fly-out to open the Outline Pen Window.


Choose Arrow Symbol: In the Arrows section of the Pen Outline, click on the triangle in ht left hand illustration. A fly-out appears with your arrow choices. Choose one, and it will be displayed in the sample box. If you also desire and end symbol for your arrow, choose form the right hand fly-out, if you decide you would like them reversed, choose Options, Swap from the same section. The arrow symbols will switch positions with each other.


Edit Arrow Symbol: Select the arrowhead you wish to modify. Click on Options, Edit to open the Edit Arrowhead window. You can resize the arrow that is presented by clicking and dragging on the handles. Move the arrowhead by clicking and nodes. Note the Center in X and Center in Y buttons. These buttons will help you return your arrowhead to a centered position once your editing is complete.


## CALLIGRAPHY OUTLINE EFFECT

Calligraphy Overview: CorelDraw offers calligraphy effects to add a casual or hand-drawn look to your objects. This setting mimics the effect of a colored pencil or paint brush changing angles, and therefore thickness, around a curve or angle. The effect is best when used on objects with dramatic curves or angles. The samples above show the thick and this nature of the calligraphy outline. The outline for the multicolored oval has been converted to an object, which is also covered in this tutorial. The options are endless.


Create Oval and Star: Draw an oval and a star (see Basic Toolbox for Graphics Magic for drawing tool tutorials). Set outline width to at least 8 pixels in order to see the effects. Select oval with the Pick Tool and click on the Outline Tool to open the fly-out. Choose the first icon to open the Outline Pen window.


Choose Calligraphy Settings: Locate the Calligraphy section of the Outline Pen window. The Stretch value sets the shape of the brush. A square brush, or $100 \%$, will not vary line thickness. A lower setting creates a more pronounced effect. The angle value simulates brush angle. At 0 there is no effect Click on the arrows to reduce and increase both angle and stretch, observing the sample as the numbers change. Note: Negative angle numbers move the brush clockwise, position number, counterclockwise. Set Stretch to 15 and Angle to -65.


Results: Click OK to accept the settings and observe your oval. Notice how the top left and bottom right lines are very thin. And opposite these points, the line is very thick. If we had used a value of +64 , the thin lines would be at the top right and bottom left. Repeat this exercise with the star to see how straight lines react.


Calligraphy Lines: Draw several curved lines using the Freehand tool and apply the same settings as you did for the star and oval. With lines, the calligraphy tool can really show off. Experiment with angles and widths to add energy and motion to your documents. You can easily sketch symbols with a hand-sketched look, or add a calligraphy outline to display text, symbols and clip art.


Convert Outline to Object: Select with the Pick Tool, or draw any object and apply a calligraphy outline. Choose Arrange, Convert Outline to Object. This is a very powerful tool to allow you to use the unlimited fill options provided with CorelDraw. Once you have converted your graphic, the outline becomes an object, and can be filled and manipulated as such Try fountain fills with a calligraphy outline for a dramatic effect. Note: Once converted, you cannot change original calligraphy settings.


## FILL TOOL OVERVIEW

Understanding Fill Types: The illustration to the left contains a selection of CorelDraw fill types. The background square contains a bitmap fill; the circle, a graduated redial fill; and rectangle, a solid color fill; the star a texture fill and the text a linear fountain fill. These are basic applications of each fill type, and each is covered in a step-by-step process in this series. This simple example gives just a glimpse of CorelDraw's powerful fill options.


Solid Fill Overview: Uniform, or solid fills are the most basic CorelDraw fill. Select on object with the Pick Tool (create one if necessary). Click in the color palette with an object selected to fill. You can also use the Uniform Fill dialog or click and drag a color from the color palette. Both methods are described in the Solid Fill Topic in this article.


Fountain Fill Overview: The illustration to the left shows the four basic types of fountain fills. The top row features a linear and a radial fountain fill. The bottom row contains conical and square fountain fills. The fills to the left are accomplished by selecting an object with the Pick Tool, clicking on the Fill Tool to open the fly-out. Click on the second icon to open the Fountain Fill window. All fountain fills are completed from this window. See the Fountain Fills tutorial in this series.


Bitmap Fill Overview: Bitmap fills put pictures inside your objects. Use the fill editor to create simple fills on the fly, or import your own bitmap file. The text and oval to the left contain bitmap fills, the light star has a preset 2 color pattern fill and the dark star a preset full color pattern fill. These fills are accomplished by selecting an object with the Pick Tool, clicking on the Fill Tool to open the fly-out. Click on the third icon to open the Bitmap Fill window. See the Bitmap Fills tutorial in this series.


Texture Fill: CorelDraw's Texture Fill puts the power of a texture editor at your fingertips. Hundreds of preset textures can be edited both randomly and through precise settings, resulting in millions of possible texture fills. Texture fills are accomplished by selecting an object with the Pick Tool, clicking on the Fill Tool to open the fly-out. Click on the forth icon to open the Texture Fill window. See the Texture Fills tutorial in this series.


Set Default Fill: When you create any object, a default fill is applied. The CorelDraw default is "no fill" but you can set any fill as the default fill. Make sure nothing is selecting in your document, or set defaults before you create any objects. Select the fill you want through any method. A pop-up screen will ask you which objects you would like this fill to affect. Choose to have the fill apply to all graphics, artistic or paragraph text. Click OK and the fill you choose will become the default.


Remove Fell: Select object with the Pick Tool. Click on the "No Color" well in the color palette. Or, click on the Fill Tool in the Toolbox and chose the X icon. Both methods will remove the fill for that object


## CREATING SOLID FILLS

Create or Select Object: Fills can be applied to any closed object. Select any object with the Pick Tool (create an object if necessary). You can select multiple objects and the fill you choose will be applied to all selected objects.


Color Palette Fill: Click on the desired color in the color palette. The selected object will be filled with the chosen color.


Drag Fill from Palette: Click and drag the desired color over any object (does not need to be selected). The cursor will change to a solid square of the chosen color. Release mouse button and the object will be filled with that color.


Fill Tool Solid Fill: Click on the Fill Tool in the Toolbox to open the fly-out. Note: You can click and drag on the fly-out border to have it remain on your workspace for easy access to fill options. Choose the first icon to open the Uniform Fill window. CorelDraw's full selection of color options and preset palettes in presented. Choose a color and click OK. The selected object will be filled with that choice


## FOUNTAIN FILL OVERVIEW

Fountain Fill Window: Fountain fills allow you to automatically blend two or more colors within and object. Use fountain fills to create a 3D appearance in graphics, or to add soft blending effects to your drawings. CorelDraw offers exceptional control over fountain fills through the easy to use Fountain Fill editing window. Select any object with the Pick Tool. Choose the Fill Tool to open the fly-out, and choose the second icon to open the Fountain Fill window.


Linear Fountain Fills: Linear fountain fills blend color form edge to edge. The samples to the left show a linear fill form medium green to a light green. The lower sample shows a 45 degree rotation of the fill. See Linear Fountain Fills in this series for step-by-step instructions.


Redial Fountain Fills: Radial fountain fills blend color in a circular pattern. You can create instant 3D spheres with a couple of steps with radial fills. In the illustration to the left, the upper circle is filled with default settings. The lower circle has the center point adjusted, the fill blend moved towards the lighter color and a pad of solid edge color added to it. See Linear Fountain Fills in this series for Step-by-step instructions.


Conical Fountain Fills: Conical fountain fills create a cone like appearance with the conical point appearing higher than the edges. In the illustration to the left, the top sample is filled with default conical fill settings. The bottom sample has had the color midpoint, the center offset and the fountain angle adjusted. See Conical Fountain Fills in this series for step-by-step instructions.

Square Fountain Fills: Square Fountain fills apply color blends in a square pattern. In the sample to the left, the top text is with default values. The lower sample fill has adjusted center point, color midpoint, angle and color edge padding. See Square Fountain Fills in this series for step-by-step instruction.

## TELET

Custom Color Fountain Fills: Fountain fills really start to get exciting when you add more colors to the blending mix. In the sample to the left, a simple linear fill comes to lift with the addition of two complementary colors. The lower sample has been further enhanced by changing the angle of the fill and creating a solid color edge padding. See Custom Fountain Fills in the series for step-by-step instructions.

## ETSE

## PATTERN FILL OVERVIEW

Type of Patterns: CorelDraw has three basic types of pattern fills. The illustration to the left shows samples of 2 colors, Full Color and Bitmap With these three general types fill, there is no pattern fill that cannot be used to fill any object. (CorelDraw can create pattern fill to use as fills, providing virtually unlimited pattern fill possibilities, but that is outside the scope of this basic series).


2 color Pattern Fill: 2 Color pattern fills are simple, 2 color bitmap patterns. There are present patterns to choose from as in the top samples to the left, or you can easily create your own as in the lower sample. The front and back color can be set using the full selection of CorelDraw colors. In the samples at the left, I have reversed the front and back samples the show how versatile even the simplest of CorelDraw pattern fills can be.


Full Color Pattern Fills: Full Color pattern fills provide the ability to place a vector image as a pattern. The sample to the left shows two preset Full Color patterns with rotated and scale variations. The variations give you unlimited power to modify and position fills for the perfect results every time. Pattern fills can be used on any object. (You can save CorelDraw graphics as vector pattern files to create an unlimited number of custom fills.)


Bitmap Pattern Fills: Bitmap pattern fills are created from raster images. You can use many types, including TIF, JPG, BMP, GIF... the list goes on. There are several preloaded images to use, but the real power of this feature is the ability to use external files in the
most common files types. The sample to the left shows variations of a preset Bitmap fill and a JPG file, from an Internet collection.


Delete Pattern Fills: For all types of patterns, to delete: Choose the pattern you wish to delete from the drop-down selector. Choose Delete.


## ALIGN OBJECTS

Select Objects: Choose the Pick Tool. Marquee or SHIFT select the objects you wish to align. There is no limit to the number of objects you select. The alignment will be based on the last object you select, so choose the object that is in the correct position last. In this example, I would like to align the left edge of all objects. The second bar is in the correct position. SHIFT select in this order: $1,3,4,5$ and finally2.


Align Object Vertically: Choose Arrange, Align and Distribute from the Main Menu to open Align and Distribute window. Choose Left. You can preview your result by clicking the Preview button. If the aligned objects are hidden by the current window, you can click and drag on the blue window heading to move it out of the way. Click OK to apply the alignment.


Align Result: Note how all the bars are now in the same position as number 2.


Align Objects Horizontally: Choose the Pick Tool and select the objects you wish to align, choosing the one that is in the correct position last. In this sample bar number 1 is in the correct position, so I choose 2 and then 1. Choose Arrange, Align and Distribute from the Main Menu to open the Align and Distribute window. Choose Top. Preview your results by clicking Preview and moving the window out of the way if needed. Click OK to apply alignment.


Align to Page Center or Edge: Select an object with the Pick Tool. Choose Arrange, Align and Distribute from the Main Menu to open the Align and Distribute window. Decide which edges of the object you would like aligned to the center. In this case I have chosen to align the vertical and horizontal center of the object to the center of the page. Choose Center and Center for object alignment. Choose Align to Center of Page in the Align To section. Preview and click OK.


## GROUP AND UNGROUP OBJECTS

Select Objects: Marquee or SHIFT selects at least two objects. Note thee status bar stating the number of objects you have selected. We are going to group these objects so they behave as one unit. You can move, transform, and resize a grouped set as if they were one single object, they can also be ungrouped at any time, and it is not unusual to group a set of objects for temporary convenience to prevent accidentally changing positions.


Group Selection: Choose Arrange, Group from the Main Menu.


Ungroup Objects: Click on your group to select. Choose Arrange, Ungroup from the Main Menu. Now note the status bar. The status bar now status that we have 5 objects selected for this sample.


Multiple Groups: You can have unlimited layers of groups in CorelDraw. In fact, in this sample, the numbers on the bars have previously been grouped with the bars. For this illustration, I have selected the group, and chose Arrange, Ungroup All, which takes all objects within the selected area out of the groups they are in. not how there are now 10 objects selected in the status bar.


## COPY OBJECT PROPERTIES

Create Objects: Create a circle. Choose a fill color and a thick contrasting outline. (See the Fill and Outline series.) Draw a second circle with a different color fill and outline as well as a thinner outline. Draw a square with white fill and a thin outline in a color you have not used for this sample. Add two text samples with different fonts. Fill one with while.


Select Object to Change: Select Square. We are going to copy the fill from the larger circle. Click Edit, Copy Properties From in the Main Menu. A screen will appear and ask which properties you wish to copy. Click OK.

Copy Properties: Click on the large circle and the square will fill with the same color as the large circle.


Click and Drag Properties: Make sure the square is still selected. We are going to copy both the fill and the outline from the smaller circle, but this time, will click and drag. Click on the small circle with your right mouse button and drag it over the square we wish to change. Release the mouse button and a menu appears. Choose Copy All Properties. The square now has the outline and the fill from the small circle

Copy Text Properties: Select the text in the large circle. We are going to copy only the text properties from the text in the smaller circle. The font and size of the text will change, but the color will stay the same. Choose Edit, Copy Properties From I the Main Menu.

Click on Text Properties and make sure the Fill and Outline settings are unchecked. Click on the text in the smaller circle and the text in the top circle will now have the same font.


## USING GUIDELINES

Create a New Guideline: Click on the vertical ruler and drag a vertical guideline onto your page. Position the guideline where you require and release the mouse button. Click on the horizontal ruler and drag to place a horizontal guideline in the same way. To move the guideline, click and drag to the new position. A selected guideline shows in red and can be moved.


Set snap to Guideline: Choose View, Snap to Guidelines in the Main Menu. This will assign a magnetic quality to your guideline. When an object is close to the guideline it will snap into place without exact positioning. To remove the snap to guidelines property, choose View, Snap to Guidelines again.


