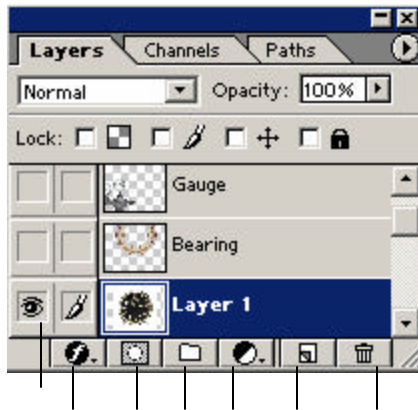


## Layer Techniques

Think of layers as a stack of transparencies. Layers can be changed independently of other layers by clicking on its name in the layers palette. Once the layer is active painting or filtering effects can modify it. A Photoshop image can contain up to 99 layers in version 5.5 and a maximum of 8000 combined layers, layer sets and layer effects per image in version 6.0. However, the amount of memory in your system may limit the number of layers possible in a single image.

### Reviewing the Layers Palette:



- A: Show/Hide Layer**
- B: New Layer Style**
- C: New Layer Mask**
- D: New Layer Set**
- E: New Adjustment or Fill Layer**
- F: New Layer**
- G: Trash (Delete Layer)**

A B C D E F G

### Layer Tips:

#### Renaming Layers

Rename the *Background* layer by double-clicking the layer in the Layers palette. From the New Layer dialog box, type the new layer name and press the OK button.

Rename all other layers by pressing the **Alt** key while clicking on the layer in the layers palette. The Layers Properties dialog box will appear. Enter a name for the layer, and click the OK button.

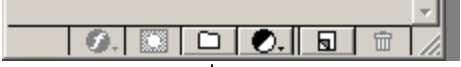
#### Moving Objects on a Layer

A layer can contain one object or several objects. In order to move an object on a layer the layer must first be selected from the Layers palette and next, select the Move tool from the toolbox and click and drag the object to its desired destination. Note, the background layer cannot be moved until after it's been renamed.

## Layer Sets

You can organize and manage individual layers by grouping them into Layer Sets. Layer Sets can expand to display all the layers in the layer set or they can be collapsed to hide all layers in a layer set. Layer Sets function as individual layers so you can duplicate and move layer sets.

### Create a Layer Set:

- Create a Layer Set by clicking on the Layer Set icon in the Layers Palette
- Create a Layer Set by selecting New Layer Set from the Layers  Palette Menu.
- Right-click with the mouse on the Layer Set to choose other options such as Delete or Properties.

### Place Items in a Layer Set:

- Place layers in a Layer Set by selecting a layer and dragging it to the Layer Set.

### Flexibility with Layer Sets

- Changing the opacity of the Layer Set will affect all the nested layers within at once.
- Changing the visibility of a Layer Set will affect all the nested layers within at once.
- When using a Layer Set, you could move all the layers within the set at once. Note, this feature will not work if the Auto Select Layer is turned on in the Options Bar.
- A Layer Set can be moved in the stacking order of layers in the layers palette just like any other layer.
- A Layer Set with all its special effects can be copied and pasted in a new layer set or in a totally different document.
- Layer sets can be used to group objects.
- Layer sets are great for organizing large layered documents.

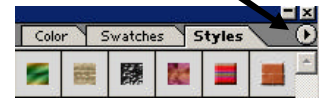
## Layer Styles

Layer styles are used to add special effects to text and images. Photoshop 6.0 includes some pre-built Layer Styles that can be applied to layers and text or users can create Custom Styles. Multiple styles can be applied to a single layer and all layer effects will display as sub-items under the selected layer in the Layers Palette.

Layer Styles include effects such as drop shadow, bevel and emboss, inner shadow and many other effects. The Layer Styles are located under the Layers Menu, Layer Style. A Custom Style is being built when items are selected from the Layer Style Menu and applied to a layer. A Custom Style can be saved for later use by double clicking the layer that contains the multiple or single style effects and choosing the New Style button. Assign a name for the custom style and the style will be available in the Styles Palette.

Photoshop 6.0 also has some pre-built styles that can be applied to layers. The pre-built styles are located in the Styles Palette. Choose Windows, Show Styles to display the Styles Palette.

Select a style from the Style Palette and it will be applied to the selected layer. Display the Style Menu from the Style Palette by clicking with the mouse on the arrow to the right of the Style Palette.



