

Adobe Illustrator -- Introduction

Raster vs. Vector images

Photo Editors are Raster Based

A raster image is made of thousands of little dots, or pixels.

Creating or editing an image with dots allows you to provide for rich detail in an image. Because every dot can be a different color, you can allow for any kind of color change.

Raster images are wonderful for rendering rich, full-color images, like photographs. Raster-based programs do have some drawbacks, though:

- * Raster images are file-heavy. All of the zeros and ones that are used to make up each pixel result in large file sizes. Your computer must keep track of the zeros and ones and must change each one when editing. This is memory-intensive and may cause slower editing.

- * Rasters do not resize well. When you resize a raster image, the pixels just get larger, making the image appear distorted and chunky/grainy.

Photo editors, like Adobe PhotoShop, use raster-based images to allow for precise editing and total freedom in image appearance.

Illustration Programs are Vector Based

Vector-based programs approach image creation in an entirely different manner. A vector-based program does not render images on a pixel-by-pixel basis.

In a raster-based image creation program, a square would be made of thousands or millions of pixel dots.

In a vector-based program, the same square would be made of only four dots, one on each corner. These “vector points,” basically allow your computer to play Connect the Dots. Each vector point has information in it telling your computer how to connect each point with straight or curved lines, and with what color to fill in the closed shape.

In the printed image, the vector points would be invisible.

Because the computer only has to keep four points in its memory, it is much easier for the computer to edit vector-based images.

If you resize a vector-based image, it loses little or no detail. The vector points spread out and the computer just redraws the image. You can easily color, or recolor, a vector-based image very easily using a drawing program. Vector images can also result in smoother lines because the lines are not hand drawn.

Vector images do have some drawbacks, however. They are generally filled with a solid color or a gradient but can't display the lush color depth of a raster. They also work better with straight lines or sweeping curves.

Drawing programs, like Adobe Illustrator, primarily use a vector-based drawing mode to allow for scalability and clean lines.

David Lieberman

[Academy of Web Design Course Video](http://www.graphicdesignforum.com/forum/showthread.php?t=41)

<http://www.graphicdesignforum.com/forum/showthread.php?t=41>

Note: When you are told to watch an Illustrator CS3 video, use the web link provided to go to the Adobe Video Workshop web site.

- Once it is open, go to “Select a Product” in the upper left corner.
- Click on “Illustrator CS3”.
- Then, click on your video title in the “Title” box.
- In the “Details” area at the bottom, you will see a picture of the author and notes about that person.
 - To play the video, click on “Play Video” (to the right).

Click [here](#) to see how the *Adobe Video Workshop* videos work.

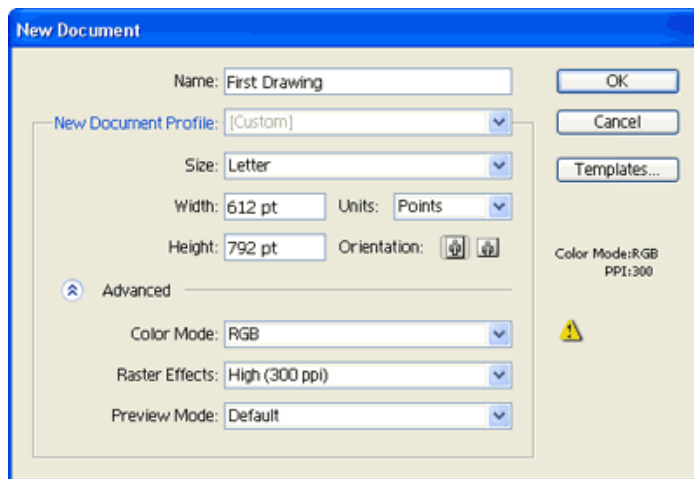
Click [here](#) to see how to open *Adobe Illustrator*.

