

PHOTOSHOP BASICS: THE TOOLBOX

The tool palette is probably one of the most frequently used parts of Adobe Photoshop. If you want to make the most of Photoshop, you need to understand how to use the tools effectively.

You can pick up a tool in the toolbox simply by clicking on it. If you let your cursor sit over the tool without clicking on it, the name of that tool will appear on screen. It will look something like this:

Move Tool (V)

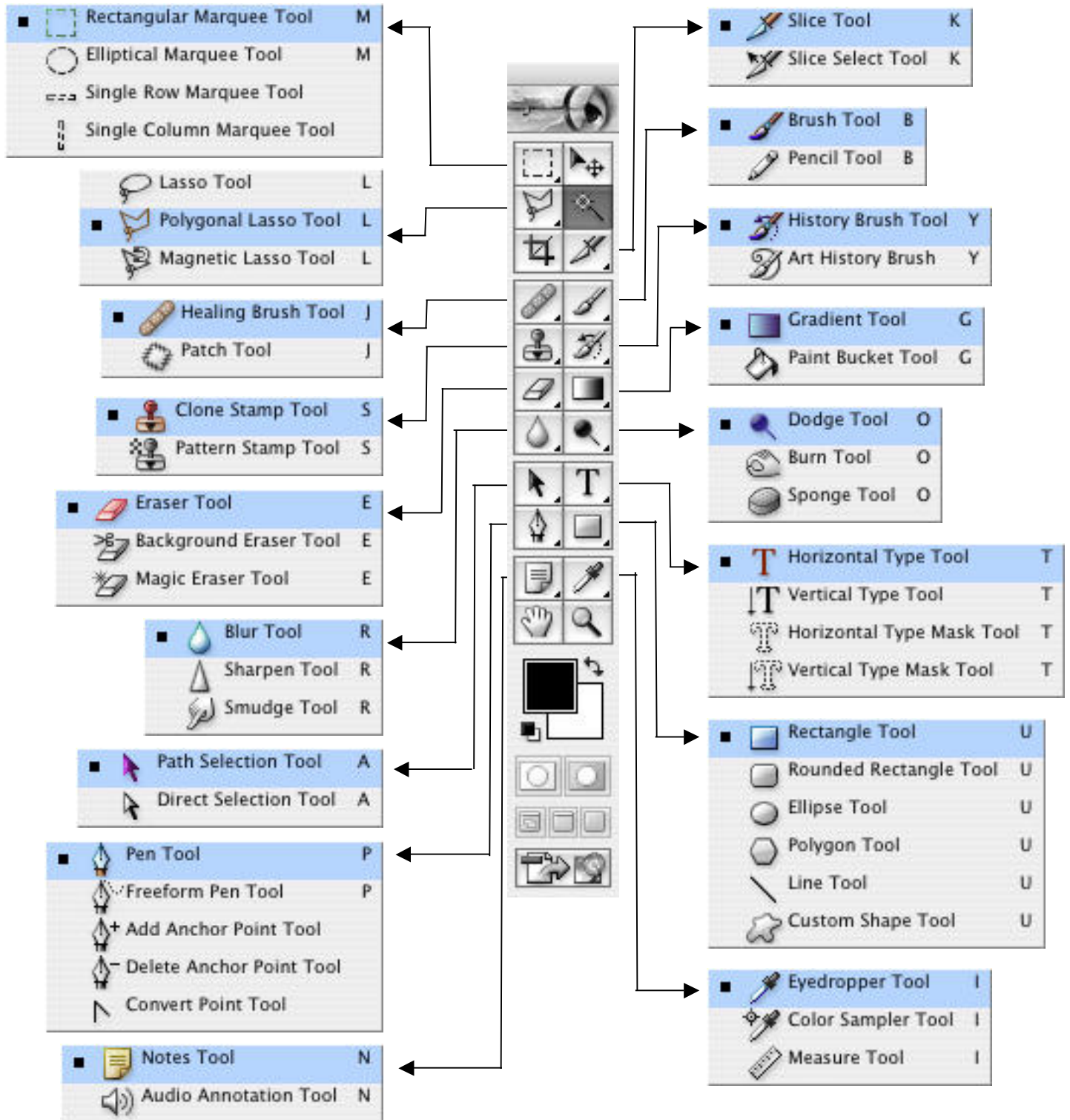
The letter inside the brackets is the keyboard shortcut for that tool. You will find a complete list of these shortcuts at the end of this tutorial.

Tools with little black arrows in the corner have hidden tools underneath. Whenever you select any tool from the toolbox, a series of options will appear at the top of the screen in the **Options Bar**. Here is an example of what part of the option bar looks like when you click on one of the selection tools:













THE TOOLBOX: A VISUAL GUIDE










There is a whole range of 'hidden' tools in the Adobe Photoshop toolbox. Here's a nifty little guide to help familiarise yourself with where they're located.


































PHOTOSHOP BASICS: THE TOOLBOX







A brief description of the tools in Photoshop and what they do.
The most frequently used tools are underlined.

TOOL	ICON	SHORTCUT	DESCRIPTION
<u>Rectangular Marquee Tool</u>		M	Allows you to make rectangular selections of the image.
Elliptical Marquee Tool		M	Allows you to make elliptical selections of the image.
Single Row Marquee Tool			Allows you to select a single row of pixels stretching from one side of the image to the other.
Single Column Marquee Tool			Allows you to select a single column of pixels stretching from the top of the image to the bottom.
<u>Move Tool</u>		V	Allow you to move selections and layers around the canvas.
<u>Magic Wand</u>		W	The Magic Wand allows you to select parts of the image that are similar in colour. Adjusting the Tolerance in the Options Bar when you click on this tool allows you to adjust how much the Magic Wand selects. If the tolerance is low, it will select only very similar colours. If the tolerance is high, it will select colours from a wider spectrum. Very useful for removing backgrounds from an image.
<u>Lasso Tool</u>		L	The Lasso Tool allows you to make irregular, freehand selections of the image.
Polygonal Lasso Tool		L	The Polygonal Lasso Tool allows you to make polygonal selections of the canvas – such as triangles and other irregular, straight edged shapes.
Magnetic Lasso Tool		L	The Magnetic Lasso Tool is similar to the regular Lasso Tool although it automatic clings the edges of an image. You can adjust the settings of this tool in the Options Bar .
Crop Tool		C	Click on this tool, select the area of your document that you wish to crop and hit 'Enter' on your keyboard to confirm the crop (if you're unhappy with the area you've selected, press the ESC key and try again).

Slice Tool		K	The Slice Tool allows you to divide the image into segments which can be exported to form a HTML table. This is useful for web design because parts of the image can be individually optimised or used as hyperlinks. Dividing such an image into smaller parts also makes it appear to load faster in browsers.
Slice Select Tool		K	This tool allows you to move and resize slices.
Healing Brush		J	The Healing Brush allows you to fix blemishes, scratches and other imperfections in images. Hold down the option key to select an area of the image which is similar to the one you want to repair. Use the healing brush to paint over the imperfection.
Patch Tool		J	This is another image retouching tool which allows you to patch areas of the image. There are three ways to do this. First, click on the Patch Tool and select an area of the screen that is to be patched up. Click on Source in the Options Bar. Drag the selected area to the region of the image you want to use as the patch. Clicking on Destination in the Option Bar enables you to do the reverse: select the patch, then drag it to the area you wish to patch up. Using the Options Bar, you may also patch up the selected area with a pattern.
<u>Brush Tool</u>		B	The Brush Tool is much like a conventional paint brush. When you click on the Brush Tool, you are able to select a range of different brushes from the Option Bar. You can also set the Opacity and Flow of the brush. Select the colour of the brush by clicking on 'Set Foreground Color' selector.
<u>Pencil Tool</u>		B	The Pencil Tool is much like a conventional pencil, except you can choose a whole range of shapes and sizes for the nib using the Options Bar. You can also set the opacity of the pencil.
<u>Clone Stamp Tool</u>		C	The Clone Stamp Tool allows you to clone parts of an image. A common use
Pattern Stamp Tool		C	The Pattern Stamp Tool allows you paint a pattern on the canvas. You can specify the sort of pattern you would like using the Options Bar.
History Brush		Y	The History Brush is very similar to the Clone Stamp Tool with one important difference: instead of allowing you to clone part of the image, it allows you to clone part of the image as it appears in the previous stage of the History. This means you can change an image and then regain portions of it using the History Brush.