Position Object Using Guides: Create a vertical guideline. Make sure that the snap to guidelines is turned on. Click and drag an object near the guideline and it will snap to it. Try this wish several objects. This feature is a great time saver for aligning objects. You will find that you toggle the snap to guidelines on and off quite frequently, as positioning objects near the guidelines is nearly impossible with the snap feature turned on.


Snapping Guidelines to Grid: You can speed up exact guide placement if you have a grid established for your document. (See Start your Page Right for tutorials on both grid and guidelines placement.) Choose View, Snap to Grid while you set up your guidelines. Your guides will snap to the grid easily, and once you have the guides positioned, turn off the snap to grid.


## UNDO／REDO REVERT COMMANDW

Undo Command：CorelDraw has multilevel undo capabilities．This means you can undo not only the last action，but many．Select an object with the Pick Tool．Move it to the right．Click on any color in the color palette to change the color．Now choose Edit，Undo Fill． Note that the object has returned to the original fill．Click on Edit．Note that the undo now says Undo Move．Choose Undo Move and your object will return to the original position．

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Redo Command：With the same object selected，click on Edit，Redo Move． The object is taken back to the moved position．Click on Edit and note that the Redo command now lists Fill．Click on Redo Fill and the new fill will be applied．You can use redo and undo commands to experiment with effect variations．


Repeat Command：With the same object selected，click on Repeat Move．This will move the object again in the same direction and distance as the original move．You can also apply this effect when you have a different object selected，allowing you to repeat the exact operation on different object．

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Revert Command: Revert is used to return your document to the latest saved version. If you have made some changes that will be hard to undo from the screen, the revert command can prevent having to redo a whole section of your document. It is most valuable when you save often though, as all changes will be lost. Click on File, Revert. A pop-up appears, reminding you that you will lose all changes if you revert. Click OK and the last saved version will appear on your screen. NOTE: This action cannot be undone.

## CHANGING OBJECT ORDER

Create Objects: Create the following objects in the same order: A circle, a square and sample text. Fill each object with a different color. Move them to be overlapping slightly. Not how the objects created first fall under the later objects.


Move an Object Forward: Select the circle with the Pick Tool. Choose Arrange, Order, Forward One from the Main Menu. You can also use the shortcut of CTRL Page Up for this operation.


Results: Note how the circle comes in front of the square. Move the text to overlap both the circle and the square. The text is still on top of the circle since we only moved it ahead by one position.


Bring to the Front: Choose the circle again and choose Arrange, Order, To Front (or SHIFT Page Up). Now the text is behind the circle but in front of the square.


Move Object Behind: Select the circle with the Pick Tool. We could move it to the back by using the shortcut SHIFT Page Down or through the Arrange menu, but we can also specify an object for the circle to be positioned behind. Choose Arrange, Order, Behind. The cursor changes to a large arrow. Click on the objects you wish the selected object to be positioned behind, you in this case, the square. The circle is now behind the square. See the next step for the final view.


Notes on Position: An object maintains its position no matter where it moves. This can cause some confusion. Often you will attempt to use CTRL Page UP or CTRL page

Down to move objects back or forward one position．If you have many objects on the page，it may seem that the command is not working．It is，however，just working its way through the position of all objects．It is often faster to send an object to the front or the back and then use the forward or back one position，or the In Front Of and Behind commands．

## CUT OR COPY AN OBJECT

Select an Object：Choose the Pick Tool and select the object or objects you wish to cut or copy．When an object is cut or copied，it is moved to the Windows Clipboard． Picture a little screen hiding in your computer with the image．When you paste，the image is retrieved from the Clipboard．The image remains on the Clipboard until you cut or paste again． The new image remains on the Clipboard until it is replaced by another cut or copy．Shutting down windows clears the Clipboard．


Copy an Object：Choose Edit，Copy．The keyboard shortcut is CTRL C． （Learn the shortcut for copy，cut and paste．You will use them all the time．）You can also right click on a single object to open the pop－up menu．Choose Copy．A copy of your selection is moved to the Clipboard，but the selection also remains in your document．（Move your selected object to the side to avoid confusion，since the next step is paste the object back into your document，and it will come to the same spot．）

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| c＞ | Repeat | Ctrl＋R |
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| 目 | Copy | Ctrl＋C |
| 自 | Paste | $\mathrm{Ctrl}+\mathrm{V}$ |
| 易 | Paste Special．．． |  |
| 自 | Delete | Delete |

Page an Image：Choose Edit，Paste，or the shortcut CTRL V．You can also right click on the screen．A pop－up menu will appear．Choose Paste．The object you copied is now placed on the screen and is selected．

Past Outside CorelDraw：You can also paste cut or copied object from CorelDraw into other applications．The sample above shows our graphic in a Microsoft Word document．Hint：While cut and paste will often work between different programs，it is usually better to export the graphic as a file and import it into the new software．You have much more control of result and often will use the separate copy of the graphic many times when it is independent．

## IMPORT／EXPORT OVERVIEW

What is Import？：Import is not to be confused with opening a file．When you import a file，you bring it into your current document．You do not affect the original import file in any way，no matter which changes you make－in effect，you borrow a copy to use in your document．When you open a file and make changes，those changes are saved．You can import an astonishing variety of file types into CorelDraw，with many fully editable．

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What is export？：Exporting is saving a copy of your file or object to a particular format to be used by other programs．For example：if you create a logo in CorelDraw， but you would like that logo for use in your Web site，you will have to export to a format that Web browsers can read（GIF or JPG）．Your original CorelDraw file cannot be read on the Web． Exporting does not affect your working document in any way．CorelDraw exports to any graphic file type most people will ever need．

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Import/Export File Types: Choose File, Import from the Main menu. Click on the Files of Type drop-down menu to see the types of files that CorelDraw can import. You can add or remove import filters (see Import and Export filters), although for all but the most specialized applications, the default list is all you will need.

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| Sort type: | All File Formats | 스 |
|  | AI - Adobe Illustrator BMP - Windows Bitmap |  |
| Code Page: | BMP - 05/2 Bitmap |  |
| Image size: | CAL - CALS Compressed Bitmap |  |
| File format: | CLK - Corel R,A.Y.E. |  |
|  | CDR - Coreldraw |  |
| Notes: | CDX - CorelDRAW Compressed |  |
|  | GGM - Computer Graphics Metafile |  |
|  | CMX - Corel Presentation Exchange 5.0 | $\checkmark$ |

Vector and Bitmap: You will see references to vector and bitmap graphics through this section. Generally, bitmaps will refer to photograph type images that have information stored by pixels. CorelDraw creates vector type images. For more information about this topic, see more about Vectors and Bitmaps.

## Introduction to Adobe Photoshop

## WHAT IS PHOTOSHOP

Adobe Photoshop is hands down, the most popular program for creating and modifying images for the web.

This id true not only because Photoshop is available on a wide array of platforms ranging from Mac to Windows o UMIX, but because after four generations of development, Adobe Photoshop has the most intuitive interface, the most complete set of tools, and the largest number books around.

In fact, as Deke Mc Clelland says in Photoshop 3 Bible, "Some estimates say that Photoshop sales exceed those of all of its competitors combined."
"Photoshop is only one tool in a good designer's arsenal. Other popular tools include Paint Shop Pro, De Babelizer, or
L View Pro for Windows and GIF Converter
Or Graphics Converter for Macintosh.
Fractal Design, Aldus and HSC also put out
Some excellent programs"
Kenji Tachibana (a gifted freelance graphics artist) and I decided to focus on Photoshop primarily because Photoshop is the program that most web designers use.

However, since most programs these days use similar concepts, many of the things we talk about here will be directly relevant to any other graphics program on the market.

## PHOTOSHOP REQUIREMENTS

One thing to keep in mind about using Photoshop, however, is that since Photoshop is so powerful, it requires a fairly souped up working environment.

Specifically, it would be a good idea to have at least 32 MB of RAM. After all, as a web designer, you will be tasking your system while developing. Often you will have two browsers; Photoshop, an HTML editor, a word processor, and two or three $\mathrm{ftp} / \mathrm{telnet}$ sessions open all at one time. Without enough resources, you computer will not have enough gusto to keep up with you

Another downside to Photoshop is that it can be rather expensive to get the latest and greatest version. However, this tutorial is written with this in mind. We have limited our
discussion mainly to3.0 basics (which still apply for 4.0 users). These basics represent the foundation of your skills with Photoshop regardless of the version. Thus, after reading through this tutorial, you will have what you need to make stunning web graphics by investing in a $1 / 4$ price year old version of Photoshop. Eventually, of course, you will want to upgrade.

## WHAT DOES PHOTOSHOP DO?

So what exactly can you do with Photoshop? Well, like any image-editing program, you can use Photoshop to "alter" images like photos, downloaded icons, or scanned artwork.

Altering an image includes doing such things as changing the colors within an image, modifying the size and scale of an image, or putting one picture "within" another. Here are some versions of street sing I photographed in Burma.


Alteration also includes technical modifications such as changing the mode of image compression from one type to another, changing the number of bits used per pixel.

But, aside from altering images, Photoshop has a vast array of tools that help you "create" images from scratch.

On the web, you will often need to make custom icons, buttons, lines, balls or test art. Photoshop makes all of this excessively easy and fun
"it is worth mentioning that Photoshop is not
a "classic" drawing, or image creation, program. Unlike a drawing program which stores information about images as mathematical expression (called Vectors), when Photoshop draws a line, the line is converted into little dots, called pixels.

When small enough, and with blended colors (anti-aliasing), these dots can come to look like lines. Think of pointillism. Of course, when magnified or reduced, the optical illusion is dispelled and you get ugly choppy lines."

We will talk more in depth about all of these things over the next couple of days so don't get caught up in any of the words or concepts. The main thing to keep in mind at this point is that Photoshop lets you play. Photoshop lets you play with images Photoshop is fun.

## THE POTOSHOP WORKSPACE

When you run Adobe Photoshop, it will load up, initialize, and display your workspace. the workspace consists of several components that you will use to create your works of art.

Generally, there are four components in your workspace that you will use while creating or modifying graphics. These components are as follows:

- The Menu Bar
- The Drawing Canvas
- The Toolbox
- Palettes (There are five palettes by default)

The figure below shows each of these components similar to how they will appear on your screen.


For the majority of today, we will learn how to use these tools in order to make or modify graphics.

## BASIC TOOLS

## THE MENU BAR

The Photoshop menu bar work like the menu bar in any other standard application. Thus, for example, the "Save" and "Save As" operations will be found in the "File" menu item and "Copy" and "Paste" will be found in "Edit". No surprises here.

```
C& Adobe Photoshop
File Edit Image Layer Select Filter view Window Help
```

Similarly, the Photoshop menu follows the standard keyboard shortcuts that you expect to see. Thus, the A L T - F combinations will access the "File" menu and the ALT- F S H I F T - N combination will access the "New" menu choice from the "File" menu item.

It is a good bet that if in any application you see a menu item with a single letter underlined, that you can access that menu item by using the ALT key in combination with the letter. Similarly, menu choices should be accessible by using the SHIFT key in combination with the underlined letter. Using keyboard shortcuts can greatly speed up your work since you do not have to navigate the mouse all over the screen. Why not take a moment to practice accessing menu items using the keyboard? If you will be a master of the menu in a couple of months.

Of course, there are a few non standard menu items such as "Mode" and "filter", but these will be explained in detail later. For the moment, let's keep our discussion focused on the basics. Let's move from the menu Bar to the Drawing Canvas.

## THE DRAWING CANVAS

The drawing canvas is the area in which you will create and/or modify images. By default, Photoshop gives you a drawing canvas to work with, but you can easily open another one by using the "New" menu choice from the "File" menu item.

For the moment though, let's just use the default canvas given to us by Photoshop.
As you can see from the figure below, every drawing canvas has a title bar with window control buttons and a drawing area. If you have resize the drawing canvas so that the window is larger then the drawing area as we did before we took the screen capture below, Photoshop will fill the margin with a gray, un-pantable area


Note: You can open as many canvases as you want at any one time. Each canvas is accessible through the "Window" menu item or by clicking on it with your mouse.

The title bar has several functions. First off, it display the current name of the image as well as information about the color mode and zoom scale. As you can see in the figure above, by default, the name will be "Untitled-1", but once you save the image, it will be changed to the name you saved the file under. The color mode and scale measure are more complex so will discuss them after we deal with the basics.

Another cool aspect of the title bar is that you can use the title bar to move the drawing canvas anywhere within the workspace by clicking and holding, down the mouse button over the title bar and dragging the mouse. Try it out!

Finally, the title bar provides several control buttons. As other applications, you can use the buttons to minimize maximize or destroy the drawing canvas.

Before we go on, try working with your drawing canvas a bit. For example, try maximizing the canvas, minimizing the canvas, and then destroying the canvas

Woops just destroyed the canvas? That is okay, you can easily open a new canvas to draw on by choosing "New" from the "File" menu.


When you do so the "New Canvas Dialog" will appear. You can use this dialog to create your own canvas.

Try it out. Title your canvas My First Canvas, set the height to 300 pixels and the width to 300 pixels, and hit the "OK" button. (Note that for the time being we won't worry about mode or resolution. We'll discus those later. For now just accept the defaults)


When you hit the "OK" button, you should see your new canvas pop-up. Try creating a second one for practice. This time, title the canvas "My Second Canvas" and set the size to 3 inches by 3 inches.


You should now have two canvases open. Try moving them around and switching between them. You can either select them by clicking on the title bar of the canvas you want or by selecting the name of the canvas from the "Window "menu item.