**Tip:** Layer Styles can be copied and applied to other layers in the existing image or to a brand new image.

**Tip:** You cannot apply layer styles to a background, a locked layer, or to a layer set.

## Type Tool

When adding a type layer to a canvas in Photoshop, it will be displayed in the Layers Palette on its own layer. The layer name for the type layer will display as the actual text that is located on the type layer. To rename the layer to a more meaningful name, Alt+double-click on the type layer and from the Layer Properties dialog box, type a new name.

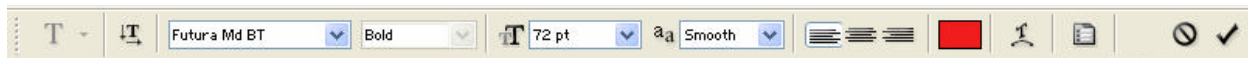
## Paragraph Text

Paragraphs of text can be added to an image by either typing the text directly onto the canvas or copying/pasting the text from an application, such as Microsoft Word. Paragraph text appears in the Layers palette and looks and acts just like normal text added to a canvas.

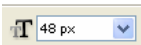
Start by selecting the Type tool from the toolbox and then with the mouse, left-click and draw a rectangle on the canvas, which will be used as the paragraph storage container. The drawn box can be resized at any time by selecting one of the handles located on the sides of the box and dragging either in or out to the necessary size.

## Formatting the Text

Formatting paragraph text is made easy when using the Type tools in the Options bar. Note, the Type tool must be selected in the tool box in order for the tools to appear in the Options bar. Formatting options can be chosen from the Options bar prior to typing text or typed text can be selected and then formatted.



### Text Size



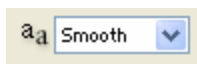
The size of the text can be changed at any time. Select the type layer to be changed from the Layers Palette and select the Type tool from the toolbox. Next, click and drag your cursor over the text to be changed, and select a different font size from the Font Size pull down menu.

### Text Color



The color of the text can be changed at any time. Select the type layer to be changed from the Layers Palette and select the Type tool from the toolbox. Next, click and drag your cursor over the text to be changed, and select a different color from the Font Color icon located on the Options toolbar.

**Tip:** It is difficult to see the change in the color of your text because of the highlight on the text selection. Press the shortcut key Ctrl+H to toggle the highlight off/on for the selected text.

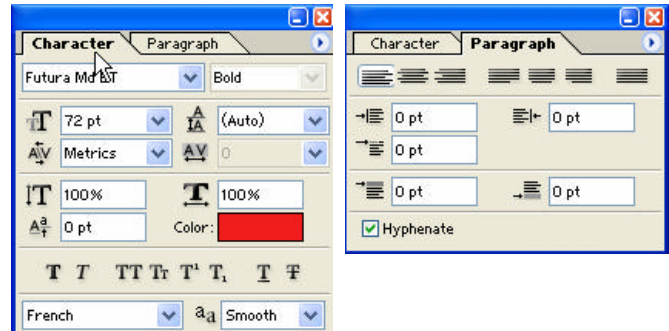


## Anti-Aliasing

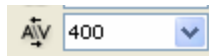
Anti-Aliasing, when applied, will smooth out the edges of text and blend the edge colors so that the text will not appear jagged. Anti-Aliasing is recommended for web graphics that contain text larger than a 14 point size. Anti-Aliasing is not required for text that is designed to “print” because the user is typically using a high resolution and the anti-aliasing is not required. However, for web graphics, experiment using the Strong, Crisp, and Smooth for type layers that are large than 14 points. Applying anti-aliasing to text layers with a font size of less than 14 points could cause the image to blur or be not as readable.

## Character and Paragraph Formatting

More text formatting options can be displayed by selecting the Character and Paragraph icon that is located in the Options bar.



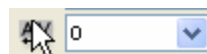
## Kerning



The Kerning tool is located in the Character Palette and adds spacing between two letters when applied. To add kerning between two characters in your text layer, first position the cursor between two letters and next, choose a number from the Kerning pull-down menu or type a number in the Kerning field.

**Tip:** Kerning can also be applied without going through the Character Palette. First, select the text layer in the Layers Palette. Second, select the Type tool from the toolbox. Third, position the cursor between the two characters in which you would like to apply kerning. Last, press the Alt key + the left or right arrow keys to increase or decrease the kerning spacing. (Mac users, hold down the Option key + the left or right arrow key)

## Tracking



The Tracking tool is located in the Character Palette and adds spacing between all the selected characters when applied. The text must be selected when apply this tool.