Art History Brush		Y	The Art History Brush allows you to transform conventional images into works of art. Experiment by choosing different styles and brush types. It's best to work on a new layer above the original image, this will preserve the original if you make major mistakes.
<u>E</u> raser		E	Allows you to erase parts of the image. Erased areas are replaced with the Background Color.
Background Eraser		E	This makes the erased area transparent.
Magic Eraser		E	Much like the Magic Wand Tool, effective for removing areas of similar colour. Check 'Contagious' in the Options Bar to ensure the area you remove is smooth.
<u>G</u> radient Tool		G	Click on this tool, draw a line in the canvas to create a gradient from the foreground colour to the background colour. Options to create more complex gradients can be found in the Options Bar.
Paint Bucket		G	Fills an area of the screen with the foreground colour. The tolerance of this tool can be adjusted in the Options Bar.
Blur Tool		R	Using this tool, you can blur part of the image, strength of the blurring can be adjusted in the Options Bar.
Sharpen Tool		R	Use this tool to sharpened the image.
Smudge Tool		R	Use this tool to smudge the image.
Dodge Tool		O	Use the Dodge Tool to lighten parts of the image, you can choose to lighten shadows, highlights or midtones using the Options Bar. You can also set the exposure of the Dodge Tool.
Burn Tool		O	The Burn Tool darkens parts of the image. Like the Dodge Tool , you can choose to darken shadows, highlights or midtones using the Options Bar. You can also set the exposure of the Burn Tool.
Sponge Tool		O	The Sponge Tool can be used to saturate or desaturate the image, that is, make the colours more or less vivid.
Path Selection Tool		A	This line allows you to select vector graphics (the sorts of lines and shapes you can draw with the Pen Tools in Photoshop).
Direct Selection Tool		A	This allows you to manipulate vector graphics such as lines, shapes and text.

Horizontal Type Tool		T	Creates horizontal type, you can adjust the size and font in the Options Bar.
Vertical Type Tool		T	Creates vertical type, you can adjust the size and font in the Options Bar.
Horizontal Type Mask Tool		T	This creates a horizontal text shaped selection which can be manipulated in various ways.
Vertical Type Mask Tool		T	This creates a horizontal text shaped selection which can be manipulated in various ways.
Pen Tool		P	The pen tool is used to create paths, which can be made into selections or objects that can have a stroke around the outside or be filled with colour (like triangles, rectangles and other shapes).
Freeform Pen Tool		P	The Freeform Pen Tool allows you to create freehand paths.
Add Anchor Point Tool			The Freeform Pen Tool allows you to create additional anchor points on a path, essentially giving you the ability to manipulate it in very flexible ways.
Delete Anchor Point Tool			Allows you to change paths by deleting anchor points.
Convert Point Tool			Another tool for manipulating anchor points of a path.
Rectangle Tool		U	Draws rectangular paths.
Round Rectangle Tool		U	Draws rounded rectangular paths.
Ellipse Tool		U	Draws ellipses.
Polygon Tool		U	Draws polygons.
Line Tool		U	Draws lines.
Custom Shape Tool		U	Draws custom shapes.
Note Tool		N	Creates post-it notes which can be positioned throughout the document. Useful if you're working with other people.
Audio Annotation Tool		N	Creates audio annotations which can be positioned on the canvas. Useful if you're working with other people.

<u>Eye Dropper</u>		I	The Eye Dropper Tool is used to select colours from the canvas. The selected colour becomes the Foreground Color.
Color Sampler Tool		I	Selects colour information from a specified point in your image. You can store up to four different colours. These can be cleared using the Options Bar.
Measure Tool		I	Used to measure areas on the screen. Values appear in the Options Bar.
Hand Tool		H	Used to scroll around your document.
<u>Zoom Tool</u>		Z	Select a particular area of the screen to zoom into. Holding down the Option/Alt button enables you to toggle between zoom in and zoom out.
<u>Foreground/Background Color</u>			If you click on the foreground or background colour, you will be presented with a dialogue box allowing you to select the colour you desire.

PHOTOSHOP BASICS: STARTING A NEW DOCUMENT

When you launch Adobe Photoshop, you can start a document by selecting **File>New**. You will be presented with a dialogue box asking you to specify the size and various other parameters.



Selecting the **Preset Sizes** submenu allows you to choose from a range of preset document sizes, such as A4, 640x480, Standard PAL. There is an exhaustive list of options. If you're working in video or print, two mediums which require very specific page and screen sizes, this drop down menu quickly becomes a necessity.

You can also manually input the desired size of your image. If you click the drop down menu to the right of the height and width fields, you'll find different forms of measurement – pixels, inches, centimetres, millimetres, points, picas and columns.

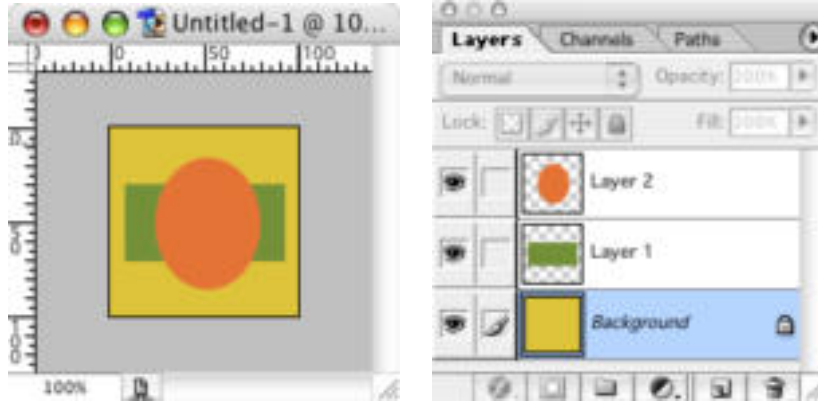
The resolution of your document depends on what the image is intended for. If it's for the web, set the resolution to 72 pixels/inch. If you're creating a print layout, the minimum resolution should be 300 pixels/inch. The higher the resolution, the slower your computer will perform.

You can select a range of colour modes, including Bitmap (black and white), Greyscale (shades of grey), RGB Color (colours are created using a combination of red, green and blue – best for onscreen work such as images intended for webpages), CMYK (colours are created using a combination of Cyan, Yellow, Magenta and black – this is best for work that is going to be printed, such as posters and magazines) and Lab Color.

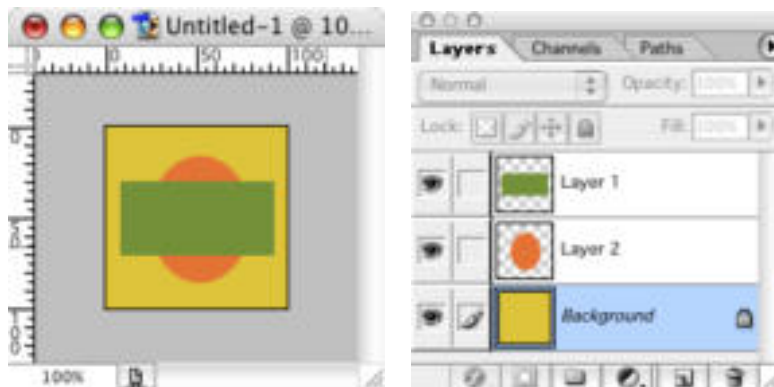
When you launch Photoshop with an image in the clipboard, Photoshop will automatically set the width and height of the new image to the dimensions of that picture (so, if your image is 50 pixels wide and 70 pixels high, Photoshop automatically puts these figures into the width and height fields).

PHOTOSHOP BASICS: WORKING WITH LAYERS

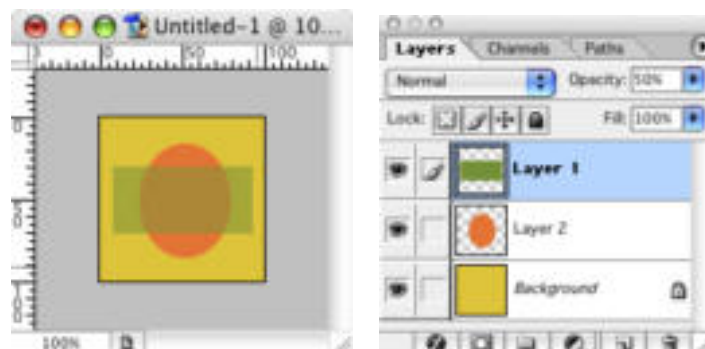
One of the most useful aspects of Photoshop is its ability to work with multiple layers. That is, you can have multiple images stacked on top of each other. Here's an example of what your document might look like if you're working with three different layers.



In this example, there are three layers. A thumbnail image of each layer is shown in the **Layers Palette**. Simply by dragging layers, you can rearrange their order.