## THE TOOL BOX

Well, now that you are comfortable with the drawing canvas, let's look at the Toolbox


The Photoshop toolbox holds 20 tools that allow you to paint, select, navigate and edit images. To select a tool you simply click on the icon with your mouse.

When you do so, several things will happen. For one, the selected tool button will "stick" to let you know it is selected. If you look to the figure on the left you will see that the "Eraser" tool is currently selected. Photoshop will also remind you which tool you have selected by modifying the look of your pointer to reflect which tool you are currently using.

Once selected, a tool can be used to mark up the drawing canvas. For most of today we will focus on each of the tools in the toolbar, so for now, just get used to having the toolbar at your disposal and selecting different tools.

Why not take a moment to select various tools in the toolbar and check out how the pointer changes.

When you are done, we can discuss the final component of your workspace, the palette.

## PALETTES

Palettes are essential components of your tool set. For one, palettes help you define the nature of your tools. That is, palettes help you customize how the tools in the toolbox. For example, you might" sharpen" (make the line thin) or "dull" (make the line thick) your pencil tool using the "Brushes Palette". Palettes also help you perform some of the more complex color schemes.

By default, there are five palettes. These five palettes are shown in the figure below


Though these five palettes control many different aspects of your drawing, they do share several properties.

For one, all palettes are made up of a title bar with close and collapse buttons, a set of tabs, and a list of options for each tab. Further, all palettes have a fly-out menu of options. Consider the figure below:


Another generic property of palettes is the ability to dynamically adjust contents. That is, you can customize the tabs in any palette simply by dragging tabs between palettes. Try it out! Click and hold your left mouse button over a tab in one palette and without letting go of the mouse button, drag the tab to another palette and let go. Now drag the tab back.

Finally, note that if you close a palette, you can easily get back on screen by choosing "Palettes" from the "Window" menu item and selecting the palette you want shown.

## DRAWING THENGS ON THE CANVAS

Of course, now that you are comfortable with your workspace, you will want to start painting things. Actually, I am sure you have already begun to play around with tools in the
toolbox. However, before we start "officially" talking abut getting virtual paint everywhere, we need to discuss a couple more things.

Like any good program, Adobe Photoshop uses a carefully constructed metaphor to transform a very complex computer aided task into a fun and easy-to-understand process. So why not take advantage of the metaphor. While you are using Photoshop, imagine yourself in a quaint barren room overlooking the side streets of Paris. Put one of those funky painter caps on. Now imagine a blank canvas, a table full of differently shaped brushes and various bottles of colored paint, and an easel in front of you.

Photoshop includes several options for using a stylus with a drawing tablet for a more traditional/intuitive drawing experience. For example, you can affect how thick a brush stroke is by applying more pressure to the drawing tablet. This works more like a real artistic tool would unlike what you would experience with a mouse. However, most web developers are not adobe power users and will not being using a stylus. Thus, we will skip a discussion of stylus options.

Like a painter, you will begin your work of art by first mixing your colors and choosing your brush.

Thus, before we start actually painting, we need to know a few things about the types of tools you have at your disposal as well as well as where all the colors are located on your virtual easel.

Let's look first at our easel and how to choose colors

## CHOOSING A COLOR

Choosing a color is a fun process in and of itself and Photoshop gives you such flexibility that color choice can be a beginning, intermediate or advanced task.

For the moment, let's focus on the basics of color. Essentially, choosing color involves two decisions: what color should your canvas be (background color in technical jargon) and what color paint should you use to draw with (foreground color)

Choosing foreground and background color is handled in the Toolbox. Near the bottom of the toolbox you will see the color picker square in back is the background color. (not that you can easily make the foreground color the background color and vice years using the little switcher arrows


To change the color, you simply click on whichever square you want to change. When do so, the "Color Picker Dialog" will appear.


Choosing a color is easy, you can choose a color by moving your pointer over the desired color in the color chooser square and clicking. Notice in the figure above that we shoes light blue. You can see the exact hue highlighted inside the tiny circle in the color chooser square if you want to change in the range of color, simply click on the color range slider to the right of the color chooser square. Notice that the your original color and your newly chosen color will be represented in the "Color preview box" to the right of the color range slider. In the case of the figure above, the old color was light purple.

Of course, the advanced user can define colors absolutely by their RGB, HSB or CMYK values. A complete discussion of the various modes of defining colors on the computer is beyond the scope of this tutorial, but truly, you don't much need to worry about it so long as you can use the color chooser square and the color range slider.

We are almost ready to start making a mess. But first let us take a look at the set of brushes we have at out disposal.

## DEFINING THE BRUSH

Photoshop uses the generic term "brush" to represent any of the drawing tools. Thus, the "paint brush" tool will have a brush and the "pencil" tool will also have a brush. This is a little confusing at first but you will quickly, it helps to think of a brush as the "drawing edge" of whatever drawing tool you are using. Thus, drawing from Photoshop's art studio metaphor, a paint brush's brush would be the bristles of the paint brush while a pencil tool's brush would be the pencil's tip.

The importance of defining the "brush" is that once defined, brushes can be customized. For example, you can change the shape or size of your brush. Think of a dull pencil point versus a sharp pencil point and imagine the different types of lines the pencils would draw.

Similarly, think of the shape of a calligraphy pen versus the tip of a magic marker or even a highlighting pen. Though the default brush is plenty powerful, it is useful to get the hang of working with custom brushes because each type of brush will be better or worse in various situations.

To customize the brush you should access the "options" palette.


## Brush Shape:

The most common customization you will perform is to modify the size of brush. To do so, you use the "Brushes" tab in the "Options" palette and choose a larger or smaller brush by selecting from the range given.

Except for the Pencil tool, brush shapes are always anti- aliased. Thus, you can choose both a hard edge and a soft edge by choosing either the solid or blended edge circles.

## Customizing Your Brush:

Of course, Photoshop allows you to create your own brush if you need something not offered by set of default brushes.

If you access the Brushes menu from the Options palette flyaway menu, you will see the various operations available to you.


Notice in particular the "Brush Options" and the "new Brush" menu choices. Click on either one of these and you can customize your own brush.


As you can see, there are several factors that define a brush besides size and hardness. You will also be asked to define the spacing, angle and roundness of the brush.

The spacing controls how frequently a tool affects an images as you drag. Turn up the spacing and you get splotchy lines if you drag your mouse quickly over the canvas. A low spacing will track your mouse more exactly


Angle allows you to pivot your brush shape on its axes which is really only useful on elliptical or strangely- shaped brushes.

Roundness is used to modify how elliptical a brush is A value of 100 creates a circle and a value of 15 creates a long, skinny elliptical shape.


Of course, you can also create purely custom brushes or load in pre-generated ones....

## Customizing Your Brush:

The brushes palette for every paint tool also contains a popup menu of varying brush modes. These modes modify how a tool will integrate with existing color on the canvas.


When you draw something on the canvas, Photoshop modifies the existing pixels in the background according to the logic of painting. Thus if you paint a streak of red over a streak of blue, the pixels in the streak of blue will be changed to pixels of purple.

Thus, you can think of painting in Photoshop as involving three values: the base value, the bend value, and the result value. Brush modes modify the way this blending works. Specifically, modes specify the way in which the blend and base values well interact to create a result value. Let's look at each of the modes...

The Normal mode apples the full blend value. In the case of a painting tool, the blend color will completely coat the base color. In the case of an edit tool, the edit value will completely override the existing color.

The Threshold mode is specific for Bitmapped and Indexed Color images. Essentially, it assures that the color value of the tool is applied according to the closest available color in the color map.

The Dissolve mode, which is only available for painting tools. Randomly scatters the blend color to give a rough textured non anti-aliased brush stroke.

The Behind and Clear modes are available in layered images. Essentially, they modify whether the blend. Color is applied to the foreground or background layer. When the behind mode is selected for example, a color will be applied behind the layer showing through only in the blank or transparent areas.

The multiply mode multiplies the brightness of the base color and the blend to create a darker tone. The opposite effect can be achieved by using Screen

Overlay works like screen and multiply depending on the value of the base color. Specifically, the hues of the base color will move towards the blend color. Soft light works like overlay with less intensity while hard light is more intense.

Darken darkens the base color using the blend color as a basis and Lighted lightens the base color by using the lightest value of blend color. Difference compares the brightness values of the base and blends colors and creates a result value by subtracting the smaller from larger values.

Hue replaces the hue of the base with the hue of the blend. Saturation does the same for saturation and Color does the same for both hue and saturation. Luminosity works the same way for the lightness value.

## THE PENCIL TOOL

Okay, now that we are comfortable with our brush, let us take a look at a specific drawing tool and see what we can draw. Specifically, let's look at the pencil tool

To use the pencil tool, simply select it from the toolbar by depressing the pencil tool icon. When you do so, you can draw on the canvas. Try it out. And don't forget to modify your brush size, roundness, angle, etc....


As you can see, the pencil tool can be very useful. However, Photoshop gives you plenty of ways to modify the pencil tool even further.

You have already seen the multitude of brush options available in the last section. Try some of the options out. The Screen, Multiply and Overlay options are particularly neat.


Note: If you ever mess something up when drawing on or modifying your canvas, you need only use the "Undo" choice in the "Edit" menu item. This will take you back to where you were just before you messed things up!

However, the pencil tool also has several options which are not generic modifications as well. For one, the pencil tool allows you to modify the opacity of the brush using the opacity slider in the Options palette. Opacity defines how much of the background color will show through the lines you draw with your pencil. Try out a few values (you will need a different colored background to see it work).


Another useful option is the fade option which allows you to streak with the pencil tool. Try it out and notice that you can fade transparently or by using the background color

$$
\text { Fade }=\text { none, } 50,25,10
$$

## THE PAINTBRUSH TOOL

The paintbrush works much like the pencil tool except that it paints an anti-aliased line that blends with the background.


Like the pencil tool, you have all the regular brush options as well as the opacity and Fade options. Try them out to see the effects of the options on anti-aliased lines.


Besides the usual cast of options, the paintbrush also has a "Wet Edges" option in the Options palette which when checked causes the paintbrush to create a translucent line with darkened edges similar to water color painting.


## THE LINE TOOL

The line is used to draw straight lines on the canvas. It is pretty intuitive, you simply choose the line tool from the toolbox, click once on the canvas to specify the beginning point of your line and then drag the mouse to define the line extending from the starting point.


As with the paintbrush and pencil, you have the full range of brush options and the opacity slider to modify the look of your line. However, the line tool also allows you to modify the line width with the line width textfield, the state of anti-aliasing using the anti-alias checkbox, and whether or not you want the line to end or start with an arrow using the arrowheads checkbox. In the case of the arrowhead option, you can also modify the shape of the arrowhead by using the "Shape" button.


Try out the tool and make some lines and arrows on your canvas.


Though the line tool is pretty easy to use, it is not exactly the best way to make lines. In fact, most designers tend to use the SHIFT key instead of the line tool to get lines. To draw a straight line with any of the paint or edit tools, you should 1) click on the canvas, 2) press the SHIFT key, and 3) click on a second point on the canvas. Photoshop will draw a line between the two points you specified. Try it out.

You needn't stop with two points either. If you continue to hold the SHIFT key down and click more points on the canvas, you will add more lines connecting all the specified points. Can you make the following design without using the line tool?


You can also draw lines perpendicular to any line by holding down the mouse button while pressing the SHIFT key and dragging in a vertical or horizontal direction

Try getting the following image...


## THE AIRBRUSH TOOL

The airbrush works a lot the paintbrush except that it continues to apply paint as long as the mouse button. Actually, with the exception of the Pressure slider, the options for airbrush are the same as for paintbrush


The pressure modifies how much paint is sprayed when the mouse is down. To spray paint you simply choose the airbrush tool click on the canvas and hold the mouse down while dragging. Actually, the effect is very much like an airbrush and you can design some pretty nifty graffiti.

## THE TEXT TOOL

The text tool is one of the most powerful tools in your toolbox because it opens the door to a multitude of pre-designed font libraries. These font libraries allow you to create graphical versions of letters using pre-designed formats. Photoshop handles these font libraries just as it would any image. Thus you can do all the same things with fonts that you do with any other image in Photoshop.

To place text based images in your canvas you need only select the text tool from the toolbox and click on the canvas in the text to appear.

When you do so, the Type Tool Dialog will appear.


This dialog allows you to specify what characters you want displayed and many other font related options such as font type, size alignment, style and characteristic

Aral indermprit
Ahal lanc-Undedint Scam


We are going to spend a lot more time looking at how to manipulate text tomorrow, so for now, just get comfortable with the tool.

Notice that when you hit the "OK" button in the Type Tool Dialog, Photoshop will place the text within the canvas, but the text will be selected. Since it is selected, you can certainly drag it round and place it anywhere you want. We will talk more about selection tomorrow.

## THE PAINT BUCKET TOOL

The paint bucket tool is another very useful tool. To use the paint bucket tool, simply click on the pouring paint bucket icon in the toolbox.


When you do so, you will see that your pointer changes into a paint bucket and that when you click on the canvas, you fill areas with the color specified in the foreground color box


The paint bucket tool has all of te usual brush options as well as the opacity slider that we have already discussed for other drawing tools. It also allows you to modify the contents and tolerance values in the Options Palette.


Essentially, tolerance affects how broadly the paint bucket will fill. If set to a high tolerance, the tool will fill all shades of a color whereas if is set low it will fill less shades. The figure below shades how higher tolerance menus that more shades of red will be filled with the blue color. We are going to discuss the content and tolerance options tomorrow along with other advanced features of the paint bucket. So for now, just practice filling basic blocks of you canvas.