Activity 1

Document setup, Illustrator workspace & tools

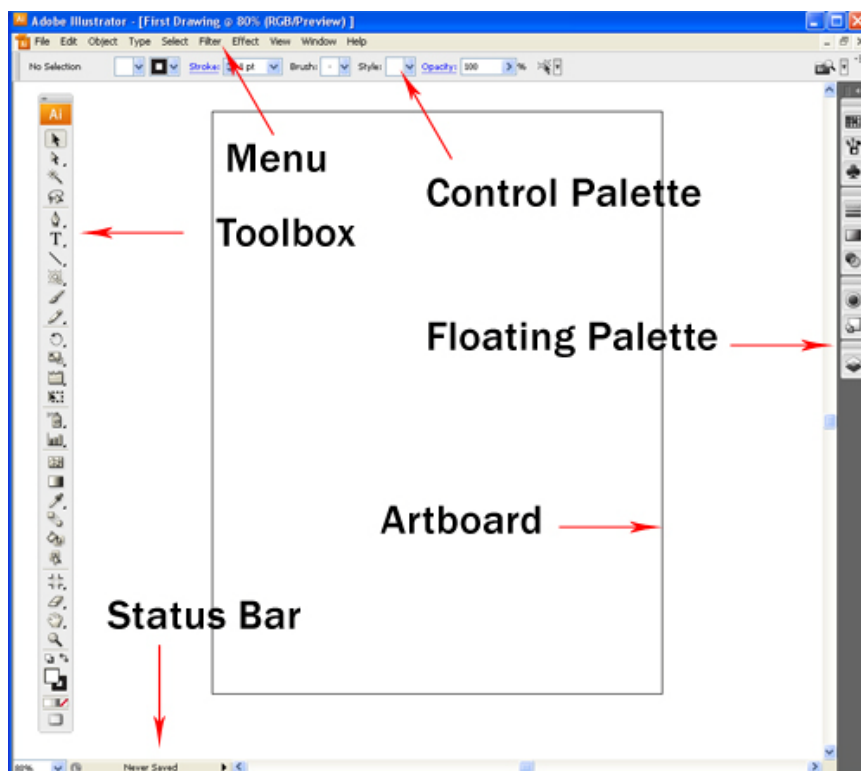
Create New Document

Go File>New Document to create your first document. Type in a Name for the document and click Advanced to select RGB for Color Mode as we will be working for the screen. Click Ok after that.



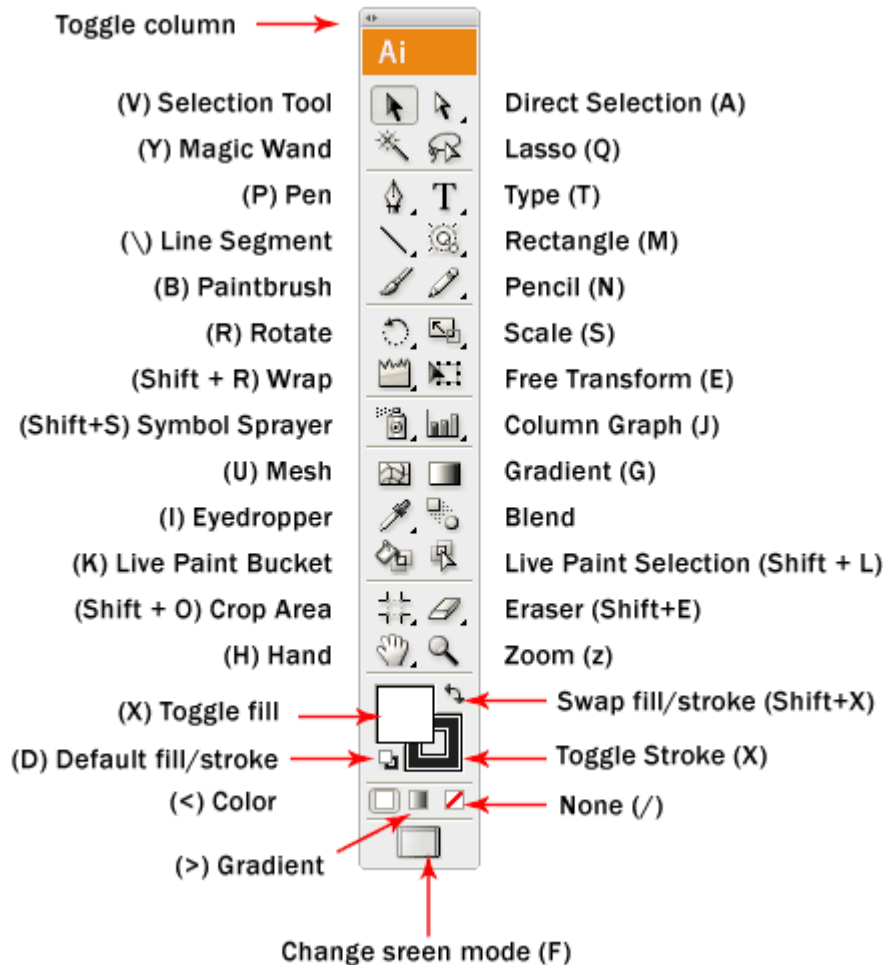
Illustrator Workspace

Below is the workspace and some common terms for its parts.



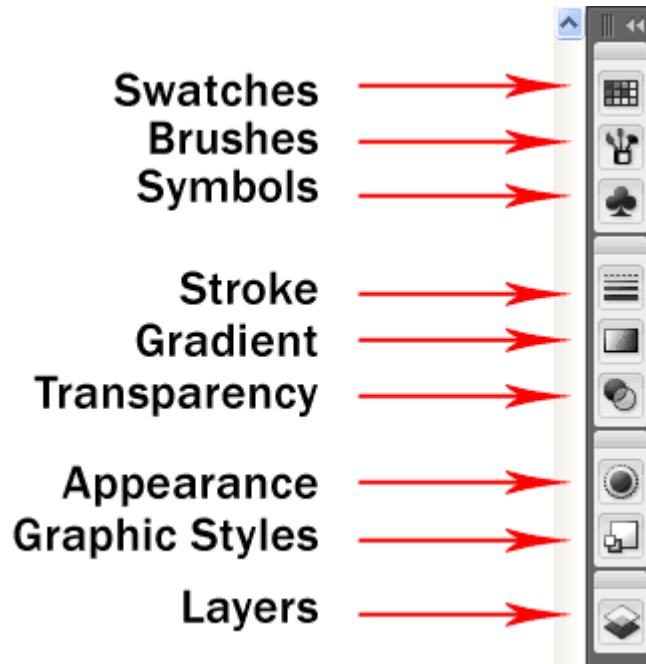
Toolbox

This is the handy toolbox which we will use most often. By default, it comes in one single column as shown in the screenshot above. To switch it back to the old 2 columns toolbox, you can simply click the top left mini arrow to toggle it into 2 columns. Some of the tools like Rectangle have more tools hidden. To expand, just click and hold the icon to reveal all the similar tools under that group.