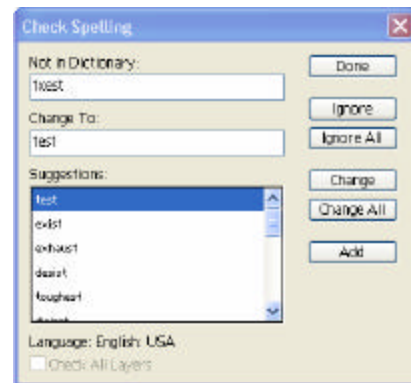
## Tip: Rasterizing Type

A Photoshop warning box will appear when applying Filters to text layers. The warning message will ask if you would like to rasterize the type. When rasterizing the type in a text layer the layer will change to fixed pixels and will not allow text editing.

## Spell Check Text

Photoshop pauses when it finds a possible error, and the word in question appears in the Check Spelling Dialog box. If Photoshop questions a specialized term that is spelled correctly, choose the Add button to add the word to the current custom dictionary. The next time you check spelling, Photoshop will not question the new term unless it is misspelled.

Access the spell checker by choosing Edit, Check Spelling.



## Working with Multiple Layers

### Copy, Move and Resize an Object

Position the cursor in the selected area or on a layer. Press the Alt key and left-click with the mouse and drag the selection to a different canvas. Notice the image being copied is located on a separate layer.

### Scaling the image

Transform an object by choosing Edit, Transform, Scale.

This puts a box around the object being scaled. Position the cursor on a corner placeholder and hold down the Shift key while left-clicking and dragging in to make the object smaller. When finished transforming the object, double-click with the mouse inside the Transform box.

### Moving a selection

If an object is on its own layer, it can be moved with the Move tool.



## Exercise on Copying, Moving and Sizing Layers

- Open the Photoshop file.
  - File, Open, Seashell-beach.jpg
  - Notice the bottom layer is the “*background*” layer.
    - Rename the background layer to **Beach**.
      - The “background” layer can be renamed by double-clicking the layer in the Layers Palette.
      -

### Insert an object from a separate file file:

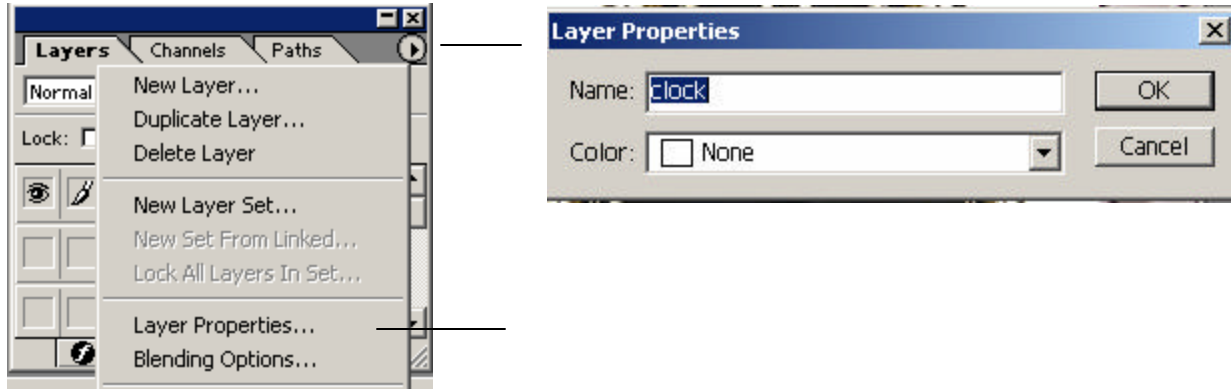
- Open the 2<sup>nd</sup> file of the image you want to copy to the background.
- File, Open, crab.jpg
- Select the Move tool and hold down the Shift-key (or Alt-key) while dragging the image to the Seashell-beach.jpg file. Holding the Shift-key while dragging will center the image on the background.

## Name the New Layer:

The new layer was brought into Seashell-beach image with the name of Layer 1.

From the Layers Palette choose Layer Properties and enter Crab as the layer name.

**Tip:** Photoshop 7 users, double-click with the mouse on a layer in the Layers Palette to rename the layer. Photoshop 6 Users, press the Alt-key and double click with the mouse on the layer to access the layer properties.