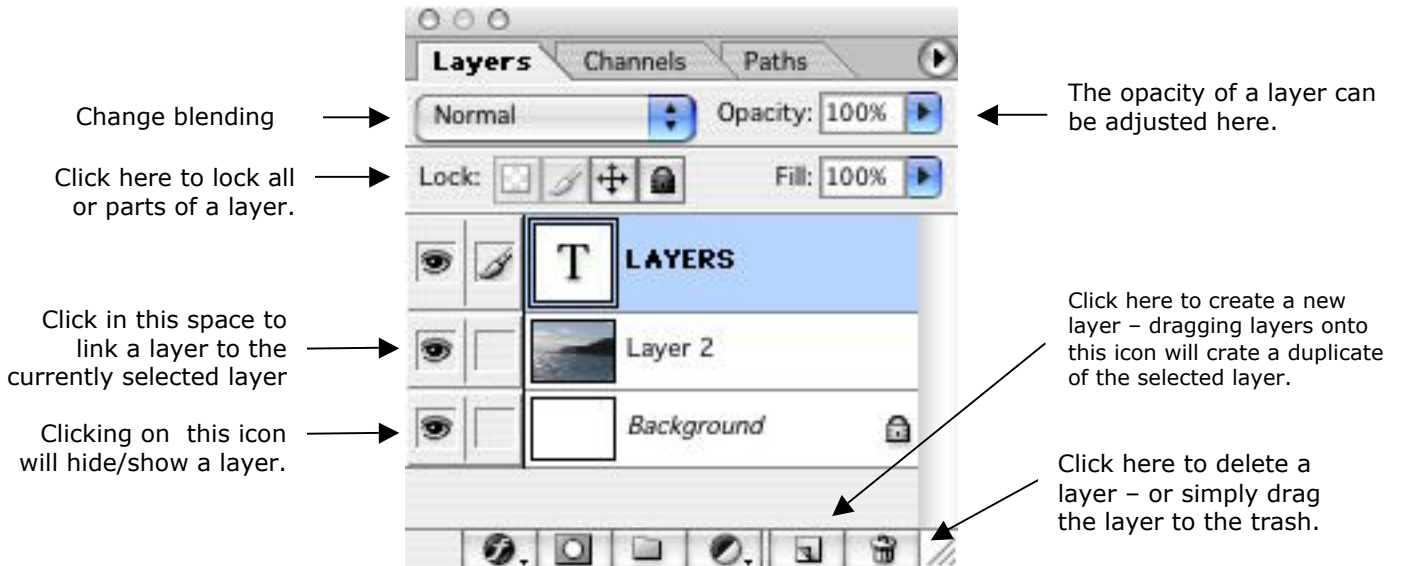
You can also adjust the **Opacity** of each layer.



Here, the opacity of the top layer has been reduced to 50%. Experimenting with layers and their opacity can produce complex and sophisticated images.

PHOTOSHOP BASICS: THE LAYERS PALETTE

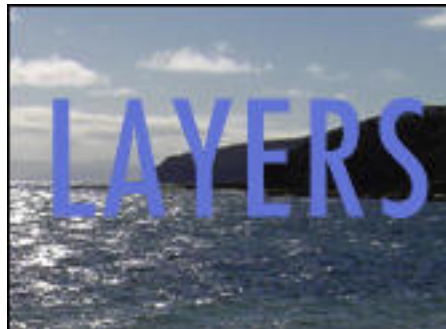
When working with layers, you will need to use the Layers Palette. This palette allows you to reorder layers, change their opacity, create new layers, hide layers, link layers and delete layers.



When you're working with multiple layers, you can manipulate the way a layer is blended with the layer beneath it. Here are examples of the layer blending modes available in Photoshop.

BLENDING MODE
Normal

EXAMPLE



Dissolve



Darken



Multiply



Color Burn



Linear Burn



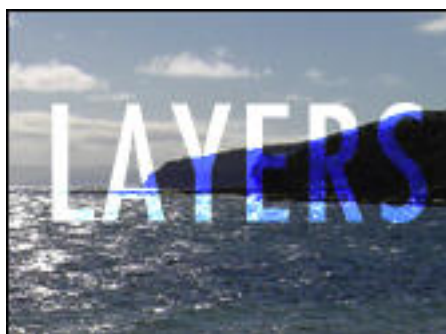
Lighten



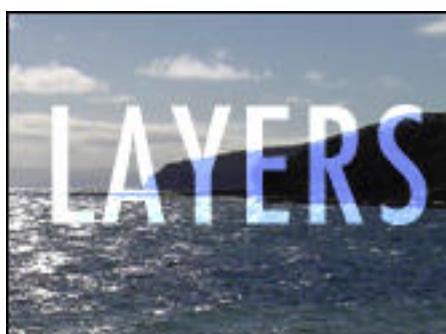
Screen



Color Dodge



Linear Dodge



Overlay



Soft Light



Hard Light



Vivid Light



Linear Light



Pin Light



Difference



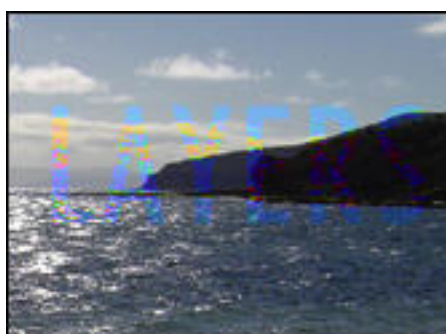
Exclusion



Hue



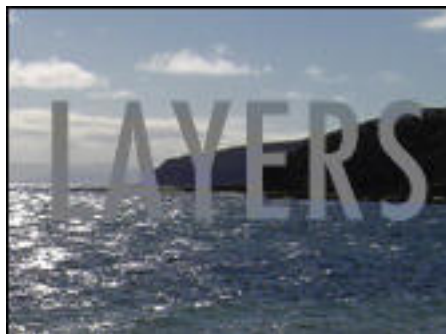
Saturation



Color



Luminosity



PHOTOSHOP BASICS: SELECTION

If you're going to do sophisticated work in Adobe Photoshop, you need to understand selection. Your ability to produce sophisticated imagery hinges on your ability to use the selection tools. If you wish to select parts of the image, you can use the following tools in the toolbox.



Rectangular Marquee Tool



Magic Wand



Elliptical Marquee Tool



Lasso Tool



Single Row Marquee Tool



Polygonal Lasso Tool

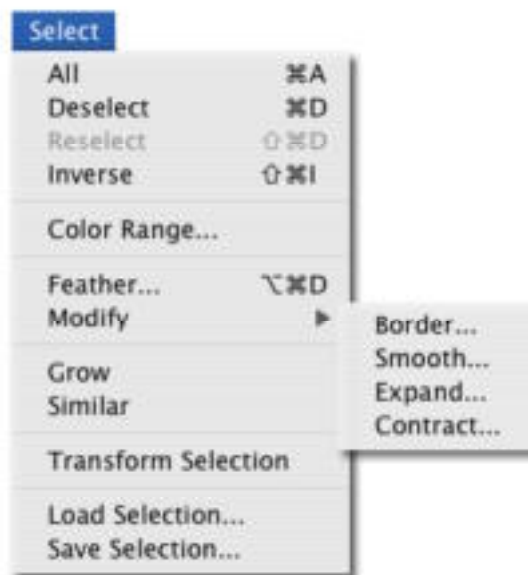


Single Column Marquee Tool



Magnetic Lasso Tool

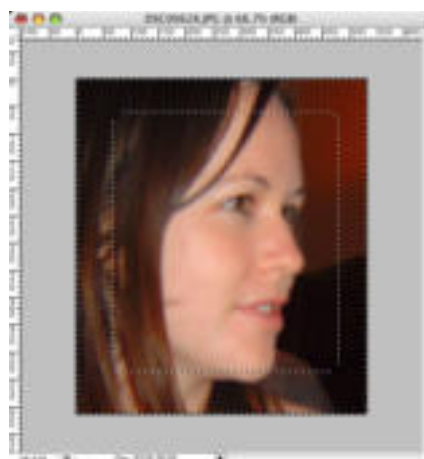
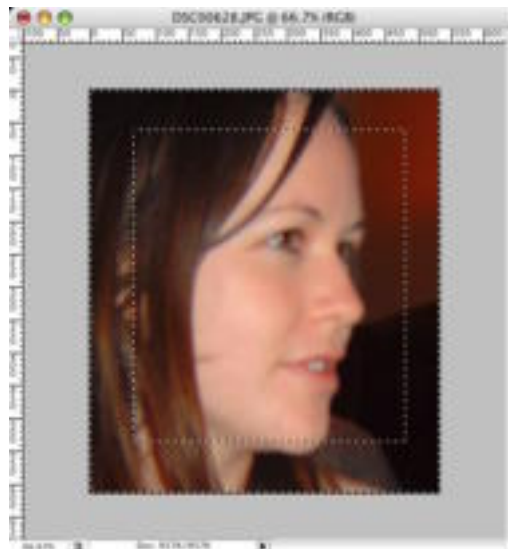
Because selection is so important when you start creating sophisticated images, Adobe Photoshop has an entire menu dedicated to the ways in which you can select parts of the image. Here's a quick summary of the feature you'll find in this menu:



MENU ITEM	DESCRIPTION
All	This allows you to select the entire image.
Deselect	Deselects currently selected area.
Reselect	Reselects previously selected area.
Inverse	Selects the inverse of your current selection.
Colour Range...	Allows you to select a particular colour. When you select this item, you will be presented with a dialogue box. You can toggle between a black and white picture of the Selection and the Image itself. When you click on the 'Image' button, you can choose the colour that you want to select using the eye dropper. The selected colour range will be displayed in the dialogue box.

**Feather...**

This menu item allows you to feather the area selected. In the following example, a rectangular area around the picture has been selected and feathered by 10 points. Notice what happens when the selected area, which has been feathered, is deleted.