## THE GRADIENT TOOL

The Gradient tool allows you to specify a gradient of color. Using it is fairly easy, you simply choose the gradient tool from the toolbox click on the canvas and drag out an area to fill with the gradient


We are going to talk more about this tool tomorrow, so for now, just play with it to get used the

## MODIFYING THINGS ON THE CANVAS

So at this point we have gotten pretty good at getting paint all over everything. We have learned the major tools with which you have to paint. Now it is time to focus on some of the other tools at your disposal. These tools are used to edit, change, tweak or otherwise modify
the things already on the canvas. In other words, they do not apply paint to the canvas. Rather, they influence existing color.

In particular, we will took at the Eraser, Smudge, Focus, Toning, Zoom and Eye Dropper Tools.

## THE ERASER TOOL

The eraser tool is a particularly intuitive tool. Click on the eraser icon and then click on an area on the canvas and while holding the mouse button down, start dragging the cursor around the canvas. You will quickly see why they call it the eraser tool, it eraser.


Like many of the tools we have discussed so far, the eraser has many options which you can select to modify how the tool works. And as usual, you can find the options in the Options Palette


The first option to try out is the eraser type menu. You can choose Paint brush, air brush, pencil or block. These options affect how the eraser erases. The effects are just as the tools named except in reverse.


Note that when in paint brush mode you have the wet edges checkbox as you would expect for paint brushing

You also have the opacity slide to modify how much of the canvas to erase and the fade tool which you should be familiar with as well as an erase image button which will erase the currently selected item on the canvas completely


## THE SMUDGE TOOL

The smudge tool is used to smear paint on your canvas. The effect is much like finger painting. You can use the smudge tool by clicking on the smudge icon and clicking on the canvas and while holding the mouse button down, dragging in the direction you want to smudge.


As usual, you have a host of options which affect your smudge located in the Options palette.


For the most part, you will use the pressure option. The pressure option modifies how powerful your smudge is. If you set to $100 \%$ you will wipe away all the existing paint. Set in to $20 \%$ and it will be as if you are trying to smudge dried paint.

Further, you have a few god options in the brush options menu such as "Darken" and Lighten". Both Pressure and Darken examples are shown below.


Another cool option is the "Finger Painting" option. When the finger painting checkbox is checked, Photoshop will add a little bit of foreground color to your smudge. This mimics a situation in which you actually dipped your finger in a bit of paint before you performed you smudge.


The final option, the "Sample Merged" option is used to blend colors from lower layers of a multilayered canvas. We have not yet talked about canvases so we will leave the discussion for later.

## THE FOCUS TOOL

The focus tool is a actually a double edged tool having states for both blurring and sharpening the focus. The state of focus is set using the Focus Tool Options Palette and the icon used in tool box will be determined by this state


The blur tool blurs an image by decreasing the color contrast between consecutive pixels. The sharpen tool, on the other hand increase the contrast

## THE TONING TOOL

Like the Focus Tool the Toning Tool has multiple states. Specifically, the Toning Tool has three states Dodge, Burn, and Sponge


The Dodge tool allows you to lighten an image by dragging your mouse across it. This tool mirrors the dodging tool in photography that allows you to cover certain part of the developing paper so that they are less exposed.

The burn tool works like the opposite of the dodge tool. This tool allows you to darken portions of the canvas by dragging over them.

Finally, the sponge tool reduces the amount of saturation and contrast.


## THE EYE DROPPER TOOL

The eye dropper tool is used to pick up a color value from the canvas. This is a very useful tool because there will be many times when you want to switch colors while painting to a color already on your canvas and you do not want to go all the way through the color chooser dialog. In these cases, simply click on the eye dropper tool in the toolbox and click on the color you want to select inside the canvas. When you do so, your foreground color in your color boxes will changes to the selected color.


He eye dropper tool has a single option which allows you to pick up the exact color or an average of the colors around it. Try it out and see how easy it is to use.

## THE ZOOM TOOL

As you might imagine, the zoom tool allows you to zoom in on the image to get a better idea of the actual pixel makeup of a section you are working on. It is fairly easy to use the tool. You simply click on the zoom icon and then click on the canvas.


The canvas will zoom one step for each mouse click. Thus, if you click two times, the image will zoom to a 3 to 1 aspect ratio. You'll see things much more clearly.


Zoom state is recorded in the title bar of the canvas window and to return to a zoom ratio of 1:1 you simply double click the zoom tool icon in the toolbox or use the Zoom 1:1 button in the Zoom options palette.

## Fivin-ly

Don't get confused between zooming and scaling. When You zoom an image, it is only zoomed from your perspective. You have not changed the image at all. If you copy a zoomed image and paste it onto another canvas, it will be pasted in its $1: 1$ size. If you wish to actually scale an image larger, you should use the menu item Image and choose the "Effects $\rightarrow$ Scale" option.

## ADVANCED TOOLS

## SELECTING THINGS

Well, the irony of yesterday was that in the introduction we said that Photoshop was not really a painting program yet we spent the rest of the day learning how to paint on our canvas.

Well, that is because you needed to learn the fundamentals of Photoshop before you could move on to the more exciting features. Today we will go into some of those more exciting features. In particular, for the first half of the day we will work with "selections".

Selections are areas within the canvas that you set apart from the rest which you can apply special effects to or other wish modify, copy, cut, flip, move, rotate or scale.

It is important to understand that Photoshop is different from other programs in which you select things. For example, consider your word processor. Most likely, when you want to select a word, you double click on that word. Your word processor knows to select the word because letters are isolate objects.

Photoshop does not have that convenience. When you scan in a picture of a face, Photoshop has no way of discerning between the eyes and the nose on that face. This is because images are pixel based rather than object oriented. Photoshop can manipulate those pixels, but it cannot intelligently differentiate between them in terms of the overall meaning of the picture.

This is a good thing because otherwise, there would be little use for you. Fortunately, you are needed to decide which pixels belong to which meaningful part of a picture. For example, you might want to select a pair of glasses on a face in order to change the color of the frame. Typical reasons to make selections include

- Editing a portion of your canvas
- Creating a mask or layer
- Cropping
- Applying filters and special effects to portions of your image.

To select a portion of your canvas, you will have to use one of the selection tools that we will discuss more later. But all selection tools do the same basic task, they draw an outline around some bit of your canvas with a little flashy marquee that looks like a dashed line or a row of little parading ants.

Once you have selected an area, you can manipulate that area in many cool ways. We will do a lot of manipulation of selections over today and how to select areas.

## Modifying a Selection

We will talk about several tools to make an initial selection however we should mention here that all selections share several properties.

For one, any selection can be deselected just by clicking outside of the selected area or choosing SELECT-> NONE from the maim menu.

Another such property is that you can edit a selection. This is a good thing because it would suck to create a detailed selection only to realize that you missed one small piece. Fortunately, you can easily add to a selection remove from a selection or create selections from intersections of other selections.

To add to a selection, simply hold down the SHIFT key and use the selection tool to add to the existing outline.

To subtract from a selection, hold down the OPTION or ALT key (depending on operating system) and use the selection tool to remove from the existing selecting

To create an intersection selection, simply hold down the ALT and SHIFT (OPTION-SHIFT) keys and use a selection tool to deselect all but the overlapping portions of two selections.

You can also hide the selection outline if it is getting in the way of your concentration by hitting CONTROL-H

Further, you can inverse the selection, thus selecting everything that was not selected by your selection by choosing SELECT -> INVERSE from the main menu.

There are also several built in selection modification tools in the SELECT menu item. These include Grow, Similar, Border, Smooth, and Expand/Contract. These all modify the selection in predefined ways.

Okay, that is a run down of the qualities shared by all selections. Now let's lake a look at the list of tools that you can use to create selections.

## THE MARQUEE TOOL

The marquee tool is the most basic of selection tools and often the one most useful. This tool is used to draw selections based on geometric shapes. Specifically, the marquee tool allows you to draw rectangular and elliptical selections. To from the selection, simply click and drag the mouse.

You can easily choose the geometrical from by changing the value for SHAPE in the options palette.[IMAGE]

Notice that there are two special cases of rectangle in which you are constrained to a single row of pixels or a single column of pixels.

Note that a square is a special case of rectangle and a circle is special case of ellipse. To get a square from a rectangular marquee or a circle from an elliptical marquee, simply press and hold the SHIFT key while you drag out your selection.

An often-desired function is the ability to draw a rectangular or elliptical shape. To do this, simply use the selection tool to define the outline of your shape and then use the EDIT-> STROKE menu item to either fill or outline the shape.

As you are dragging out your selections, you should notice that selections are drawn outwards from the point at which you initially clicked on the canvas. Sometimes, this can be disconcerting, especially if you are trying to select a circular area around some base point. Fortunately, Photoshop has an answer. To draw the selection out from the center, press and hold the ALT key while dragging out the selection.

Of course, to anti- alias your selection, you can use the anti- alias checkbox or the feather checkbox simply affords an extra degree of anti- aliasing.

## THE LASSO TOOL

The marquee tool is certainly cool and when you use the SHIFT and ALT keys to add or subtract from the selection, you can create some pretty complex selections. However, often times, a free from selection tool is what your really want. A freeform tool like the Lasso, allows you to draw out a selection area much like you were tracing over in image through tracing paper. [IMAGE]

To create a free form selection, simply choose the lasso tool [IMAGE] and click and drag on the canvas. The selection will follow your drag

Obviously, it is unlikely that you will succeed in making a free from selection right the first time since it is very easy for your mouse to slip. Fortunately, you can use the SHIFT and ALT key to add or subtract from a selection as well as use the ALT key down while you drag with the lasso to create polygons much like you would do to create lines using one of the paint tools as discussed yesterday.

Note that if you do not perfectly align up the beginning and the ending of a lasso selection, Photoshop will complete it for you by drawing a line from the end to the beginning as the crow flies.

## THE MAGIC WAND TOOL

This tool allows you to create a selection just by clicking on Magic Wand icon and then clicking on the canvas.[IMAGE]

The selected area is create by adding all adjacent similarly colored pixels to the selection. The range of hues selected is controlled by setting the "Tolerance" level. The larger the tolerance, the more shades of the color will be selected.

## THE MOVE TOOL

The Move Tool is quite handy indeed. [IMAGE] This tool allows you to take any selection and move it to a different location on the canvas. It is also very easy to use. Simply click and hold on the selection and then drag the mouse to move the selection.

Note that if there is nothing underneath the selection, the area left behind will be filed with the background color. Note also that if you click the pixel doubling checkbox in the options palette, you will speed up the refresh rate such that the move operation will be real time.

You can also move a selection pixel by pixel by using the arrow keys. This gives more precise movement but is less convenient for large moves. Note also that you can get the exact screen positions by looking at the info palette.

## THE CROP TOOL

The cropping tool does exactly what you would expect, it crops out a rectangular portion of your canvas and throws away the pixels outside the crop. [IMAGE] To create a crop marquee, simply select the crop tool, click on the canvass and drag out an area.

When you do so, Photoshop will create a temporary crop selection which you can easily edit or move just like any other selection, simple position the pointer inside the area and drag. To resize, drag any of the corner points out. Drag SHIFT to scale the marquee proportionally. To rotate the selection, click drag outside the crop selection. And finally, to cancel the crop, hit the ESCAPE key.

When you are satisfied, simply click on the crop selection and it will be cropped to your specification.

Note that you can easily set, expand or contract the size of the final canvas by modifying the setting in the Cropping Tool Options Palette

## WHAT ARE CHANNELS

Photoshop uses channels to store color information about an image or to store selections. Photoshop create color information channels automatically and all Photoshop images contain at least one channel.


Bitmap- mode, grayscale, duotone, and indexed- color image are each singlechannel modes. An indexed-color image has one channel containing up to 256 levels of density.

## Indexed Color

The Web Palette with its 256 colors is an index color. It ensures predictable color on the Web or the Intranet.


Color Modes

Modes are found under the Image menu item.


The default is 8 bits per channel. Only in RGB mode is bits per channel available.
RGB is my default working mode.

- RGB is Modes
- CMYK Modes
- Grayscale Modes
- Duotone Modes
- Bitmap Modes
- Indexed Modes


## RGB Color Mode

An RGB image contains three channels made up of red, green, and blue color data as shown in the sample below.


RGB output mates well with the monitor RGB electron guns. The direct color match can produce excellent color on the monitor screen.

Professional monitors are pricey but they can be tuned or matched to very precise output settings.

## CMYK Color Mode

CMYK is designed to covert well into the printer's environment with its four-color plates of cyan, magenta, yellow, and black.


## Counter Intuitive

CMYK contains 1 more channel then RGB but it has a smaller color gamut.
Its color gamut is designed to meet the narrower color range needs of the fourcolor printing process.

## 24 Channels

Except for the Bitmap-mode image, all images in Photoshop can have up to 24 channels. These are frequently called alpha channels. Sometimes, the alpha channel can be used to decrease file size.

## Palettes

Study the palette titles to the left. Photoshop Layers Palette usually includes the Channels and Paths as tab selections.

I added the Actions to my Palette set by a simple drag and drop process. Grab the Actions tab and drag if off to remove it from the Palette.


A working knowledge of Selections and Masks are prerequisites to using the Channels concept effectively. Selections were already covered at the start of this section,. The next Topic will be Masks.

## WHAT ARE MASKS

Traditionally a ruby lith, a transparent deep red material, was used as a mask. The mask covered and protected parts of an image. The masks were cut with an X-acto TM knife and the process was tedious, taxing, and tiresome.


With Photoshop this process has been simplified. Make a single or multiple Selections. Shifted Selection allows for adding to Selections. The resulting area outside the selection automatically becomes a mask.

Sometimes this outside/inside thing can get confusing. No problem, it is easy to reverse a mask. Inverse the selection (Shift+ $\mathrm{Ctrl}+\mathrm{l}$ )

Use the resulting mask, modify it, or even save if for later use. Eliminate any masks or Selections with Ctrl + D.