Floating Palette

This is the floating palette which contains properties for our shapes. It is commonly used for changing colors and stroke width.



Saving AI Files

Let's select the type tool and click on the artboard and **type your name**. After that go to File>Save. Select Adobe Illustrator(*.AI) for file type and name it **act1_text.ai**. Be sure to save it into the Illustrator Module folder on your U:\ drive. Click Ok after that. Leave the rest of the settings at default. You have successfully saved your first file. To make any more changes you can simply open the Adobe Illustrator file.



Illustrator ROCKS!

Adobe Video Workshop – watch the Illustrator CS3 video: “**Creating and setting up a new document**” [Click here](#) for the web site.

Activity 2

Selecting and Manipulating Objects

Adobe Video Workshop – watch the Illustrator CS3 video: “**Selecting and manipulating objects**” [Click here](#) for the web site.

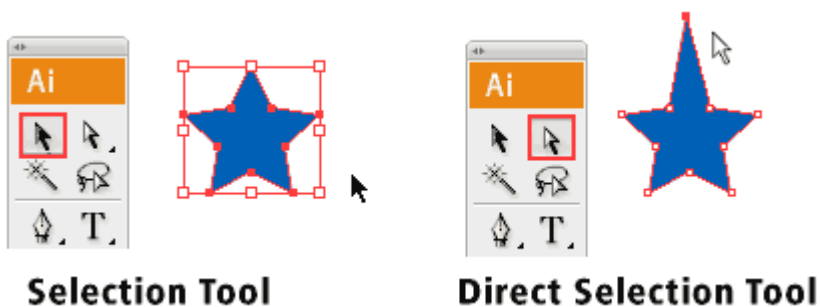
In this lesson, we will look at how to use the shape tools to draw our basic shapes in Illustrator. But before we start, we will look at how to select a basic shape so that you have no problems in selecting and editing shapes in Illustrator.

Selection Tools

There are 2 types of selection tool in Illustrator used for selection objects.

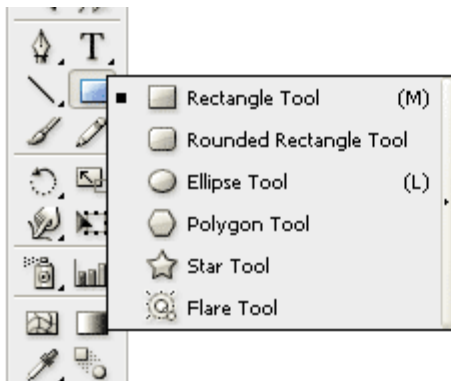
Selection Tool: Used for selecting and moving a shape. It can also be used to resize a shape.

Direct Selection Tool: Selects a single anchor point instead of the whole shape. Used for editing anchor point of a shape. Click once on a point to select and hold Shift to select multiple anchor points.



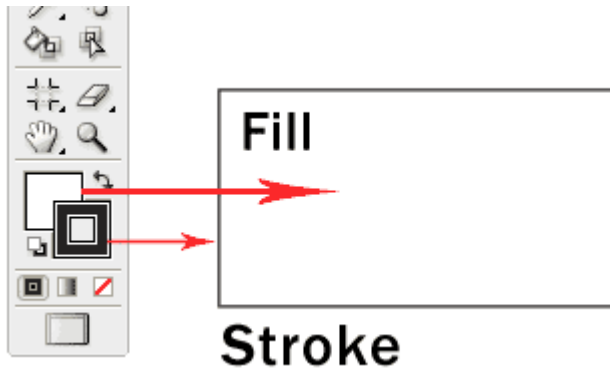
Shape Tools

Now we will move on to the Shape Tools. When you go to the Tool Palette and hold the Rectangle Tool, a list of shape tools will expand out for you to pick. We will start with the default Rectangle Tool.



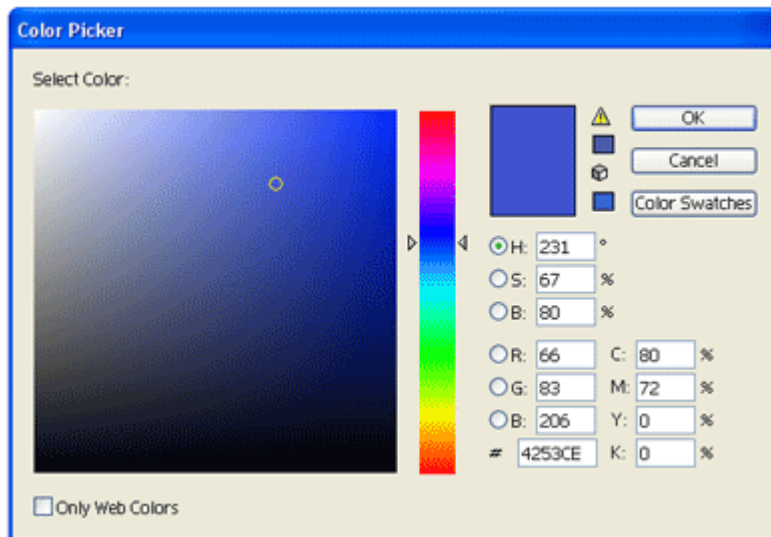
Understanding Fill & Stroke

Click and drag out a Rectangle as shown. By default, it has a white fill and black stroke. (Stroke is the border of the shape)