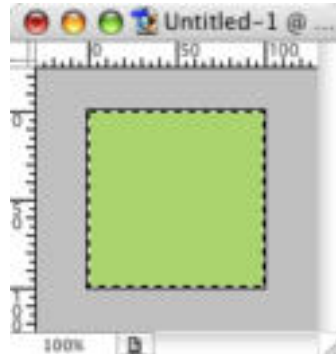
(notice the slightly rounded corners on the rectangular selection)



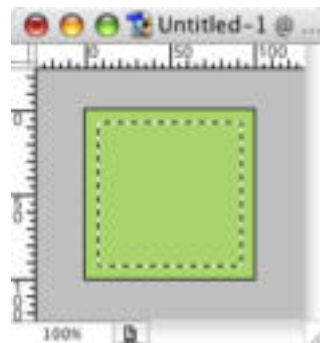
When the feathered area is filled, the image slowly fades into the fill colour.

Modify>Border...

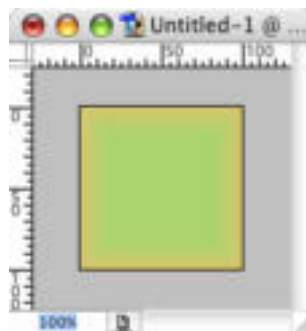
This constrains the image by creating a border around it. In the following example, the entire area has been selected. A border of 15 pixels has been created using the background colour.



Modify>Border (15 pixels)



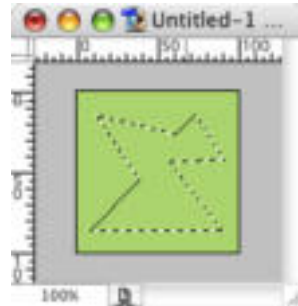
Pressing delete...



Fills the border with the background colour

Modify>Smooth...

This smooths the selected area. In the example, an irregular selection has been made with the Polygonal Selection Tool and it has been smoothed by 10 pixels.

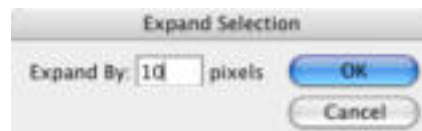
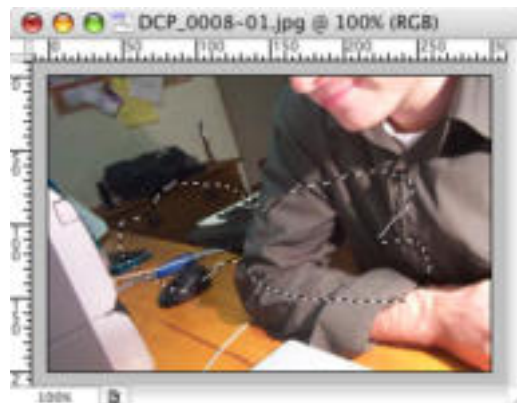


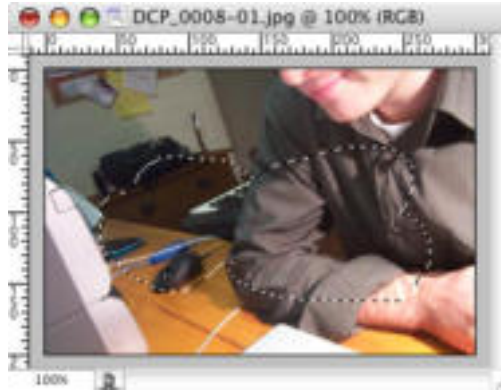
Modify > Smooth (10 pixels)



Modify>Expand...

Expand allows you to increase the selected area by a specified number of pixels. In the example, a selection has been made with the Lasso Tool. It has been expanded by 10 pixels.





Notice that the selected area has increased by ten pixels around the perimeter.

Modify>Contract...

Contract allows you to decrease the selected area by a specified number of pixels. In the example, a selection has been made with the Lasso Tool. It has been contracted by 10 pixels.



If you look closely, you will notice that the selected area has decreased by 10 pixels all the way around the perimeter.

Grow...

Using **Grow** will increase the selected area to encompass nearby areas of similar colour. Here, an area has been selected with the **Lasso Tool** and the **Grow...** function has been performed. Notice how the selected area increases each time to incorporate areas of similar colour...



Similar...

Similar... allows you to select areas of a similar colour or tone to the area currently selected. In this example, a small area of the picture has been selected with the **Lasso Tool**. Choosing similar has selected areas of the picture that are similar in colour.

**Transform Selection**

Transform Selection enables you to manually resize the selection.

Load Selection

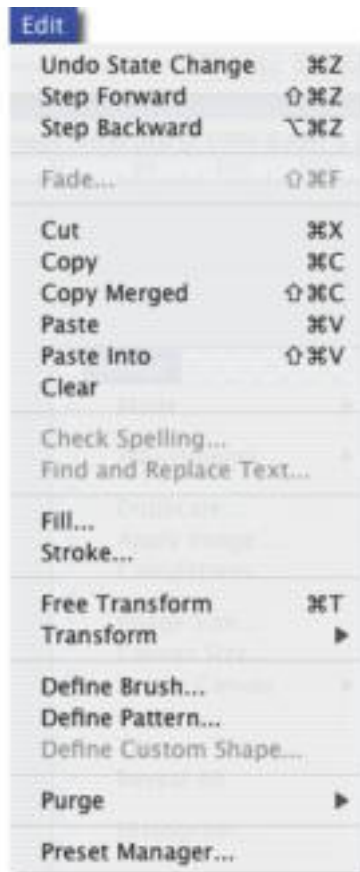
Allows you to load saved selections.

Save Selection

If you find yourself frequently selecting the same area or a similar shape, you are able to save these selections for later use. Saved selections can be reused by going to **Selection>Load Selection**.

PHOTOSHOP BASICS: THE EDIT MENU

The Edit menu contains a range of powerful ways to manipulate the image you're working with. You'll find yourself using the features under this menu quite frequently no matter what sort of image you're creating. Here's a brief summary of the features you'll find in this menu.



MENU ITEM

Undo

DESCRIPTION

Allows you to undo the previous action.

Step Forward

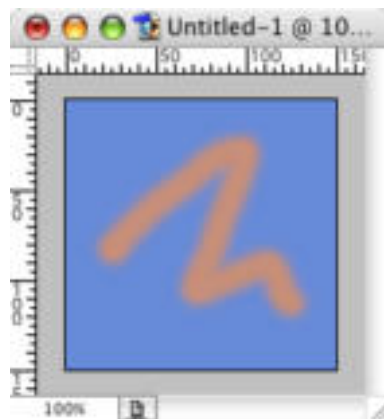
Allows you to move forward in the history.

Step Backwards

Allows you to move backwards in the history.

Fade

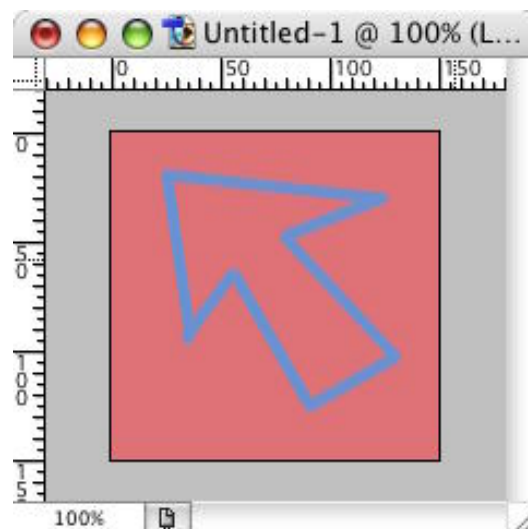
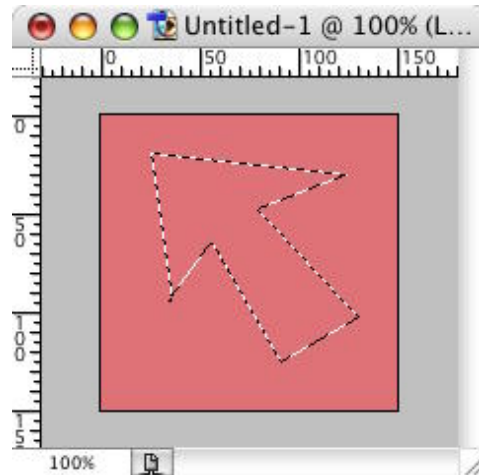
Fade allows you to fade brush strokes after drawing them. You can also apply various blending modes to the brush. In this example, a squiggle has been drawn on a layer above the background using the **Brush Tool**. It has been faded to 70% of its original opacity.



- Cut** Allows you to cut out the selected area to paste somewhere else.
- Copy** Copies the selected area.
- Copy Merged** Copies all of the visible layers into one image.
- Paste** Pastes the copied selection, creating a new layer.
- Clear** Clears the selected area.
- Check spelling...** Basic spell checker.
- Find and Replace Text...** Allows you to find and replace text, much like the type of feature you find in a word processor.
- Fill...** Fills the selected area. You can choose from the foreground colour, background colour, pattern, 50% grey, black and white.