## Hide or Display layers:

Click on the Eye Icon next to the layer to toggle the visibility of the layer.

## Arranging Layers

Layers can be rearranged to change the way the image is viewed.


- Select the layer to be moved and left-click with the mouse and drag the layer to a new location.

**Tip:** Make all layers visible by clicking on the Eye icon for each layer.

## Erasing a Layer to the Background Layer

**Tip:** This technique removes pixels.

Notice the crag layer has water around it. Remove the water around the crab using the eraser tool.

- Select the crab layer from the Layers Palette.
- Select the Eraser tool from the Tool box 
- Select a brush size for the eraser and erase the water around the crab.

- As the eraser is being used the background layer will start to appear.
- The Zoom tool may be useful to zoom in or out of tight area. Change your brush size frequently to access different areas of your image.
- The background layer is not being modified, only the active layer.

## Transform an Object

- Select the layer to be modified.
- Select the scale tool from the Edit, Transform Menu.
- Position the cursor on a corner point. Left-click with the mouse and drag in while holding the Shift-key to downsize the image.
- When finished double click inside the transformation box.

## Copying a Layer

A layer can be copied by dragging a layer in the Layers Palette to the New Layer icon.



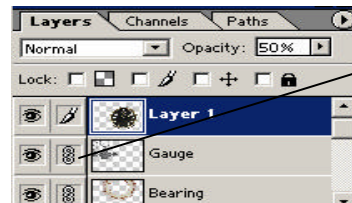
A layer can also be copied by selecting the Move tool from the toolbox and pressing the Alt-key and dragging the image on the canvas.

**Tip:** Don't forget to rename your copied layers.

## Linking Layers

Linking layers together can have several benefits. For example, if you take a lot of time to resize and position several layers, then it is a good idea to link the layers. By having layers linked, they can be moved and/or resize simultaneously.

- For each layer, except the background, select the move tool and position the layers as you want them to appear on the canvas.
- Link the layers by clicking with the mouse in the box to the right of the Eye icon for each layer.
- A chain link appears in the box.
- To remove the link click on the chain link with the mouse.



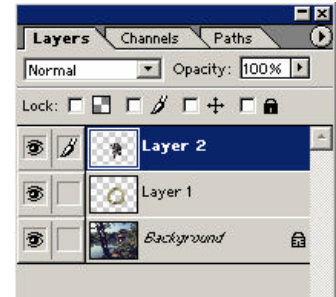
## Layer Mask Exercise

A layer mask will determine whether an image is visible, invisible or partially invisible. Layer masks do not permanently change or remove pixels in an image.

**Objective:** Make it appear that the Zebra is looking through the Porthole.

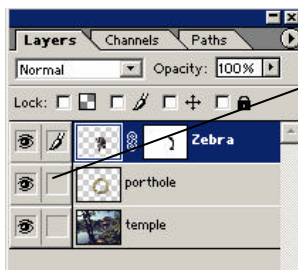
### Applying the Layer Mask:

- Select the Layers Palette. There should be three layers in this exercise.
- Select the Zebra layer from the Layers Palette.
  - Transform and resize the zebra. Edit, Transform, Scale.
- To add a Layer Mask choose Layer, Add Layer Mask, Reveal All.
- Select the Paintbrush from the toolbox. Paint with Black to make portions of the Zebra invisible and paint with White to make portions of the Zebra visible.



When finished and happy with the end result be sure to link the Porthole layer and the Zebra layer together. Linking the layers together will allow the layers to be moved together when using the Move tool.

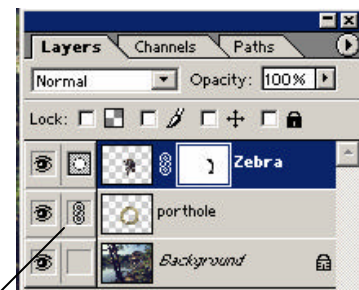
### Linking Layers



Select the Zebra layer.

Left-click with the mouse in the little box to the right of the Eye icon on the Porthole layer.

A Chain Link will appear. The Chain Link icon represents a linked layer.



- Select the Move tool and move the Zebra. The Zebra and the Porthole should move together if linked correctly.

## Using Adjustment Layers to change colors in an image

Adjustment Layers allow you to make image adjustments that are not permanent or destructive to the original image. The Adjustment Layers is a great tool to adjust the contrast, hue, or color balance of an image.