This is a much easier and faster process than making a new mask in the traditional X- acto TM method.


Save masks to the alpha channel. The Select > Save Select... opens the Save Selection dialog box.


Click OK and accept the default settings.


Click on the Channels tab to see the result. The new channel is inactive (no eye icon).

Notice that the Display box is missing the eye icon.
The mask shape is shown as a b/w mini icon with a \# 4 label. The mini mask icon shows the exact silhouette in black and white.

Activate the mask by clicking in the empty Display box. The eye icon appears and the red mask becomes visible over Stevie (see sample below).


The active mask color resembles the traditional ruby lith. Everything under the mask is protected.

All changes to the image will occur in the non-masked area, the wall behind Stevie. Multiple masks can be used and masks can also be affected by any of the modifiers which interact with the Selections tool. In this example, the wall is also masked but the mask has been modified Feather (Selections > Feather... value3).

Notice that the Channels Palette now shows tow mask channels and the new mask icon even reflects the feathering.


## WHAT ARE LAYERS

Having access to channels is pretty amazing. Using layers is even more phenomenal. It allows you to do composite and prototype work with speed and ease. It creates a playground for the imagination

There is no one- to -one comparison to layers in the traditional graphic arts technique. Cut-and -paste and the use of tracing paper are a crude comparison. A better comparison exists in the animation industry.


The technique used in cell animation comes close to suggesting the power of Layers.

Disney style animation scenes are created by stacking numerous layers of clear acetate sheets with artwork painted on them.

A Photoshop project can easily end up looking very similar. Look at the Layers sample to the left showing all the layers so a pad file.

An approach 1 use often utilizes the background layer as the negative. All of my active work is done on duplicates or other layers above the background.

One exception might be the Auto Levels (Image > Adjust > Auto Levels) command. It is a single step command which "properly adjusts" most photographic images.

The Display icon is the eye. Click on it to hide the layer. The layer becomes invisible and the eye icon also disappears.


The Active layer is indicated by the brush icon. Click on it to lock protect the layer. The layer will be visible but not changeable and the brush icon will disappear.

The chain icon indicates the link status of a layer. A linked layers can be merged, moved in unison, and other joint actions are possible. In the above example, Background Effect is linked to Background Color. If the Background Effect is moved, Background Color will match the move.

Three Layers Palette Buttons.


- Create Layer Mask
- Create New Layer
- Trashcan


## Create Layers Mask

- Create a new layer by clicking on the Creates New Layer icon. A new layer will be created above the active layer.


## Create New Layer

- Create a new layer by clicking on the Creates New Layer icon. A new layer will be created above the active layer.
- Create a copy of a layer by dragging it to the Create New Layer icon. A duplicate layer will be created above the original layer.
- Create a copy of the active layer by clicking on the Create New Layer icon. A blank layer will be created above the active layer.


## Trashcan

- Delete a layer by dragging it to the Trashcan icon.
- Delete an Active Layer by clicking on the Trashcan icon.

There will be some in -use Layers examples in the Real World Example Section. The next topic will be what Fill/Paint Bucket is.

## WHAT IS FILL/PAINT BUCKET



## Fill tool

Fill is available either as an Edit Menu choice or as a Toolbox selection as seen in this sample.

Some Tools have keyboard shortcuts and some of them even have Shift- key modifiers.

The uses of keyboard shortcuts are highly productive. Choose a few often used commands and learn their shortcuts. Add a few shortcuts each week.

Before long, shortcuts will become second nature. Some of the basic ones are universal to Windows, such as the following:

- Save:
- Cut:
- Paste:
- $\mathrm{Ctrl}+\mathrm{S}$
- $\mathrm{Ctrl}+\mathrm{X}$
- $\mathrm{Ctrl}+\mathrm{v}$


## Fill command

Fill can be applied to a selection, layer, or to a layer element (s). The default settings are Normal Mode, Opacity $100 \%$, Fill with the Foreground color, as in the sample below.

## Anti-Aliased

Check selects it to avoid the jaggies. Jaggies are the pixel stair-stepping which can be seen in any lines or edges which is off the true vertical or horizontal axes.

## Tolerance Option

Tolerance setting ranges from 0 to 255 . The 0 setting works fine with a smooth single color background. Enter a higher tolerance to select a broader range of colors.

Getting the proper Tolerance setting is like focusing a camera lens. Get close by over- setting and under-setting. Using intervals of 25 to 50 . then bracket by smaller intervals to zero-in on the target range.

Cursor placement can be critical when doing a broad range Fill. The actual Fillrange is determined by the exact cursor placement but it is difficult to click on the same spot each time when testing the Fill Tolerance setting.

It would be helpful if Photoshop provided a Repeat-Fill command. This would allow for a single-click -position to be used for multiple Tolerance range tests.

Until then, 1 offers two work-arounds. One is to use the magnified mode. The other is to create a new layer above the target layer. Place a cross hair marker on the new layer. Activate the target layer and fill using the cross hair as a guide.

## Pattern Fill Option

Pattern option is ghosted until a pattern is defined. This can be seen in the previous sample.


Pattern Fill is a powerful tool allowing you to fill with any image element. The image can come from a clip-art or be custom-made, even transparent areas can be part of the Pattern.

## Procedure:

- Define a pattern image area using the rectangular marquee ( m key) tool.
- Set Define Pattern mode (Edit > Define Pattern).

Pattern is now available as an option under Paint Bucket Contents list as shown to the right.

## Fill Menu Dialog Box

Choosing Edit> Fill from the menu selections opens a dialog box with different options than the Paint Bucket Palette. The drop down list offers more choices.

I use the paint Bucket Palette most of the time because it is convenient and fast.
It also has the tolerance option not available in the Fill dialog box.


There will be some in-use Fill command examples in the Real World Examples Section. The next TOPic is Cloning/Rubber Stamp.

## WHAT IS CLONING / RUBBER STAMP

The Rubber Stamp concept is taken directly form the real world. The Palette Options make it a power tool.


## Rubber Stamp Options

The difference between aligned and non aligned is the thing to remember. It refers to the relationship between the cursor and the reference point.


## Clone Align

Clone Align treats the reference point as a dance partner. They move together in a precise and constant relationship. No matter how many times the mouse is activated to stamp an image, the relationship never changes.

It is a wonderful tool for cleaning up backgrounds. It is probably the most popular Rubber Stamp option.

## Clone Non-aligned

Clone Non-aligned theats the reference point as fixed point on the image. Every time the rubber stamp is activated, the reference image is painted form the stating painted from the stating point.

I find this very awkward. This requires the action to be completed in one continuous mouse or pen motion. I would appreciate a keyboard modifier to hold the reference point while I relax my hand.


## Retouching Using Clone Align

Taking a lint mark out of the background is a snap. To establish the Clone Align reference point, hold down the Alt-key and click the rubber stamp cursor in the target area indicated by the circle.

Choose your stamp size from the Brushes Palette. Click on the 17 pixel blurred edge brush. The blurred edge helps to feather-in the retouching.


Double clicking in the brush selection cell will open its dialog box. Look at this treasure chest window on your own.

## Retouched



Remove the lint mark with a stamping (spotting) action. Compared to the tedious use of spotone (a semi -poisonous dye), Cloning is a lot safer faster, and more fun.

The background irregularity which you may see is a JPG artifact in the display image and not a bad retouching work.


## From Snapshot and Saved

They are both straight forward variations on the basic stamping idea. Combined with Clone and Pattern, the result can be richly complex and painterly.

Take Snapshot is an option below Define Pattern under the Edit menu.

## Impressionist Option

The Impressionist option was unimpressive. I found it labor intensive and frustrating. It inspired me to finding a more intuitive method. The process went as follows:

Duplicate your master image (drag the master negative/background to the New Layers icon). Apply the following filters to the work copy layer.

- Filter> Noise> Add Noise... value 8
- Filter> Blur> Motion Blur> Radius value 1

The effects were right but too much detail was lost. I played with the opacity settings on layers 1 and 2 . I finally added a third layer for more detail.


The final look resulted from the combination of Filter effects and Layers opacity adjustments.


- Layer \#3:

More Detail Layer at 50\% opacity.

- Layer \#2:

Work/Effects Layer at $72 \%$ opacity.

- Layer \#1:

Background/ Negative layer at 68\% opacity.
Let's get into Filters and Plug-Ins next.

## WHAT ARE FILTERS AND PLUG-INS

## Photoshop Filters

Photoshop has plenty of powerful built-in Filters. Apply special visual effect to your images using Filters. Look at the long list in the drop down menu sample to the left.

A very effective way to learn Filters is to play with them. Start with a few that sound familiar to you.

Before you use any of the filters, create an image in your mind's eye of what you expect to see. This is important for building your skills and your mental reference library.

## Reference Library

I have Zip disks labeled Graphics Library 1 and 2. They contain numerous subfolders. One of the sub-folders is labeled Filters.

I suggest that you might do something similar. Save some of your key test images and related text files into that folder. Review these files periodically for insight, or their value will become meaningless.

## Filter Tests

Start your testing and play by using the default settings or create your own starting points when necessary. Use the same filter and settings on several other images with differing range and characteristics such as:

- Color.
- Tone.
- Contrast.
- Sharpness.

Also try out filters on various size images; value settings are influenced by image size. A larger image will require higher value settings.

## Cheap Insurance

Always start with a duplicate image on a new layer. This will keep your reference image handy and unaltered. Relabel the Background Copy layer to something relevant.


I may label the layer GusBlur_5 if my major action on this layer is the use of the Filter Gaussian Blur set to the value 5.

## Renaming a Layer

Double clicking on a layer opens the Layers Options dialog box where the layer can be easily relabeled.

## Blur Of Choice

The plain Blur More have no controls. Use Gaussian Blur, it has control and a real-time preview.

| Artistic |  |  |
| :--- | :--- | :--- |
| Blur | Blur |  |
| Brush Strokes | Blur More |  |
| Distort | Gausian Blur... |  |
| Noise | Motion Blur... |  |
| Pixelate | Radial Blur... |  |
| Render | , | Smart Blur... |

In Windows "..." after a menu selection indicate further options such as a dialog box or controls. The following options all launch control windows.

- Motion Blur...
- Radial Blur...
- Smart Blur...

Try these functions on your own. They will probably help solve some graphic conundrum in the near future.

## Expectation and Predictability

Start with a mental image or some other measurable expectation. Play and experiment based on those expectations. Review the result in comparison to the original mental picture.

Play with the Filters as you would with a new lens or color films. Get to know their characteristics. After you gain an inner sense through trial and error, you can select the right tool and use it "just so" to give birth to your inner ideas.

## Save and Review

Write down your expectation and insights. Write down the results and discoveries. Be sure to write down your conclusions gained from matching the mental image with the concrete results. Save the text file, along with the image files, to your reference library.

## Repeat

Review these files periodically for insight, or their value will become meaningless.

## Anything That Works

For some people, this method may be a turn-off or a waste of time. Do whatever it takes to keep your inspiration cooking

## Plug-ins: Fun just got Turbo-charged



Photoshop, like most other professional tools, supports Plug-ins. This allows the use of Filters developed by other software developers.

Once installed, they appear at the bottom of the Filters drop down list as shown above. I use Kai's Power Tool 3.0 and Extensis Photo Tools because they work for my needs. There are many other Plugins such as:

- Alien Skin
- Andromeda
- Chromatic
- Dig Effects
- Factory
- Fast core
- Digital Frontiers
- Picture Man Collection
- The Flux Collection
- Visual Manipulation
- And more...


## ABOUT THE TEXT TOOL

Photoshop Standard Text Dialog Box


Photo Tools TM Text Dialog Box


Photo Text is surrounded by an array of tools to add, manipulate and position text. The editing is done in text blocks of any size and number.

## Color Picker

Use it to pick a color directly off the image. It also has a magnifier to zoom in to find that exact color.

The RGB read-out gives exact values. Switch back to the pointer and the RGB read-out changes to precise X and Y coordinate values.


## Point Size

The height portion of a type face determines the point size. Ascenders, descenders, and width are not considered. So depending on these other factors, type can be taller, shorter, wider, or narrower.

## The Web is great The Web is great The Web is great The Web - Helv. The Web - Arial

- Helvetica 23 point Font
- Times New Roman 23 pt. Font
- Brush Script MT Italic 23 pt. Font
- Microsoft created Arial to replace the classic Helvetica.


## Rule-of -Thumb

Times New Roman 12 point font is considered a good default size for body copy. Notice that if Helvetica or Brush Script MT Italic 12 point fonts were used in place of the Times New Roman, the body copy area would change affecting the layout.

Many children, senior citizens, and adults with reading glasses prefer a larger type size than Times New Roman 12 points for their body copy.

12 points in pica

6 picas in inch

$$
12-6-1
$$

Kerning: Tracking or Character Spacing

## Type <br> Type

Kerning is an aesthetic regard for the negative space between characters. Study the two kerned samples to the left. The difference is subtle.

I prefer the letter spacing of the lower sample but kerning is a personal judgment call. The only difference between them is the kerning pair "Ty".

Most computer fonts today are proportionally spaced, meaning they are prekerned. Custom kerning is very labor intensive and it is usually reserved for use on large display type. Courier is the infamous non-proportional type carried over to PC's from the typewriter.

Many DTP applications use the term "tracking" for kerning. Microsoft Word TM refers to kerning as "character spacing"

## Unfortunate Discovery

When I began this tutorial, I was using Photo Tools tm 1.0. Extensis gave me an upgrade to Photo Tools TM 2.0 after I discovered a bug.

Unfortunately, it still has critical flaw. It discounts the font's kerning pair information. This cripples the power of Photo Text. Extensis is working to correct the problem in future upgrades.