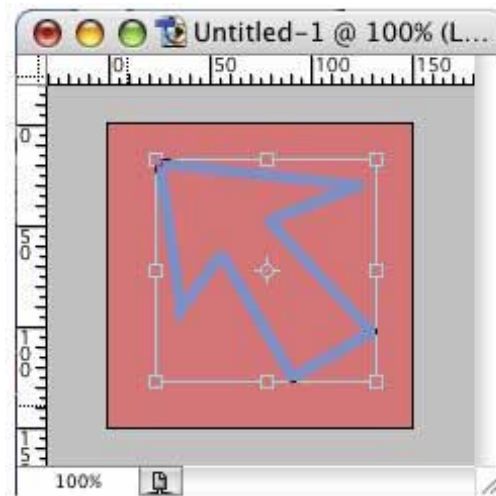
Stroke...

Creates a stroke around the selected area. In the example, a five pixel stroke has been added to the selected area.

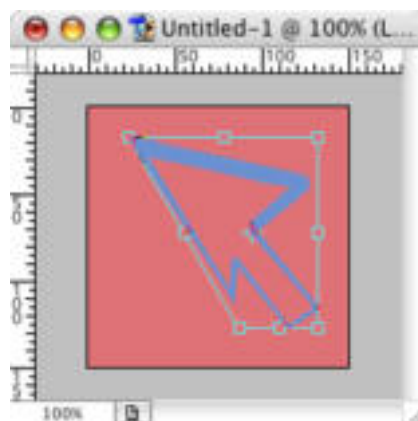
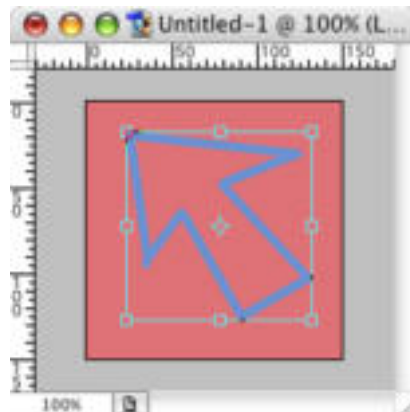


Free Transform...

Free Transform allows you to manually rotate and resize the selected area by dragging handles around the selection area.

**Transform...**

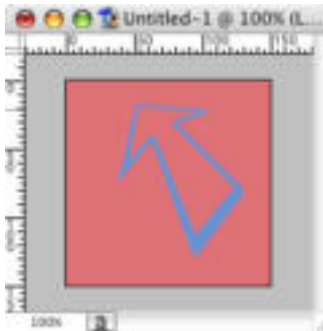
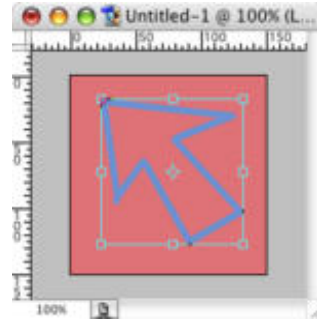
Under this menu you'll find an array of vitally important ways to manipulate your image, including: Scale, Rotate, Skew, Distort, Perspective, Rotate 180°, Rotate 90° Clockwise, Rotate 90° Counter Clockwise, Flip Horizontal and Flip Vertical. Some of these functions are self-explanatory. The less obvious ones have been described here.

Skew

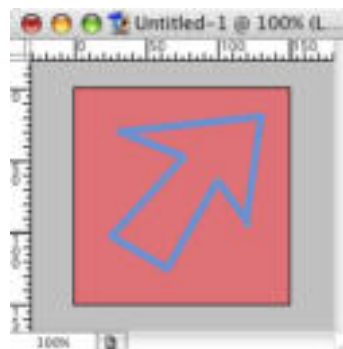
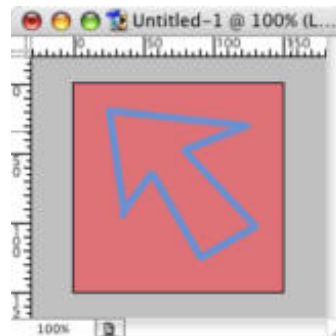
Distort

Distort allows you to move the corners of the image horizontally and vertically, it provides more freedom than skew.

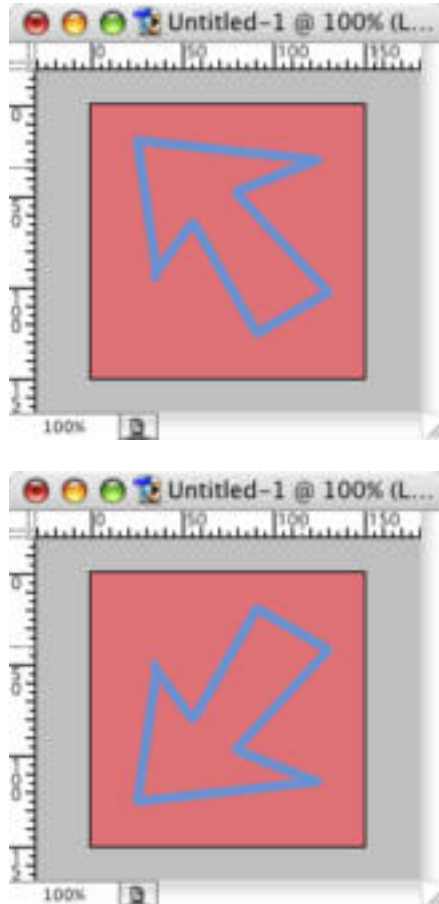
Perspective



Flip Horizontal



Flip Vertical



Define Brush...

Makes the selected area into a brush that can be used when using the Brush Tool, Eraser and other tools that rely on different shaped brushes.

Define Pattern...

Turns the selected area into a pattern.

Purge

Allows you to clear undo, the history and clipboard.

Preset Manager

Allow you to manage the objects that appear by default in the Brushes, Swatches, Gradients, Styles, Patterns, Contours, Custom Shapes and Tools.

PHOTOSHOP BASICS: THE IMAGE MENU

The Image menu is where you can adjust the colour and size of your image. There are a number of fundamental, frequently used image manipulation functions under this menu.



MENU ITEM

Mode >

DESCRIPTION

This menu item allows you to set the colour mode of your document. The most frequently used modes include Bitmap, Grayscale, RGB Color and CMYK Color. If your image is entirely black and white, chances are you've accidentally set the mode to Grayscale or Bitmap when creating the document. Changing the colour mode will often flatten the image into one layer.

Adjustments >

This menu essentially contains a range of important colour manipulation functions. Under this submenu, you will find: Levels, Auto Levels, Auto Color, Curves, Color Balance, Brightness/Contrast, Hue/Saturation, Desaturate, Replace Color, Selective Color, Channel Mixer, Gradient Map, Invert, Equalize, Threshold, Posterize, Variations.

Duplicate

This allows you to create a copy of the document in a new window.

Image Size...

Allows you to change the size of the image.

Canvas Size...

Allows you to change the size of the canvas, the image will not change, only the size of your workspace (unless, of course, you make your workspace smaller than the picture, in which case the original image will be cropped).

Rotate Canvas>

This allows you to rotate your entire document 180°, 90° CW, 90° CCW, as well as by other values. It also enables you to flip the entire document vertically and horizontally.

Crop

Crops the image to the selected area.

PHOTOSHOP BASICS: THE FILTER MENU

The Filter Menu contains a range of powerful ways to manipulate your images. Examples of some of these filters have been shown below. When creating advanced imagery in Photoshop, you will need to have a good understanding of these filters. The best way to get to know them is simply to experiment.

MENU ITEM NORMAL

EXAMPLE



This is the unprocessed version of the image that has been used for these examples.

Artistic>Colored Pencil



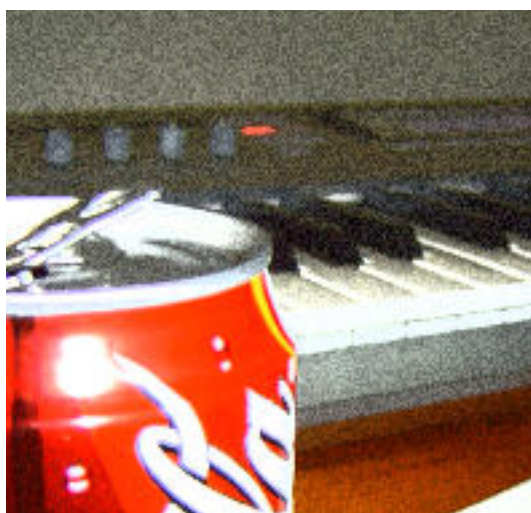
Artistic>Cutout



Artistic>Dry Brush...