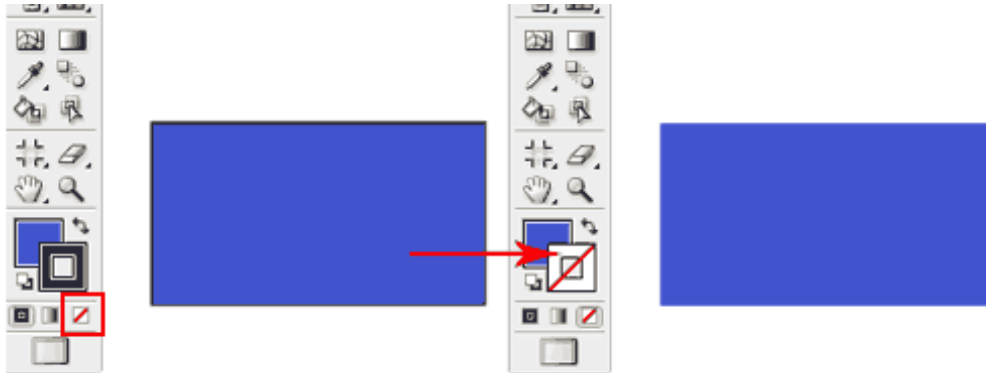
Changing Fill Color

Let's start changing the fill color for the rectangle. Double click the Fill from the Tool Palette. It will pop up the Color Picker. Drag the slider to blue and select a deep blue color. Click Ok after that.



Removing Stroke

Click the Stroke in the Tool Palette once to swap it above Fill. Click the None icon boxed up in red to set the Stroke to None. The black stroke will disappear.



Constrain Proportions

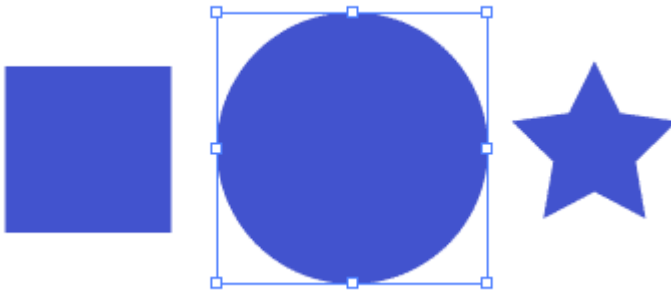
To draw a perfect square, we will select the Rectangle Tool. Hold Shift and drag to draw a square. Same for the circle, we will select the Ellipse Tool and hold Shift to drag out a circle.



Hold Shift to constrain proportion

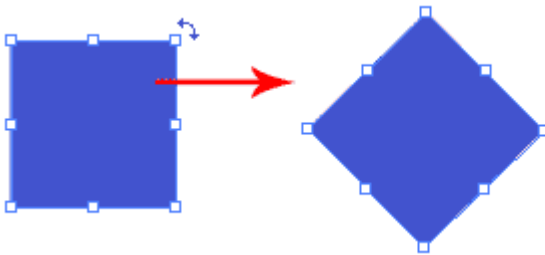
Resizing Shapes

To resize shapes, select the shape using the Selection Tool and a bounding box will appear. Drag the corner anchor point to resize it. To constrain to proportion while resizing, hold Shift as you resize. Also hold Alt/Option if your want to resize from the same position.



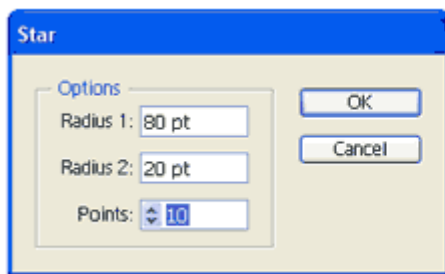
Rotating Shapes

Select the shape with the Selection Tool and a bounding box will appear. Move your cursor near the anchor corner and a rotation icon will appear, click and turn it to rotate the square. To snap at 45 degrees increment, hold Shift and turn.



More Options for Shape Tools

Select the Star Tool. Click once on the artboard and an option will pop up. Enter the same values below and click Ok. It will draw a star burst shape. This method can be used to bring out more options for shape tools.



Conclusion

Almost all the objects found in our daily life can be built from combining using the basic shape tools. In Activity 9, we will learn about Compound Paths which will help us create more complicated shapes by adding and subtracting from the basic shapes.