The Photo Text example given at the beginning of this Text section still gives a strong idea for how text might be handled in future Photoshop upgrades. I still recommend Extensis TM Photo Text for their other power packed components:

- PhotoBevel
- PhotoEmbos
- PhotoGlow
- PhotoCastShadow
- PhotoButtons and more.


## Leading

The space between lines of type, measured base-o-base in points. A 14-point type has a standard leading of 18 points ( $120 \%$ ). Leading is a term left over from the hot-metal typesetting days, in which strips of lead were inserted between lines of type.

## Font

A typeface can include many fonts. Helvetica is a typeface. A 16-point Helvetica is different from a 24-point Helvetica and from a 16-poin Helvetica Italic. A font includes all of the type capitals and lowercase letters, numerics, and punctuation marks of one typeface in a specific point size.

## Serif and Sans Serif Fonts

## F F

Serifs are the omamental finishing strokes at the end of the main strokes, such as the "feet" at the bottom of the Times New Roman "F".

Sans is the French word for "without". It is a blend of Latin sine and absentia, in the absence of. It also has another name, Gothic. Compared to Gothic, Serif has more of a Romanesque presence. This sans serif Example is Helvetica.

## RAGGED AND FULLY JUSTIFIED TYPE

Left justified This is a test block. This left justified text block. This left justified text block.

Center justified This is a text block. This is a center justified text block. This is a center justified text block.

Right justified This is a text block. This is a right justified text block. This is a right justified text block.

Fully justified type has all its lines. the .same. Length (unless they're. indented or end of a paragraph.), pro- ducing even left. And. right margins. The word spacing varies; .and hyphenation is used as necessary.

Comment: As a graphic element, fully justified type looks great. Unfortunately, it is hard to read. The default ragged left justified setting works for most general purpose uses. Compare and make your own judgment.

This completes this section. The next section is the real World Example. You might take a breather before moving on,. The following section is fun but intense.

## LEARN BY EXAMPLE

## REAL WORLD EXAMPLE



Tools are not used in isolation. In the real world, tools take a back seat to the process.

This logo image required many Photoshop tools and effects to create.
Phase I:
Phase II:
Phase III:
Phase IV:
Phase V:
Back board I-A and I-B
Back board II-A and II-B
Logo Text III-A and III-B
Visual Illusion
File Formats

## Real World Example

## Phase I-A: Backboard Preparation

1. preliminary
2. channels Palette
3. Channels Options
4. Gradient Fill Tool
5. Gradient Tools Options
6. Gradient Drop-down List
7. Apply Gradient Fill
8. Changing Gradient Results

## 1. Preliminary

The project started in Corel Draw 6. The structured drawing program was the ideal place to give birth to the rainbow paint palette shape.

The shape was exported from Corel Draw as a TIFF, a bitmap file format.
TIFF was imported into Photoshop and a mask was created using the "Magic Wand" tool.


Set the options to Tolerance value of 4 and check select the "Anti-aliased" option.
Place the tip of the "Magic Wand" tool within the black shape and click. This will select the shape. Save the selection as a mask (Selections> Save Selections> New).

## 2. Channels Palette

Click on the Channels tab. The new mask will appear at the bottom as \#4. Scrolling down may be necessary to find it.

## 3. Channels Options



Double clicking on the channel \#4 will activate the "Channel Options" dialog box shown below.

## Chamuel Optimans:

Narne Fillelse Marid

Rename \#4 to full Size Mask and click OK.

The Channels palette label will reflect the name change as shown to the right.


## 4. Gradeent Fill Tool



Click to activate it from the Photoshop
Toolbox or press "G".

## 5. Gradient Tool Options

The Palette tab will change automatically to show the "Gradient Tool Options". The defaults settings are Normal, Opacity $100 \%$, Mask and Dither are check selected.


Type is set to Linear and Gradient to Blue Arrow. Blue Arrow is a previously created custom gradient that I saved to the "Gradient List"

## 6. Gradient "drop-down" List

Access the "Gradient List" by clicking on the down arrow at the end of the Gradient "list window". Photoshop provides many custom gradients. For your test, select Copper from the drop down list. I will use my own gradient Blue Arrow for my demonstration image.

## 7. Apply The Gradient Fill From A to B

Click and drag from point " $A$ " to point " $B$ " the selected gradient as shown below.


This JPG sample is scaled to $60 \%$ reducing the file size for faster down-loading and layout considerations.

## 8. Changing The Gradient Results

Using a gradient from the list does not always provide the exact solution needed. Photoshop offers numerous ways to change image appearance. Few ideas are listed below:

- Use Gradient with different start and end points
- Add or subtract colors from the gradient.
- Modify the color position in the gradient.

Try these and other ideas on your own. Use my examples as jumping off points off points for similar projects that inspire your imagination and drive.

## PHASE I-B: Backboard Under Painting

## Preliminary Stage A

Gradient options Edit...
Gradient Editor
About The Tool

- Adjust
- Color-Indicators
- Color-Selectors

Color Indicator Location

## Preliminary Stage B

Fast Track
The Step-By-Step Method

- Foreground Color
- Color Picker
- RGB
- Background Color

Create A Custom Gradient

- Fast Track
- The Step-By Step Method


## The Final Steps

1. Result
2. Reapply Gradient
3. A Note on the Purpose

## Preliminary Stage A

## 1. Gradient Option Edit...

Click on the Edit... button in the Gradient Tool Options Palette to display the Gradient Editor as shown below.


## 2. Gradient Editor

This dialog box is cropped and it is showing the copper gradient pre-installed by Photoshop.


The Gradient Editor allows for creation of new gradients or customizing gradients from the drop-down Gradient List.

## 3. About The Tool

- Adjust: Color will add the currently active color to the Gradient. It is the default setting. Transparency will add transparency to the gradient, a very powerful feature.
- Color-Indicators: These triangle points touch the color band. They can be changed in color, be moved, deleted, or new ones added.
- Color-Indicators: These triangle points touch the color band. They can be changed in color, be moved, deleted, or new ones added.
- Color-Selectors: These are the buttons and box in the lower left corner. They allow for quick access to the following:
- Current Active Color, the left buttons.
- Foreground color, the middle F buttons.
- Background color, the right B buttons.
- Color Picker, the rectangular box right of the buttons.


## 4. Color Indicator Location

In the sample above the second "Color Indicator" is selected and its location is $30 \%$. The "zero point" is at the left edge. Most of the time, this particular information is irrelevant.

## Preliminary stage B



## 1. Fast Track

Set foreground color to H: 211, S: 72 and B: $100 \%$.
Set background color to H: 211, S: 72, and B: $40 \%$. The sample Toolbox image shows the correct colors.

If this instruction is too sparse, the following will walk you through the process. Otherwise, skip step 2.

## 2. The Step-By-Step Method

- Foreground Color: Click on the top foreground color box in the Toolbox. This will launch the Color Picker shown to the right. This sample is severely cropped for layout and file size considerations.
- Color-Picker: Duplicate the values shown in the sample to the right.
- Hue value set 211 degrees.
- Saturation value set to $72 \%$.
- Brightness value set to $100 \%$.
- RGB: Its value change automatically.

- Background Color: It is $60 \%$ darker and Brightness value is the only thing that changes.
- Brightness value changes to $40 \%$.


## 3. Create A Custom Gradient

Let's change the Copper scheme to Blue.


## 4. Fast Track

- Change the active cream color to white.
- Move its position to the left from $30 \%$ to $25 \%$.
- Delete the drake brown Color Indicator Tab to the right by dragging it down off of its position.
- Change the left Tab to the Foreground color and the right Tab to the Background color.

Newly created 3- tab Blue Gradient.


Continue on and do the step-by-step.

- The

Step-By-Step
Method


- Click on the Color Selector F (Foreground color).
- Click on the Color Indicator tab on the left Edge turning the left side to the Foreground color (light blue).
- Click on the Color Selector B (Background color).
- Click on the Color Indicator tab on the right edge turning the right side to the Background color (dark blue).
- Click on the light copper Color Indicator tab.
- Click on the Color Selector box to open the Color Picker shown to the right.
- Change the $S$ : and $B$ : values as per sample turning the light copper band white.
- Grab and move the White band left from $30 \%$ to $25 \%$.

- Click on the dark copper tab and click in the Color Selector box to open the Color Picker.
- Set the values to H: 211, S: 95, and B: 70.
- Change its position from $84 \%$ to $74 \%$.


## The Final Steps

## 1. The Result

The step-by-step approach resulted in a richer and smoother 4-color gradient. Scroll up and compare.


Click saves to add it to the Gradient List. Name it Tutorial Blue.

## 2. Reapply Gradient

Go to the original Corel Shape layer. If the Selection has been discarded, select it again by loading the "Full Size Mask".

Select > Load Selection...

- Channel: Select Full Size Mask from the drop-down list.

- Click on the New Layer button to create a new layer.
- Apply the Tutorial Blue gradient using the original "A to B" spread.

The resulting gradient image should resemble the above sample.

## 3. A Note on The Purpose

The under painting does not require a specific color scheme. The goal of this section was to give guidance on the use of the "Gradient Editor" to create new or to customize gradients.

## PHASE II - A: Rainbow Façade Preparation

This section will take you from the previously created "Under Painting" to a "Colorized 3-D" stage.

- Duplicate Safeguard
- Reduce Contrast
- Add Noise
- Add 3D (Bas Relief)
- Lighten and Preview
- Colorize
- Rename


## 1. Duplicate Safeguard

Duplicate the master image for safety, comparison, and quick access ("drag" the Background layer to the "Create New Layer" icon).

The new layer Background copy Becomes the "Work Layer".

2. Reduce Contrast: Image > Adjust > brightness/ Contrast...

- Contrast set to value (-31).


3. Add Noise: Filter > Noise > Add Noise.

- Uniform set to value (17).



## 4. Add 3D (Bas Relief)

- Set the foreground color to black and set the background color to white (the default state).

Click on the following Toolbox icon.

- Filter>Sketch>Bas Relief
- Detail set to value (9).
- Smoothness set to (5).
- Light Direction set to (Bottom).



## 5. Lighten and Preview

- Eliminate the "marching ant" Selections outline (Ctrl+D)
- Add a black background behind the 3-d shape.
- Add a new layer (click on "Create New Layer").
- Move the new layer below the 3-d shape layer ("drag" to the new layer position).
- Select the entire layer $(\mathrm{Ctrl}+\mathrm{A})$.
- Fill with black (Edit> Fill... Use: Black).
- Lighten The Shape
(Image > Adjust > Brightness/Contrast...)
- Brightness set to $(+16)$.
- Contrast set to (-7).



## 6. Colorize

Add color (Image > Adjust > Hue / saturation...)

- Check selects Colorize.
- Check selects Preview.
- Hue set to value (-133).
- Saturation set to value (40).


## 7. Rename

- Double click on the "Work Layer".
- "Layer Options" Dialog box opens.
- Rename Background copy to Colorized.


## PHASE II-B: Backboard Rainbow Façade

Creation

Continue working with the previously created file.

## 1. Contract and Feather Full Size Mask.

- Turn off thee Colorized and the Black layers (click on the eye icon in each layer).
- Click on the Background Layer.
- Click on the New Layer Icon.
- Rename this layer Rainbow Façade.
- Load the Full Size Mask.
- Select> Modify> contract... to value3.
- Select> Feather... to value 2.

- The sample indicates the mask contraction.


## 2. New rainbow Façade Layer with Spectrum

## Fill

- Select the Gradient Tool from the Toolbox.
- Select the Spectrum Gradient from the Tools Palette Gradient List.
- Apply Spectrum to the Rainbow Façade Selection from the bottom-left to the top-right (A to B spread).



## 3. Make it look more like the above sample.

- Display both the Colorized and the black layers (click in the display boxes to bring back the eye icons).
- Move both Colorized and the Black layers Below the Rainbow Façade layer.


PHASE III-A: Add Text to Logo

## 1. Preparation Steps

- Set the Foreground Color
- Double click on the Foreground Color swatch in the Toolbox to open the Color Picker.
- Use the following settings: H: 184, S: 100, and B: 100.
- Make the Spectrum Layer active if necessary.
- Select the Type Tool (click on the Type Tool icon in the Toolbox).
- Click just inside the bottom left corner the work image.
- The resulting Type Tool Dialog Box is shown to the right.
- Duplicate the settings as shown in the Dialog Box. Substitute the font is necessary.



## The Style

## 2. Text Position Preview

Your image should look something like this sample below.


Photoshop 4.x automatically puts the text on a new layer. Relabel the text layer Style.

Photoshop 3.x floats the text on the current layer. Place the text on a new layer and Relabel the text layer Style.

## 3. Separate the and Style into different layers.

- Activate the Style Layer if necessary.
- Select The with the "Marquee Selection" tool (M key).
- Cut and paste The into a new layer (Shift+ ctrl+ J).
- The ends up on the layer about the Style Layer.

Text elements are now independent. Move the text elements to create a rough composition.

- Activate The layer if necessary.
- Hold down the Ctrl key and "Drag" The to its new location.
- Do the same for Style.


## 4. Move and Nudge the text elements into their final composition.

- Turn off the Spectrum layer for easier preview by clicking on its Display icon (the eye).
- Select the text layer for The.
- Nudge it into its final position (Ctrl+ arrow keys).
- Select the Style Layer.
- Nudge it into its final position (Ctrl +arrow keys).
- Turn Spectrum back on, if applicable.


## 5. Getting Closet



The text position is fin but it does not separate well from the background. It is hard to read.