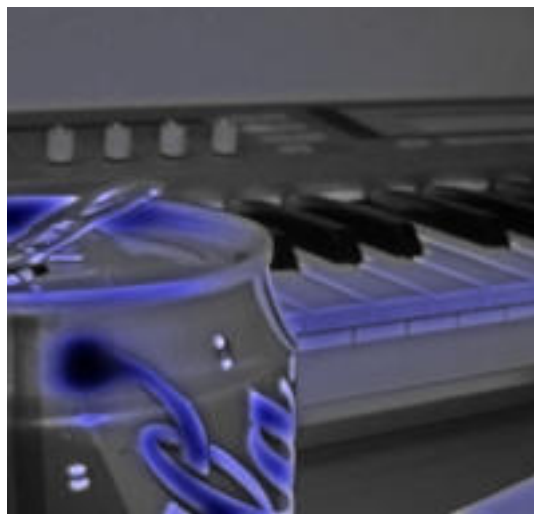
Artistic>Film Grain



Artistic>Fresco



Artistic>Neon Glow



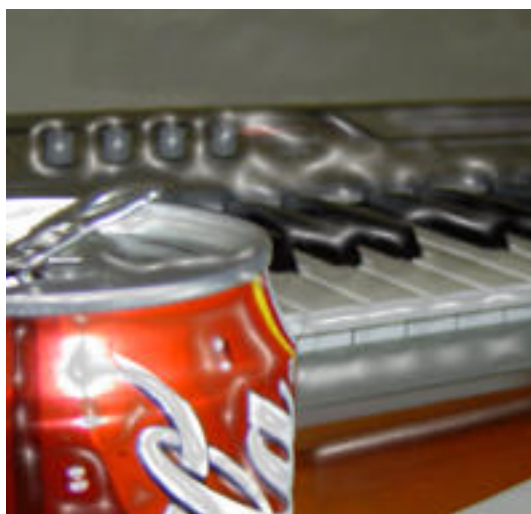
Artistic>Paint Daubs



Artistic>Palette Knife



Artistic>Plastic Wrap



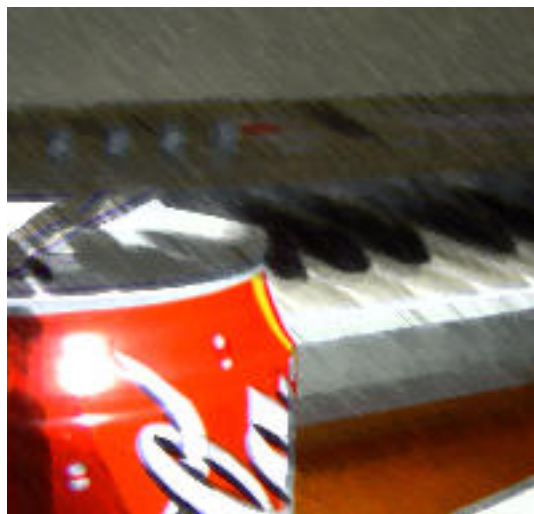
Artistic>Poster Edges



Artistic>Rough Pastels



Artistic>Smudge Stick



Artistic>Sponge



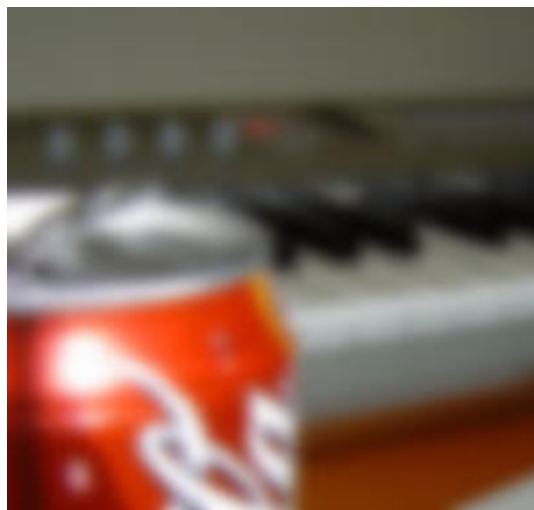
Artistic>Underpainting



Artistic>Watercolor



Blur>Gaussian Blur



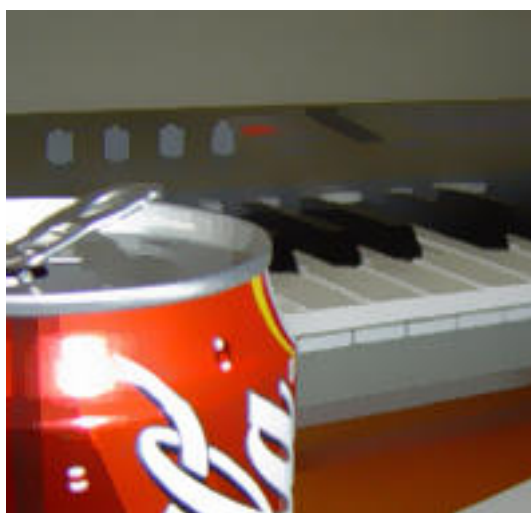
Blur>Motion Blur



Blur>Radial Blur



Blur>Smart Blur



**Brush Strokes>
Accented Edges**



**Brush Strokes>
Angled Strokes**



**Brush Strokes> Cross
Hatch**



Brush Strokes> Dark Strokes



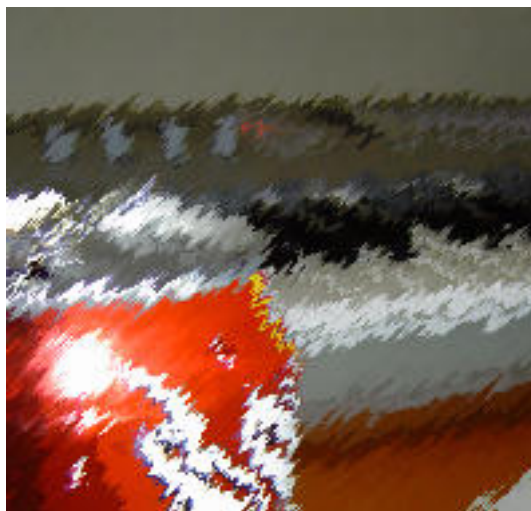
Brush Strokes> Ink Outlines



Brush Strokes> Spatter



**Brush Strokes>
Sprayed Strokes**



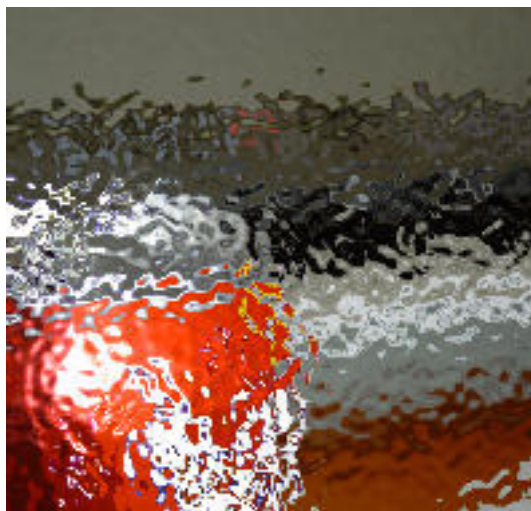