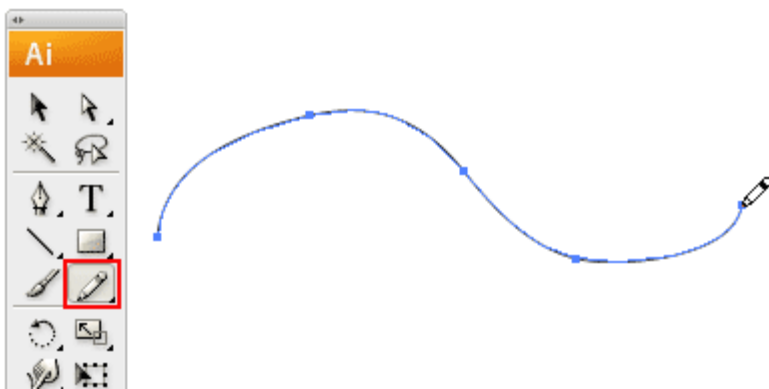
Activity 3 -- Pencil Tool

Adobe Video Workshop – watch the Illustrator CS3 video: “**Using the Pencil tool**” [Click here](#) for the web site.

We can quickly draw shapes and lines quickly using the Pencil Tool. This lesson will show you some of the tricks in drawing smooth and fluid lines.

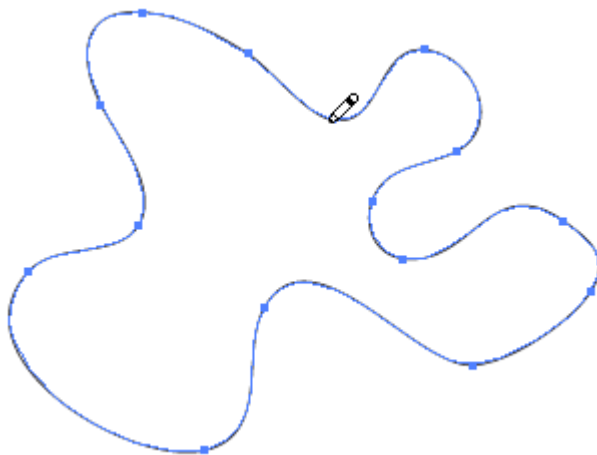
Drawing a Line

Select the pencil tool and click and drag to draw a free hand line drawing.



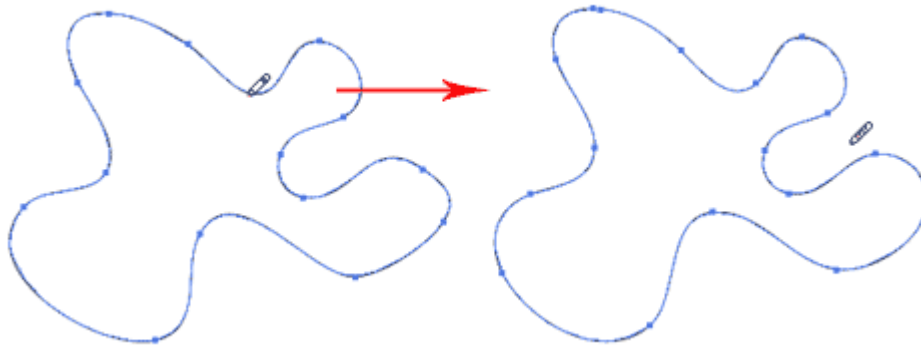
Closing Paths with Pencil Tool

To close a path, hold Alt/Option as your Pencil Tool reaches the start point. A circle icon will appear next to the Pencil Tool to indicate path closure.



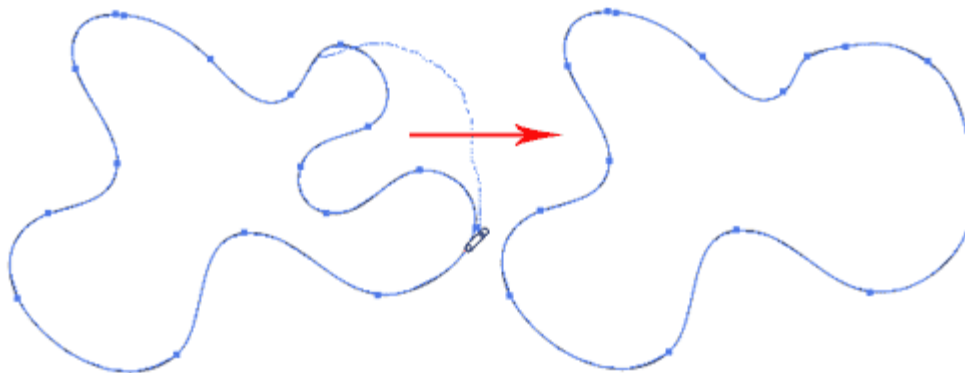
Smoothing Jaggy Lines

Normally when you draw with the Pencil Tool, the path looks jaggy. To smoothen the parts that are jaggy, simply hold Alt/Option to turn the Pencil Tool to Smooth Tool. Then draw over the area of the lines which you would like to smoothen.



Reshaping Path

To reshape a path, make sure your path is selected and use the Pencil Tool to redraw the parts you would like to reshape. Note that the start and end path must be close to the original path to make it work.