- File, Open, balloon\_flower
- Double click on the Background Layer and name the layer.  
(layer name can be whatever)
- Using the Magnetic Lasso tool or Quick Mask tool select an area of the flower to be modified.
- Create an Adjustment Layer

Choose Layer, New, Adjustment Layer

From the pull-down menu select Hue/Saturation (try 2<sup>nd</sup> example using Color)

**Hue** is the name of the color. Hue is pure color. ie: Red, Green, Yellow....

**Saturation** is the amount of gray in a color. A fully saturated color (100%) is pure hue and there is no gray in the color. When more gray is added the colors become dull and eventually will turn very gray.

**Lightness** → **Tints**. Tints are created when white is added to a color. These are the pastel colors such as pink.

**Lightness** → **Shades**. Shares are created when black is added to a color, such as Forest Green.

- Choose OK when finished.
- When using an Adjustment layer the original layer of the image is not being altered. All special effects are linked to the Adjustment Layer.
- Add more Adjustment layers for other areas in the image.

## Clipping Groups

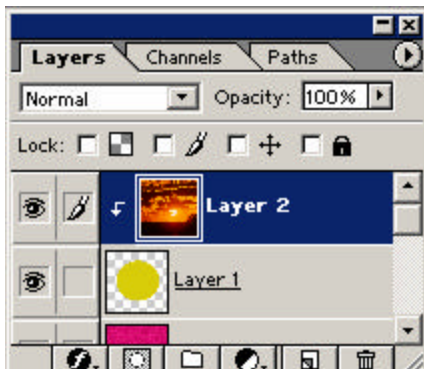
A Clipping Group involves two or more layers. The artwork or background that will serve as the mask for the group needs to be on the layer below whatever is being used as the mask. This tool is great for inserting content inside shapes or text.

- Create a New Canvas:

File | New | 400 x 400 pixels, 72 = resolution, RGB = color mode, white = background.

- Fill the Canvas by selecting a Foreground color and then choosing Edit, Fill, use the Foreground Color option.
- Apply a Texturizer filter to the background by choosing Filter, Texture, Texturizer
- Add a new Layer by clicking on the New Layer Icon in the Layers Palette.
- From the New Layer draw a selection using the Elliptical Marquee tool.
- Fill the Selection by selecting a Foreground color and then selecting the Paint Bucket tool from the toolbox. Next, with the paint Bucket tool selected, click inside the selected area to fill the selection.
- Open the file: Sunset\_copy.psd
- Select the Move tool and Shift-click and drag the Sunset image to the canvas you are working with. Note, the Sunset image appears in its own layer.
- Add a Clipping Group.

Position the cursor at the base of the Sunset layer (the top layer). Press the Alt-key and at the same time left-click with the mouse on the bottom border of the Sunset layer.



When a clipping group is applied the layer will contain an arrow pointing down and the layer will be indented.

To remove a clipping group press the alt-key and left click on the layer border that contains the clipping group OR select Ungroup Layers from the Layers menu.

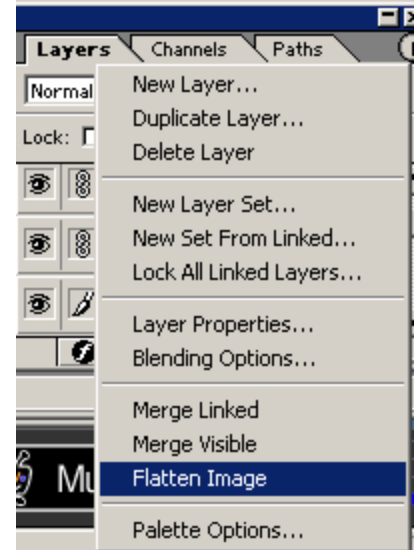
The end result will display the shape you drew filled with the Sunset image, which are all on the background layer.

## Saving your File

Save a **copy** of your file so that the layers become flattened. Only flatten your files when you are certain editing is complete. Flattening a file's layers merges them into a single background. Once a file is flattened you cannot access the layers that were once visible and available for editing. Note, it might be a good idea to keep a copy of your file with all the layers for any future editing.

### Flatten the Image:

- From the Layers Palette menu select Flatten Image.
- Choose File | Save As | Filename



### Flattening Files

**Merge Down** – combines or flattens the selected layer and the layer directly below it.

**Merge Visible** – combines any layers that have the Eye icons turned on. This is a good method to selectively flatten layers.

**Flatten Image** – combines all layers in the document