**Brush Strokes>
Sumi-e**



**Distort>
Diffuse Glow**



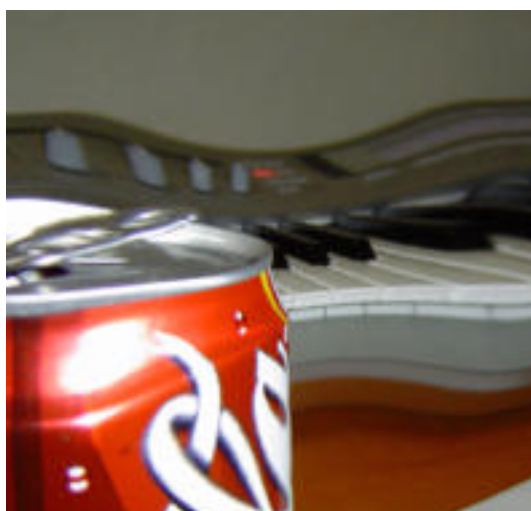
Distort>Glass



**Distort>
Ocean Ripple**



Distort>Pinch



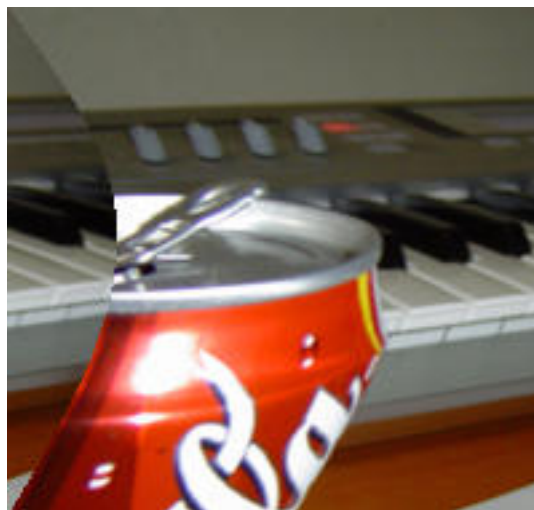
**Distort>
Polar Coordinates**



Distort>Ripple



Distort>Shear



Distort>Sphereize



Distort>Twirl



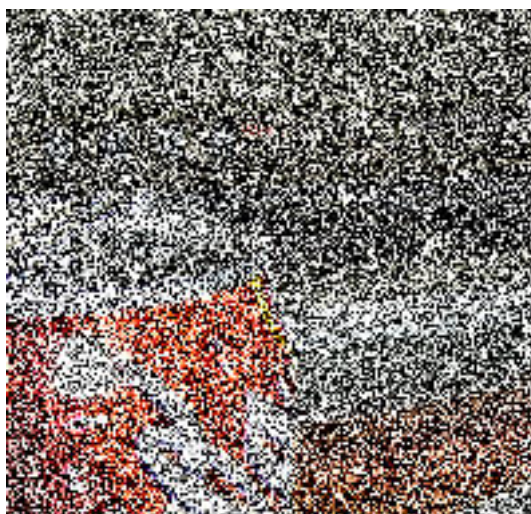
Distort> Wave



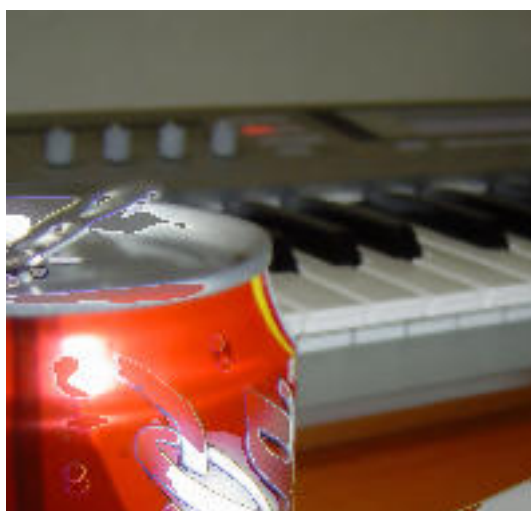
Distort> Zig Zag



Noise>Add Noise



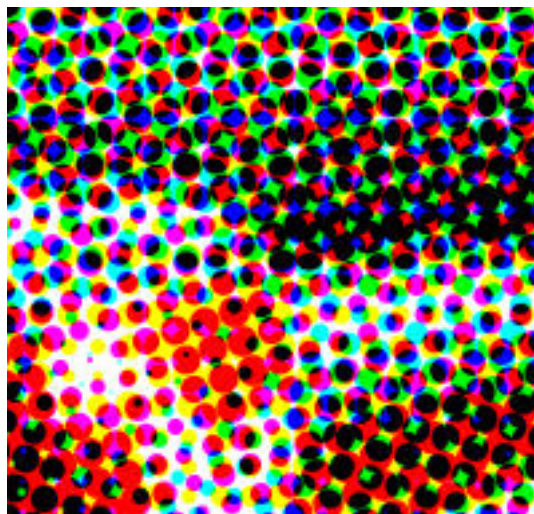
**Noise>
Dust and Scratches**



Noise>Median



**Pixelate>
Color Halftone**



**Pixelate>
Crystallize**



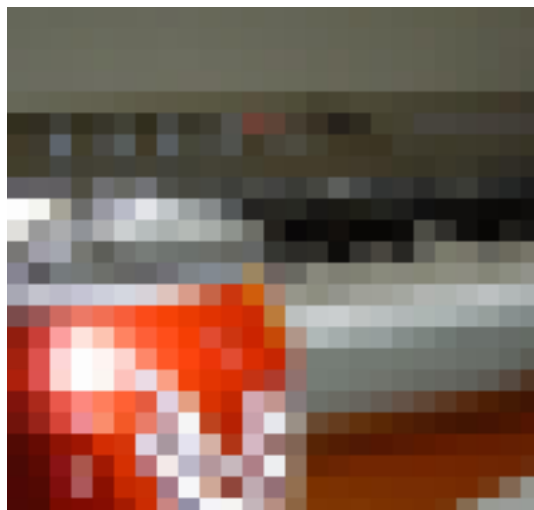
Pixelate>Fragment



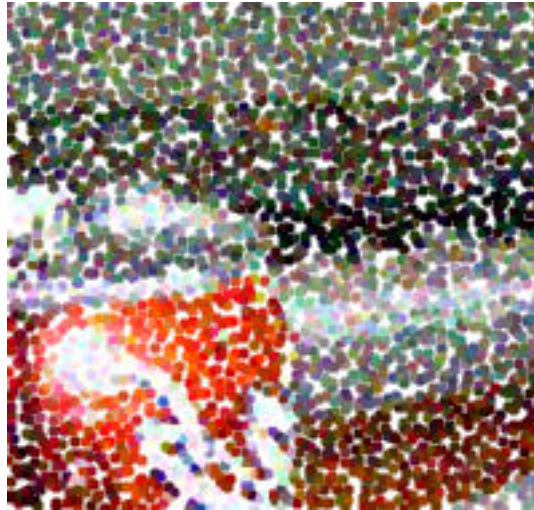
Pixelate>Mezzotint



Pixelate>Mosaic



Pixelate>Pointillize



Render>Clouds



Creates a random cloud in the selection based on the background and foreground colour.