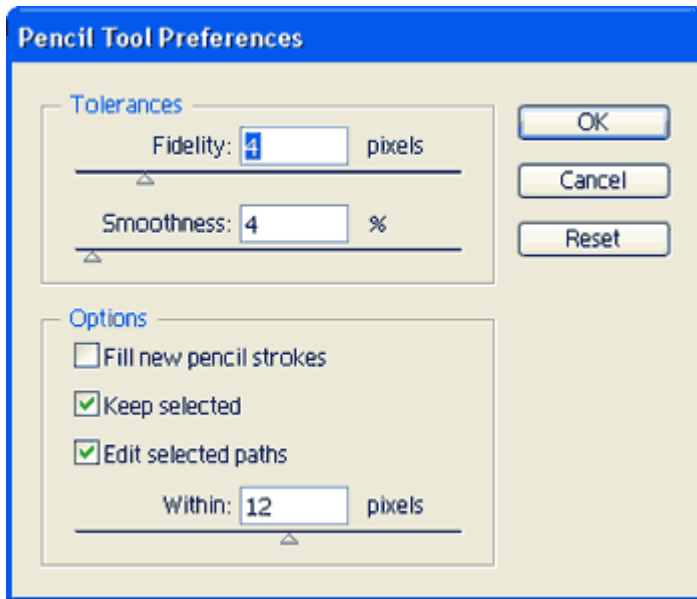


Pencil Tool Preferences

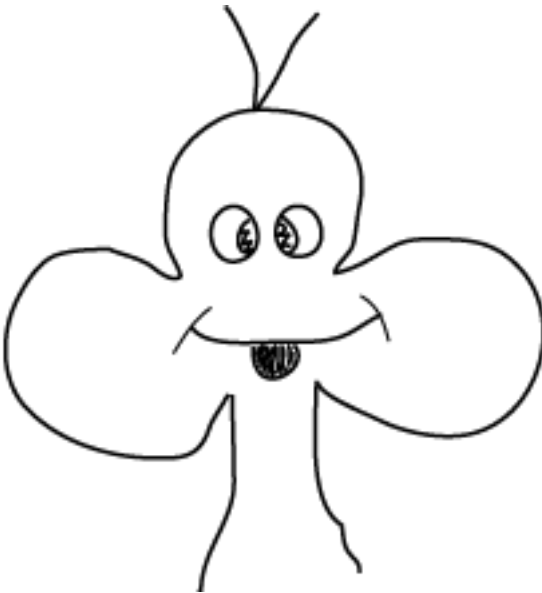
You can turn on the Pencil Tool Preferences by double clicking on the Pencil Tool. You can change the fidelity and smoothness to find a combination that works for you.

Fidelity: Determines how close the path is drawn to your mouse movement. Set it at a higher fidelity if you're not good at drawing with your mouse.

Smoothness: The higher you set for smoothness, the fewer anchor points it produces, thus producing a smoother line.



Now, use the pencil tool to draw a cartoon head (see example below; yours can be your own design). Make sure that the stroke width in the drawing is 1.5 or 2 pixels. Save the drawing into your Illustrator Module folder as filename `act3_cartoon.ai`



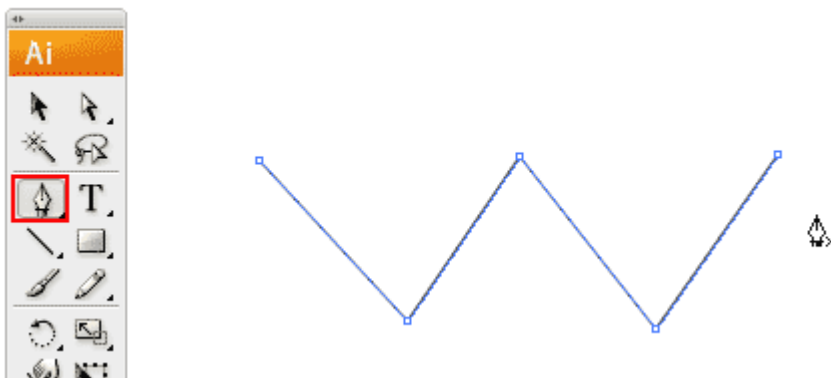
Activity 4 -- Pen Tool

Adobe Video Workshop – watch the Illustrator CS3 video: “Using the Pen tool”
[Click here](#) for the web site.

The Pen Tool will be the hardest tool to learn in Illustrator. It usually take weeks to learn and beginners always end up in frustration while figuring how it works. So don't give up and practice it every day and soon you will be able to draw any shape.

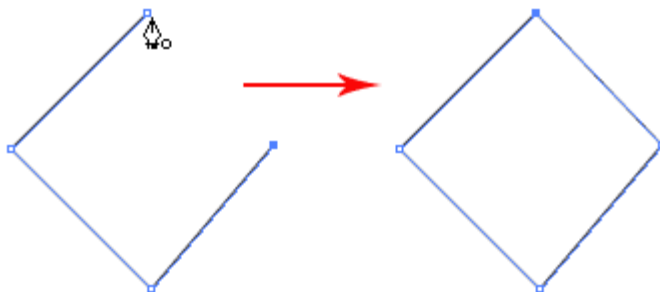
Drawing Straight Lines

Select the Pen Tool and click once to add the first anchor point. Move your mouse to the next position and click again to create the second point. The two anchor points will be connected together. Continue doing this to create a W shape as shown. To draw a new line, click the Selection Tool (The Black Arrow Icon) and click back the Pen Tool again.