The following section will make it pop off the page in 3-D.
PHASE III-B: Logo Text In 3D

1- Layers Options Flyout
2- Merge Layers To Create The New Text Face Layer
3- Creating the Text Shadow And Highlight Layers
4-Draken The Shadow Layer
5- Lighten The Highlight Layer
6- Nudge The Highlight And Shadow Into Postions.
7- Lighting Direction Change
8- Not Right Yet
9- A Solution Recipe
10- The Final Tweak
11- The Result

## 1-Layers Options Flyout

Access the flyout by clicking on the black triangle at the top right corner of the Palette title area as in the sample below.

The chain icon shows that The layers is Linked to the Style layer.


## 2... Merge Layers To Create The New Text Face Layer

- Click on the Merge Linked option from the flyout, which will merge The and Style into one layer.
- Relabel the new layer Text Face.


## 3...Create The Text Shadow And Highlight Layer

- Duplicate text Face twice.
- Rename the First copy to Shadow.
- Rename the second copy to Highlight.
- Click and Drag the Text Face Layer above duplicate layers.
- Confirm that your text looks like my sample
- 


## 4. Darken The Shadow Layer

- Select the shadow Layer by clicking on it.
- Darken the layer (image> Adjust> Hue/ Saturation...)
- Check: Colorize option.
- Hue: - 148, Blue.
- Lightness: - 79, Very Dark.
- 


## 5. Lighten The Highlight Layer

- Select the Highlight Layer by clicking one it.
- Lighten the layer (Image> Adjust > Hue/ Saturation...)
- Check: Colorize option.
- Hue: - 148, Blue.
- Lightness: - +83 , Very Light.


## 6. Nudge The Highlight and Shadow Into Position

- Move the Highlight up and to the left by 1 nudge each ( $\mathrm{Ctrl}+$ the up arrow, $\mathrm{Ctrl}+$ the left arrow).
- Move the Shadow down and to the right by 1 nudge each ( $\mathrm{Ctrl}+$ the down, Ctrl + the right arrow).


## 7. Lighting Direction Change



I intentionally changed the light direction in the foreground text element.

Changing the lighting direction can sometimes help to add to the "illusion of depth".

## 8. To Right Yet

What are my options...

- Change text color
- Darken the text shadow.
- Lighten the text highlight.
- Darken the spectrum face.
- Recolorize the spectrum face.
- Blur the background.
- And much more ...


## 9... A Solution Recipe



- Mute the Spectrum Gradient layer by setting the Opacity value to $91 \%$ allowing the Under Painting to show through a slightly.
- Make the text Highlight pure white (Image > Adjust> Brightness to value + 100).
- Make the text Shadow pure black (Image > Adjust > Brightness to value- 100).
- Change the Face color (Image> Adjust> Hue set to value 132 and Light set to value +13 )
- Apply Gaussian Blur to the text highlight (Filter> Blur> Gaussian Blur...)
- Check selects Preview.
- Radius set to value .5 pixel, which is only a hint of softness.


## 10...The Final Tweak

- Select the Spectrum Gradient layer.
- Darken and lower the Contrast slightly (Image > Mode> Brightness/Contrast...).
- Brightness set to value -29
- Contrast set to value -12
- Touch-up the Sharpness using the UnsharpMask (Filter> Sharpen> UnsharpMask).
- Amount set to value $70 \%$.
- Radius set to value 3.2 pixel
- Threshold value unchanged 0 , default


## 11...The Result

Final comp


- The difference is subtle but the Final Comp is better. The obvious change can be easily seen in the top right corner.
- I found the softness in the top right corner distracting. The soft brightness drew attention unnecessarily. I only sharpened the back ground layer but the entire image looks sharper in Final Comp.


## PHASE IV- A: Visual Illusion

## 1... The Original Renton Logo Image

This custom logo image was created for a print project. The art work much larger and super crisp. It was reduced to work for this online tutorial. Photoshop bicubic image scaling is very good but not perfect.


This sample lost its crispness and vibrancy in the Photoshop reduction process.
Also the high degree of JPEG compression adds to the slightly mushy feel this 16 KB image.


## 2. Improved Image

This Photoshop file has been reworked to enhance its presence without increasing the critical file size .

This file 1 KB smaller than the original file above

## 3. The Background Base And Rainbow Façade Tweak

The Background Base and the Rainbow Façade have been individually sharpened. Care was needed here because sharpening usually adds to the file size.

- Click activates the Background Base layer.
- Sharpen the layer (Filter> Sharp> Unsharp Mask...)
- Check activate Preview
- Amount set to value 65 percent
- Radius set to value .5 pixel.
- Threshold set to value 1 level.
- Click activates the Rainbow Façade layer.
- Sharpen the layer (Filter> Sharp> Unsharp Mask...)
- Check activate Preview
- Amount set to value 35 Percent
- Radius set to value .7 pixel.
- Threshold set value 1 level.


## 4... The More Obvious Text Tweak

Only a single black intermediate shadow layer was added.

- Duplicate the text layer.
- Drag it to the New Layer icon.
- Colorize it to black (Ctrl + "U").
- Lightness: - 100
- Nudge 1 click up and 1 click to the left.


## PHASE IV-B: File Formats (Save as...)

## JPEG: A super compressed file format.

Joint Photographic Experts Group wrote the compression standard for the JPEG file format. In the previous section, the Improved Image was saved at JPEG Quality set to Medium 3 as shown in the sample below.

The characteristic JPEG compression artifact can be seen in the Improved Image. I call the look mushy.

A higher quality setting would have reduced the artifact but the file size would have increase.


Though the settings are numeric, they are not absolute. The image size and characteristics interact with the JPEG compression process. Testing is a must with JPEG

## Photoshop JPEG Descriptive Settings: A Great Guide.

JPEG is universal but the setting indicators are not. Photoshop has an excellent descriptive settings. The results coincide with the description of Low, Medium, or High. Do some testing on your own and see for yourself.

- Oto 2 are LOW, avoid if possible.
- 3to 5 are MEDIUM; lot of web images requires this.
- 6 to7are HIGH, better settings for better quality.
- 8 to 10 are MAXIMUM, best settings to use.

Paint Shop Pro TM is a small graphics application that I use often. Unfortunately, its JPG setting method is gruesome by comparison. Paint Shop Pro's JPEG settings range from 1 to 99 with no clue as to image quality.

I use Progressive set to Scan 3 for web images. This allows the image to build in focus from soft, medium, to sharp. The Scan 5 setting looks more like a down- loading error.

## CompuServe GIF: Graphic Interchange Format.

A great format for saving graphic files. In this case, Paint Shop Pro TM is my application of choice for handling GIF files. Especially the GIF transparent background color option.

The sample Photoshop menu above has a torn edge look. This would not have been possible with the GIF transparent background color option.

A major draw back to the Gif format is its limited 256 color range. Ordinarily, photographic images do not survive such a radical color palette reduction

I have seen some pictures reduced to a GIF and they were quite passable. The process can require labor intensive manual color palette manipulation.

Try it and you will learn a lot about working with palettes. GIF animations using photo realistic images will demand photo images to be reduced to 256 colors.

## JPEG: Staggering Power.



## 12KB: JPEG set to Medium 5.



## 13KB: GIF file size is bigger.

- Full color JPEG file size is 12 KB .
- The 256 color GIF file size is 13 KB .
- The LZW compressed TIFF file size is 115 KB .
- The uncompressed TIGG file size is 232 KB .

This is only one example. An image with different characteristics will yield different file size relationships.

## TIFF with LZW Compression

The TIFF file format is excellent for archiving or transferring photographic images. PC's and Mac's share TIFF files easily. LZW is a no-loss alga rhythm so nothing is sacrificed for file size reduction.

Regardless of the setting, JPG images suffer from loss of date. This type of compression format is referred to as Lsooy. I do not recommend JPEG for archive purpose. Photoshop Filters work best on high quality images.

## 3-D BUTTONS IN THREE STEPS

## Let's make a button

It is the Corel Palette Shape again just follows the three steps given below.
First Step: Create the basic elements
1- Open the Corel Draw "Palette Shape. TIF" in Photoshop.

- Reliable Background to Palette Shape.

2- Create the Gray Background layer (Layer 1).

- Click on the "Create New Layer" Icon.
- Relabel "Layer 1" to Gray Background.
- Select the entire layer (Ctrl + A ).
- Fill the selection with $50 \%$ gray (Edit> Fill... > Use: 50\% gray)

3- Create layer 2.

- Duplicate Palette Shape ("Click, drag and drop" the Palette Shape Background on the "Create New Layer "icon).
- Move the Palette Shape copy to the top layer position (click, drag, and drop).
- Reliable "layer 2" to Button Face (Double click on "layer 2" to open "Layers Option" Dialog Box).

4- Create the Button Face color.
5- Click on the Foreground "Color Patch" in the Toolbox to open the "Color Picker" and reset the HSB values as follows:

- H: value set to 262
- S: value set to 100
- B: value set to 90

6- Fill the Button Face with the new Foreground Color.

- Select the "Paint Bucket Tool" (K key).
- Click the cursor tip inside the Button Face shape.

Your Layers Palette should be looking similar to the sample to the right.


## Second Step: Add the 3D elements

1- Duplicate the Button Face layer twice (Drag the Button Face layer to the "Create New Layer" Icon twice).

2- Move the Button Face layer Above the two copy layers (click, drag, and drop).
3- Relabel the top copy Highlight (Double click on the layer to open the "Layers Options").
4- Relabel the other copy Shadow (Double click on the layer to open the "Layers Options").
5- Colorize each to their proper values.

- Click on the Highlight layer.
- Colorize the highlight to white (Image> Adjust> Hue/Saturation...).
- Check selects Preview.
- Set Lightness value to +100 .
- Click on the Shadow layer.
- Colorize the shadow to black (Image> Adjust> Hue/Saturation...)
- Check selects Preview.
- Set Lightness value to - 100

6- Position the Highlight and Shadow.

- Activate the Highlight layer.
- Nudge up and to the left by 1 click each. (Arrow key up and arrow key left by 1 click white holding down the Ctrl key).
- Activate the Shadow layer.
- Nudge down and to the right 1 click each. (Arrow key down and arrow key right by 1 click white holding down the "Ctrl key").

7- Soften both the Highlight and Shadow for realism.

- Activate the Highlight layer.
- Add a slight blur (Filter> Blur> Gaussian Blur> Radius: value. 03 Pixel).
- Activate the Shadow layer.
- Add a slight blur (Filter> Blur> Gaussian Blur> Radius: value. 03 Pixel).

8- Recolor the Highlight for harmony.

- Change the foreground color to H: 247, S: 42, and B: 100 .
- Select the "Paint Bucket" from the Toolbox.
- Select the Highlight layer.
- Click the "Paint Bucket" tool tip in the "button shape".

Your Layers Palette should be looking similar to the sample to the right.


## Third Step

Create an Intermediate Shadow and Highlight layers to add to the realism.
The final layers palette will look like this multilayered sample to the right.
Compare this against the previous sample.


1-Duplicate the Button Face layer twice (Drag the Button Face to the "Create New Layer" Icon twice).

2- Move the Button Face layer above the two copy layers (click, drag, and drop).
3- Relabel the top cop Inter-Highlight (Double click on the layers to open the "Layers Options").
4- Relabel the other copy Inter-Shadow (Double click on the layer to open the "Layers Options").

5- Colorize each to their proper values.

- Click on the Inter-Highlight layer.
- Colorize the highlight to white (Image> Adjust > Hue/Saturation...).
- Check selects Preview.
- Set Lightness value to +100 .
- Click on the Inter-Shadow layer.
- Colorize the shadow to black (Image> Adjust> Hue/Saturation...)
- Check selects Preview.
- Set Lightness value to - 100

6- Position the Inter-Highlight and Inter-Shadow.

- Activate the Inter-Highlight layer.
- Nudge up by 1 click (No side movement).
- Activate the Inter-Shadow layer.
- Nudge down by 1 click (No side movement

7- Special treatment to the Inter-Highlight layer.

- Click selects the Inter-Highlight layer.
- Go up to the Opacity gadget and reduce the setting from $100 \%$ to $39 \%$.
- If necessary, look at the "Layers Palette" sample below.


## Notes On The Previous Action

Mixing colors using reduced Opacity is a sure fire way to make colors and images work together harmoniously.


## DROP SHADOWS

## Make It Float

Does it with a drop shadow?

## Resize The Canvas

The current Photoshop canvas size is too small to encompass the drop shadow area. Increase it by approximately $10 \%$ and put the size increase to the right and bottom of the image (Image> Canvas Size >).

- Width: Approximately $+10 \%$.
- Height: Approximately $+10 \%$.
- Anchor: Top left corner.

Continuation: Use the sample as a guide

- Change the Gray Background to white.
- Click activate the Gray Background layer.
- Select the entire layer ( $\mathrm{Ctrl}+\mathrm{A}$ ).
- Fill the selection with white (Edit> Fill> Use: White).
- Place the Palette Shape Layer above the new White Background.

- Duplicate the Palette Shape layer. ("drag" it to the "Create New Layers" Icon.
- Relabel the layer to Shadow (Double click on the copy layer to open the "Layers Options").


## Turn the new Shadow into the Drop Shadow Layer.

1- Relabel Shadow to Drop Shadow.
2- Nudge the Drop Shadow into position.

- Press and hold the "Ctrl" key.
- Press both the "down" and the "right" arrow keys seven times.
- Press the down key 3 more times.
- Release the "Ctrl" key.

3- Blur the Drop Shadow image to soften the lighting.

- Filter > Blur > Gaussian Blur... set to value2.5.

4- Lower the "Layers Opacity" to $44 \%$. This works especially well with texture backgrounds. It allows the texture to show through the shadow creating a very believable drop shadow.