**Render>
Difference Cloud**



Render>
Lens Flare



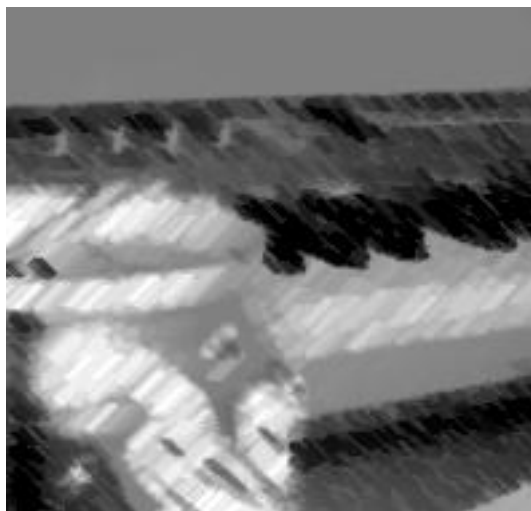
Sharpen>
Sharpen More



Sketch>
Bas Relief



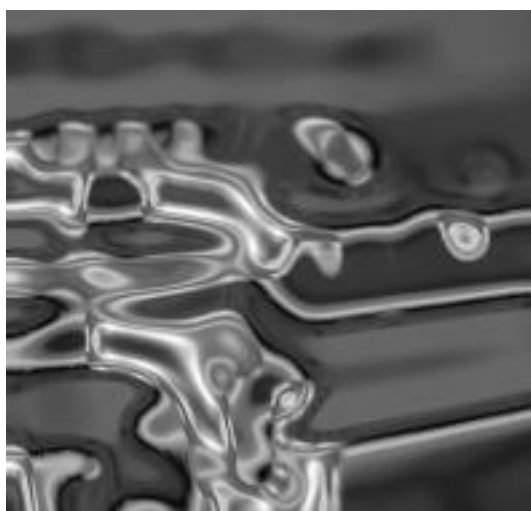
Sketch > Chalk and Charcoal



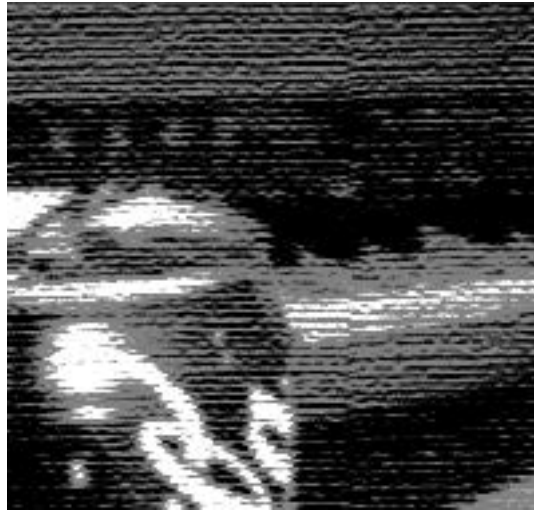
Sketch > Charcoal



Sketch > Chrome



**Sketch>
Conte Crayon**



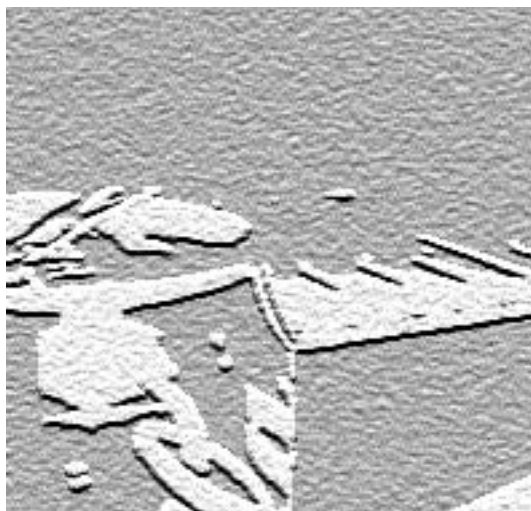
**Sketch>
Graphic Pen**



**Sketch>
Halftone Pattern**



**Sketch>
Notepaper**



Sketch> Photocopy



Sketch>Plaster



Sketch>Reticulation



Sketch>Stamp



Sketch>Torn Edges



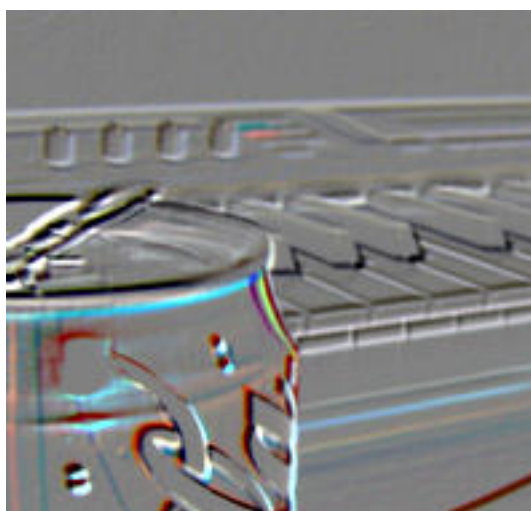
**Sketch>
Water Paper**



Stylize>Diffuse



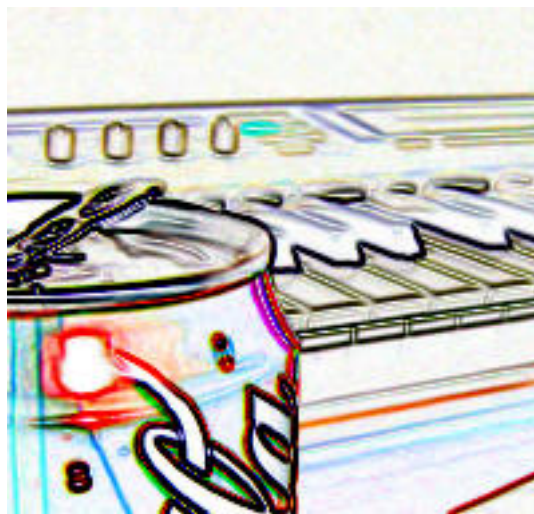
Stylize>Emboss



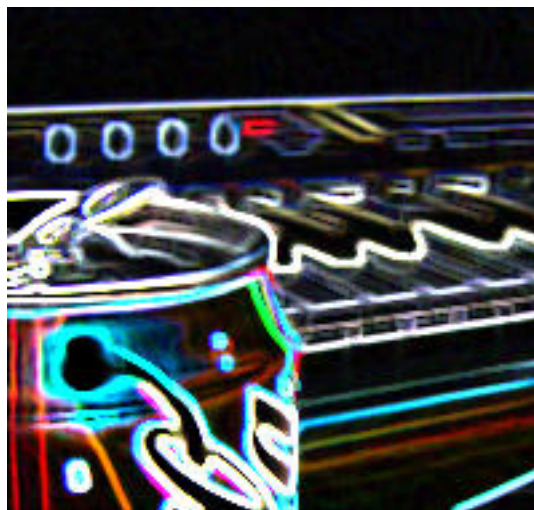
Stylize>Extrude



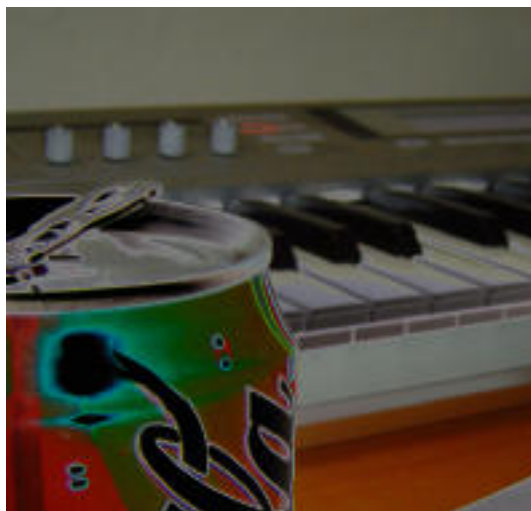
Stylize>Find Edges



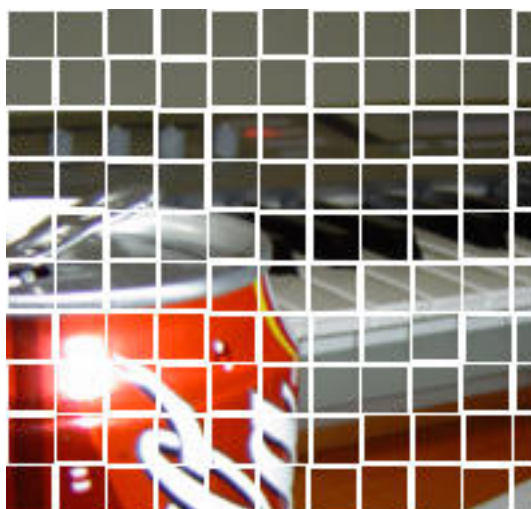
**Stylize>
Glowing Edges**



Stylize>Solarize



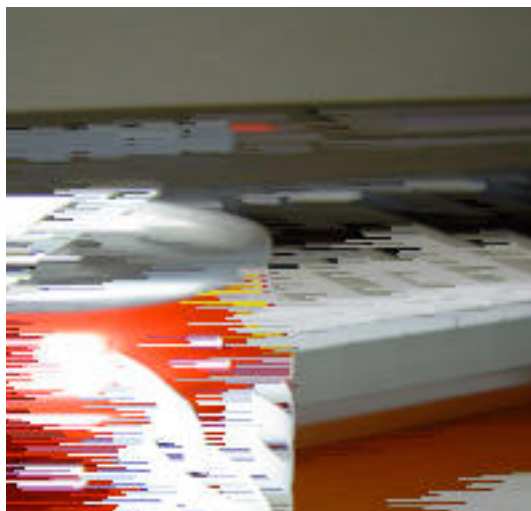
Stylize>Tiles



**Stylize>
Trace Contour**



Stylize>Wind



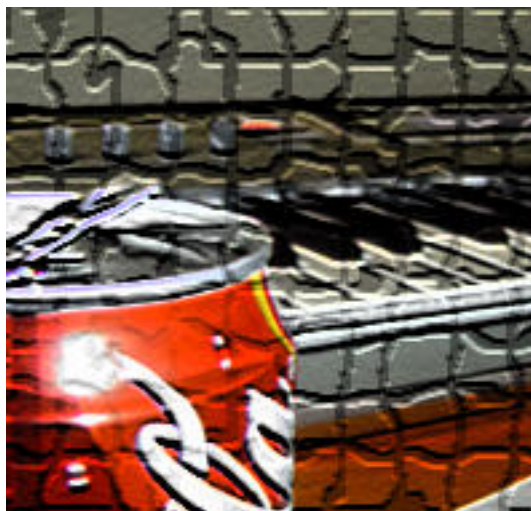
Texture>Craquelure



Texture>Grain



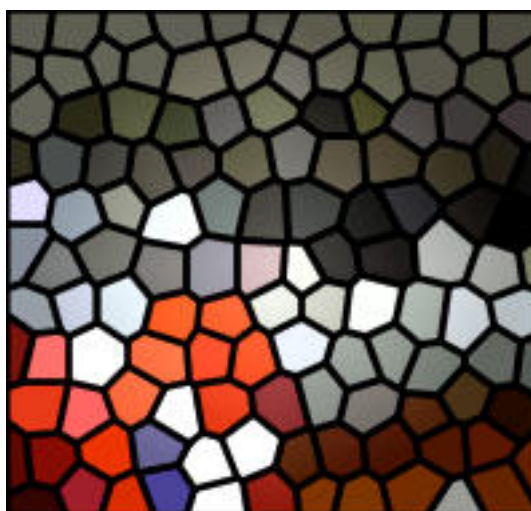
**Texture>
Mosaic Tiles**



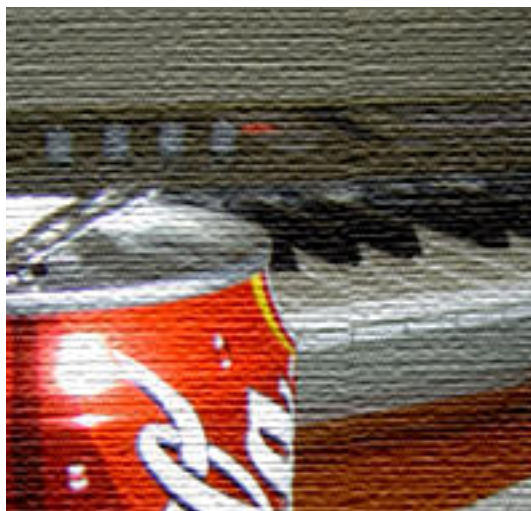
Texture>Patchwork



Texture>Stained Glass



Texture>Texturizer



PHOTOSHOP BASICS: THE VIEW AND WINDOWS MENUS

The View Menu is essential for zooming in and out and showing/hiding guides. If you don't see a particular palette on the screen, you can show them using the Windows Menu.