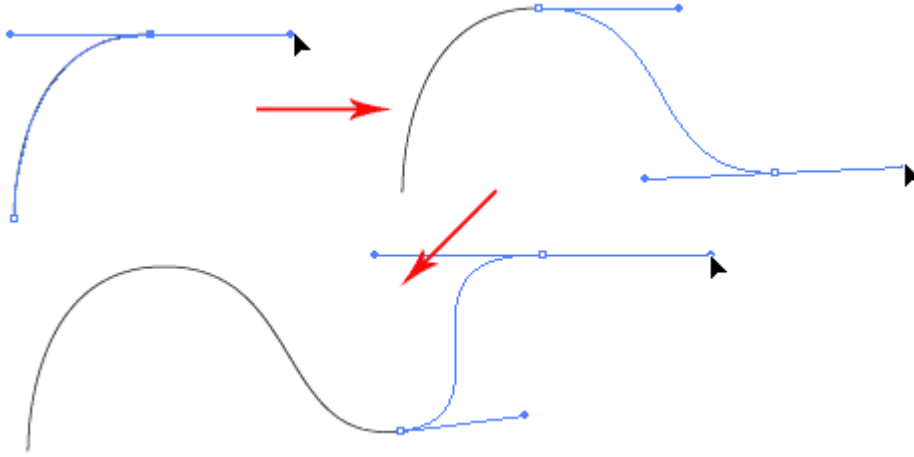
Closing a Path

To close a path, click back the starting point to close the shape.



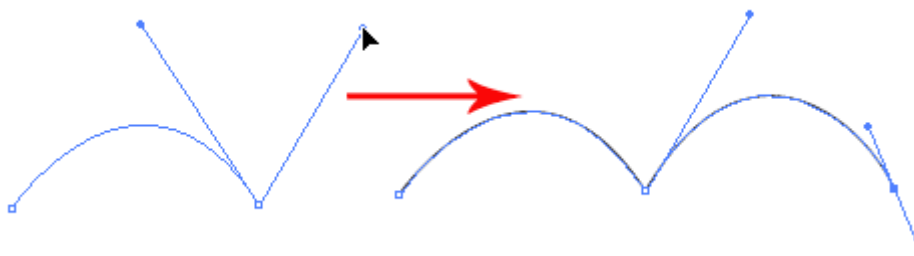
Drawing a Curved Line

Click and drag to put out the handles to create a smooth anchor point.



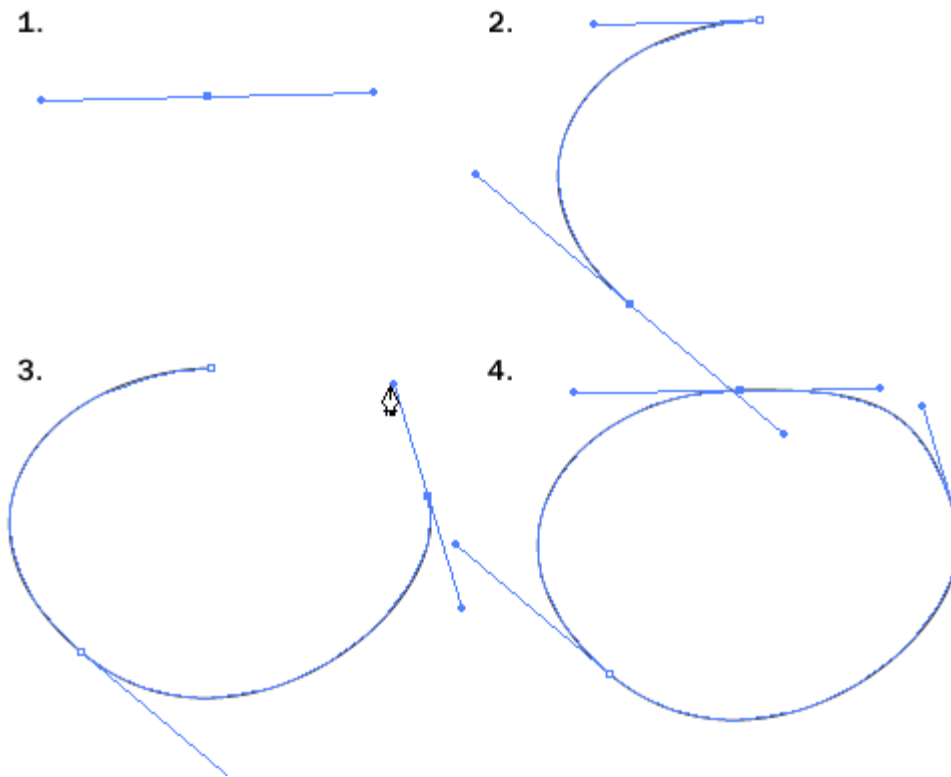
Changing Path Directions

Click and drag to create a smooth anchor point. Without releasing your mouse, hold Alt/Option and drag the handle up to change the path direction.