## CREATING A CUSTOM BEVELED FRAME



## Corel Clip Art



## Custom Frame

## Procedure

## Part I: Current Page

- Make Changes In The Preference Settings
- New File Creation And Image Transfer
- View Command Settings And Option
- Create And Save Five Masks


## Part II: Next Page

- Use Masks To Cut Out Parts
- Add Effects: Apply surface and lighting treatments
- Final Enhancements: Tweak and retouch
- Final Color Tweak: Minor color correction


## Make Changes In The Preferences Setting

1- Open Preferences (File> Preferences).

- Units \& Rulers: Duplicate the sample settings.

- Guides \& Gird: Duplicate the sample settings.



## New File Creation And Image Transfer

1- Create a new Photoshop file (File > New...).

- Name: $\qquad$ Bevel Test
- Width: .......... 252 pixel
- Height: ........... 198 pixel
- Resolution: ... 72 pixel/inch
- Mode: $\qquad$ RGB Color
- Contents: $\qquad$ White

2- Open your art work Choice (File> Open...)
3- Crop the art work to the Bevel Test proportions.

- Select the Crop Tool from the Toolbox
- Turn on Tool Info (Window > Show Info).
- Use the Tool Info feedback to pull the Crop Mark out to W: 252 and H: 198.

4- Move the Crop Mark to the desired location (click, drag, and drop).
5- You may have to reduce the art work image size to make the crop work your artwork.
6- once the right composition is achieved, crop the image (Enter key).
7- Transfer the newly cropped image to the Bevel Test window

- Select the entire layer ( $\mathrm{Ctrl}+\mathrm{A}$ )
- Copy the selection $(\mathrm{Ctrl}+\mathrm{C})$.
- Activate the Bevel Test window (click on its menu bar).
- Paste the image into Bevel Test $(\mathrm{Ctrl}+\mathrm{V})$.
- Close your art work file.


## View Command Settings and Options

1- Go to View Menu and duplicate the settings below.
2. Compare your Bevel Test with the sample below.

- The ruler display as per Show Ruler option under the View Menu.
- The yellow grid lines as per Preference setting

3- Pull out red guidelines from the ruler using the sample above as guide.

- Click and hold the cursor on the left ruler.
- Drag the cursor into the screen.
- As soon as the cursor clears the ruler, a red vertical line with follow the cursor tips.
- The red line will snap to the yellow grid line.
- Release the mouse on that first grid line.]
- Pull a second guideline from the ruler.
- Let it snap to the second grid line and release mouse button.
- Pull two more vertical guideline and place them on the right side repeating the pattern as shows above.
- Pull out the horizontal guidelines from the top ruler.
- Position all four horizontal guideline as shown above.

4- Hide the ruler and the grid using the following steps.

- Eliminate the ruler (View> Hide Ruler).
- Eliminate the grid (View> Hide Grid).
- Hiding the grid eliminates the snap to grid function



## Create and Save Five Masks

( L or cycle with L )
1- Use the "Polygon Lasso" tool to make the mask parts.

- Frame Face Mask.
- Left Bevel Mask.
- Top Bevel Mask.
- Right Bevel Mask.
- Bottom Bevel Mask.

2- Use this "A to H" snap-to reference shown below to from the shapes.


## 3- Frame Face Mask

- Click on A, B, C, D, and A to close the selection.
- Save the selection (Select> Save Selections...)
- Go to the Channels Palette, double click on the new channel (\#4) and rename it Frame Face in the Channels Options dialog box).
- Click on A, D, E, H, and A to close the selection.
- Save the selection (Select> Save Selection...)
- Go to the Channels Palette, double click on the new channel (\#5) and rename it Left Bevel in the Channels Options dialog box).

5- Top Bevel Mask

- Click on A, B, E, F, and A to close the selection.
- Save the selection (Select> Save Selection...)
- Go to the Channels Palette, double click on the new channel (\#6) and rename it Top Bevel in the Channels Options dialog box).

6- Right Bevel Mask

- Click on B, C, F, G, and B to close the selection.
- Save the selection (Select> Save Selection...)
- Go to the Channels Palette, double click on the new channel (\#7) and rename it Right Bevel in the Channels Options dialog box).

7- Bottom Bevel Mask

- Click on C, D, G, H, and C to close the selection.
- Save the selection (Select>Save Selection...)
- Go to the Channels Palette, double click on the new channel (\#8) and rename it Button Bevel in the Channels Options dialog box).


## CREATING A CUSTOMBEVEL

## Procedure

## Part II: Current Page

- Use Masks To Cut Out Parts
- Add Effects: Apply surface and lighting treatments
- Final Enhancements: Adjust an retouch
- Final Color Tweak: Minor color correction


## Part I: Previous Page

- Make Changes In The Preference Settings
- New File Creation And Image Transfer
- View Command Setting And Options
- Create And Save Five Masks


## Use Masks To Cut Out Parts

1- Preparation: Create the 5 parts layers.


- Highlight the Art Layer.
- Drag it to the "Create New Layers" icon 5 times.
- Relabel the new layers as shown above.

2- Load the Frame Face mask into the Frame Face layer.

- Select the Frame Face layer.
- Open the mask dialog box (Select> Load Selection...).
- Choose Frame Face from the drop down list.
- The Frame Face mask will appear over the image as shown below.
- The sample image above has been lightened to enhance the visibility of the Selection line and to minimize file size.
- Cut away the unprotected area by pressing the "Delete" key. The result is show below and this image has not been lightened.



## Add Effects: Apply surface and lighting treatments

1-Decrease contrast

- Eliminate the mask ( $\mathrm{Ctrl}+\mathrm{D}$ ).
- Decrease contrast (Image> Adjust> Brightness /Contrast...)
- Set Contrast (-75).

2- Add Texture

- Add noise (Filter> Noise> Add Noise...).
- Set Noise level (25).
- Check select Gaussian.
- The result of the above two step.



## 3- Add a Color Shift

- Colorize (Image> Adjust> Hue/Saturation...).
- Check select Preview.
- Set Hue to blue (149).
- Set Saturation to mute ( $81 \%$ ).
- Set Lightness higher (+22).
- The result of the above step.

4- The remaining parts can be created by following the steps from above. Start with Use Masks To Cut Out Pates step number 2. Just change the part layer and the mask part. Do the Top Bevel next.

There is one additional step required by each of the parts and they are as follows:

- The Top Bevel is in deep shadow so it must be darkened (Image> Adjust> Brightness/ Contrast...).
- Check select Preview.
- Set Brightness (-80).


## The Top Bevel part.

- The Left Bevel is also in shadow but not as dark (Image> Adjust> Brightness/Contrast...).
- Check select Preview.
- Set Brightness (-40).
- The Right Bevel is a highlight so it must be lightened (Image> Adjust> Brightness/Contrast...).
- Check select Preview.
- Set Brightness (+50).

The Left Bevel and Fight Bevel parts.

- The Bottom Bevel is the main highlight so it is the lightest (Image> Adjust> Brightness/Contrast...).
- Check select Preview.
- Select Brightness for main highlight (+85).


## The Bottom Bevel part.



Final Enhancements: Adjust and retouch.
Adjust the newly create frame. I found it too bold for the artwork. It was toned down for the final version to retain the focus on the artwork.

The method I chose was to reduce the Layers Opacity setting to $75 \%$ for all the five parts layers. I could have chosen to reduce contrast but the result would not have been as painterly.

The picture with a softer frame.

## Retouching: Use the "Burn Tool"

The "Burn Tool" is part of a powerful triad (Burn, Dodge, and Sponge) in the Toning Tool set. Keystroke "o" will select or cycle through the 3 Toning tool choices. They are all very intuitive for photographers familiar with darkroom work.

The Sponge works like a polycontrast filter. It can add or reduce contrast in very localized areas. You can literally dodge and burn different contrast grades into one image.

For the non-photographer among you, just try it. It works wonders. For the retouching, use the "Burn Tool" with the settings suggested in the samples shown below.


Toning Tool Options... Burn Tool.. Brush Size Selections.
The framed picture above was already retouched. The sample below shows the original fiat lighting (lack of dimension) problem.

- Activate the Right Bevel layer.
- Burn the bottom corner area with burn tool exposure set at $50 \%$.
- The red marks in the center sample show the 3 burn locations.


The Final Tweak: Minor color and contrast correction.


Before


After

Enhance the color balance in the Art Layer (Image> Adjust> Color Balance...).

- Select midtones.
- Set Cyan (+19).
- Set Magenta (unchanged).
- Set Yellow (-7)

Change brightness and contrast in the Art Layer (Image> Adjust> Brightness/ Contrast...).

- Brightness value to +7
- Contrast value to +8


## ARROWS AND BUTTONS



## NO Right Answer: Go your way.

The JPEG arrow has more presence than the GIF arrow. The good looks comes at a price. The JPEG arrow weighs $50 \%$ more. At 3 KB the weight is negligible but it adds up.

If the download speed is crucial, plain text pointer links are super light. Plain text is sot very exciting but the decision is yours to weigh.

Purely Home Grown: From scratch.

These arrows are buttons and they were created totally in Photoshop.

## Part 1

- Start With Create New...
- Change Preference Settings.
- Fill The Background Layer With White.
- Use "Polygon Lasso Tool" With The "Snap To Grid".
- Save The Arrow Shape Mask.
- Turn Off The Grid.
- Create A New Layer.


## Part 2

- Create The Arrow Body Layer.
- Create The Arrow Body Part.
- Emboss Preparation 1.
- Emboss Preparation 2.
- Apply Emboss.
- Create The Final Colorized Layer.
- Add A Dimensional Text Layers.


## Start With Create New... (Ctrl +N).

Create a new file using the sample below as a guide.


## Change Preference Settings: (Ctrl +K)

Change Guides \& Grid preference settings as per sample.


## Fill The Background Layer With White.

- Select the entire layer ( $\mathrm{Ctrl}+\mathrm{A}$ ).
- Fill the selection white (Edit> Fill> Use: White).



## Use "Polygon Lasso Tool" With "Snap To grid".

- Turn on the View> Grid (Ctrl +").
- Turn on View> Snap to Gird (Shift +Ctrl+").
- Select the Polygon Lasso Tool (L or L again to cycle).

- Start the Polygon Lasso at the tip of the arrow (click on the tip snap-to point).
- Go clock wish and click on the tip again completing the 7-point Selection



## Save the Arrow Shape Mask (Selection> Save Selection...).

- Click OK to accept the default settings.
- Click on the Channels tab to open its Palette.

- Double click on the \#4 to Relabel it to Arrow Mask.
- Click on the RGB Channel at the top to bring back the RGB color image.
- Click on the Layers tab to return to Layers.


## Turn off the Grid (Ctrl +").

- The Snap To Grid is turned off automatically.

Create a new layer (Click on the Create New Layer icon).


- Reliable the new layer Arrow Base.
- Double click on Background copy to open the Layers Options dialog box.
- Enter Arrow Base for the new name.


## CREATE THE ARROW BODY LAYER

- "Drag" the Arrow Base layer to the "Create New Layer "icon.
- Reliable the Arrow Base copy to Arrow Body (double click on the Arrow Base layer to open the "Layer Options" dialog box and rename).


## Create The Arrow Body Part.

- Load the Arrow Mask selection if necessary (Select> Load Selections...Arrow Mask).
- Fill with black (Edit> Fill> Use: Black).
- Deselect the arrow shape $(\mathrm{Ctrl}+\mathrm{D})$.


Emboss Preparation 1: Set foreground and background colors.

- Step 1 is to click on the tiny b\& w "default color "icon.
- Step 2 is to click on the double headed "reverse colors" icon.


Emboss Preparation 2: Blur edges.

- Filter> Blur> Gaussian Blur...
- Check selects Preview.
- Radius set to value (1.7).

Apply Emboss: to the Arrow Body

- Select the Arrow Body layer if necessary.
- Apply the emboss filter (Filter> Style> Emboss...).
- Check the Preview option.
- Angel set value (141 degrees).
- Height set to value (7 pixels).
- Amount set to value (132\%).


## Create The Final Colorized Layer.

- Create a new layer above the Arrow Body layer.
- Select the Arrow Body layer.
- Click on the "Create New Layer" icon.
- Relabel the new layer Colorized $40 \%$.

- Load the Arrow Mask selection (Select> Load Selection> Arrow Mask).
- Modify the Mask before colorizing.
- Contract the mask (select> Modify> Contract... by 1 ).
- Soften the edge (Select> Feather... by1).
- Fill the mask with $50 \%$ gray (Edit> Fill>50\% gray from the list).
- Colorize The Arrow (Image> Adjust> Hue/Saturation...).
- Check select Colorize .
- Hue set to value (-140)
- Lightness set to value (+20)
- Complete the process by setting the "Layer Opacity" to $40 \%$ as shown above.


## Add The Dimensional Text Layers.

- Deselect the Colorized Arrow ( $\mathrm{Ctrl}+\mathrm{D}$ ).
- Create a new layer above the Colorized Arrow layer by clicking on the "Create New Layer" icon.
- Relabel the layer Black Text Face (see "Create The Arrow Body Layer" above)..
- Set the Toolbox colors to default (see "Emboss Preparation 1" above).
- Choose the Text tool. Select the Text Tool from the Toolbox (press the "T" key).
- Open the "Type Tool" dialog box (Click in the arrow point).

- Fill in the requester as per sample above as a guide.


## The Ention.

- Nudge the text into position (Ctrl +arrow keys).
- Duplicate the text layer (drag the text layer to the "Create New Layer" icon).
- Relabel the layer White Text Highlight.
- "Drag" the Highlight layer below the Text Face layer.
- Nudge the Highlight down and to the right by one click each .
- Colorize the Highlight to white (see Colorized Layer from above).


## The Ention

- The Layers Palette Should looks like the sample below.

|  |  |
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