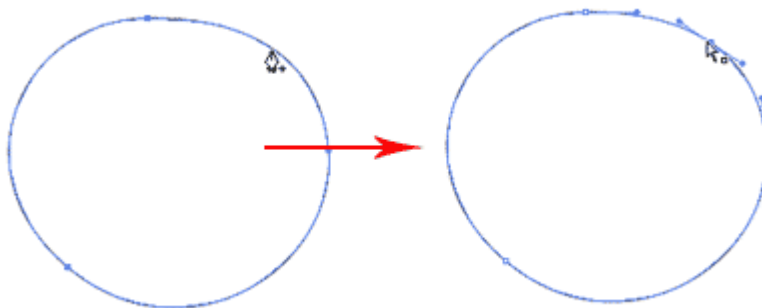
Drawing a Circular Path

Click and drag to create a smooth anchor point. Continue adding points and click back the starting point to close the path.



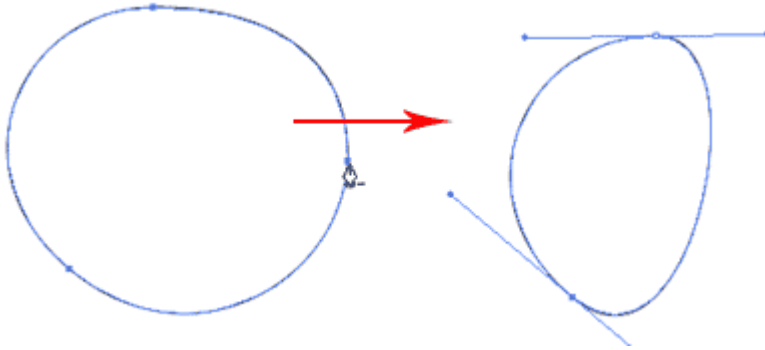
Adding Anchor Points

With the Pen Tool selected, go near the path where you want to add a new anchor point. A plus sign will appear next to the pen, click on the path to create a new anchor point.



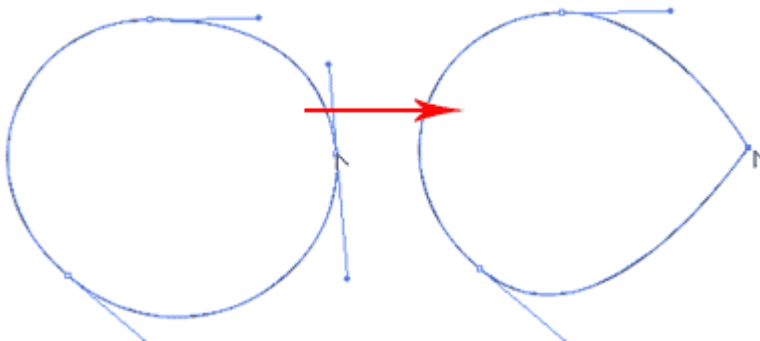
Removing Anchor Points

To remove point, move your Pen Tool close to an anchor. A minus sign will appear next to the pen. Click on the anchor point to delete it.



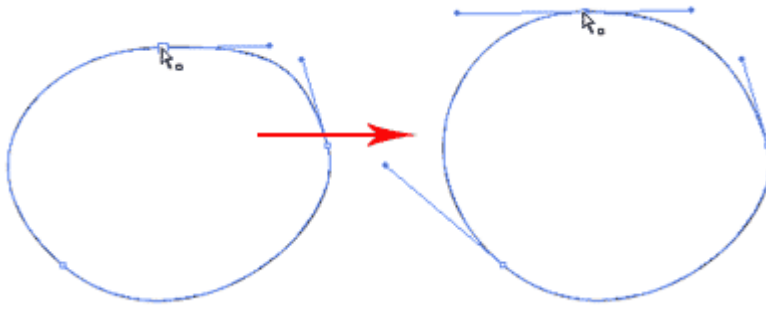
Converting Anchor Points

To convert a smooth anchor point to a sharp anchor point, move your Pen Tool near the anchor and hold Alt/Option and your Pen Tool will change to an arrow shape. Click on the smooth anchor to convert it to an anchor point. Click and drag on the anchor point again to change it back to a smooth anchor point.



Moving Anchor Points

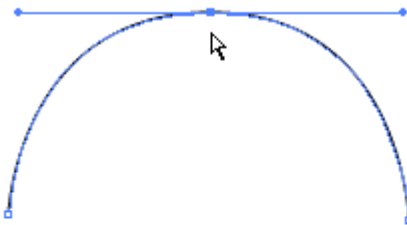
Select the Direct Selection Tool and click and on anchor you want to move. Click and drag to change positions.



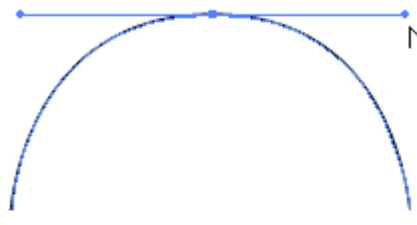
Changing Anchor Directions

With the Pen Tool, you can quickly change the anchor directions. Hold Ctrl/Command to quickly change the Pen Tool to Direction Selection Tool. Select the anchor point you want to edit. The anchor handle will appear. Now release Ctrl/Command and hold Alt/Option to change it to Convert Anchor Tool. Click and drag the handles to change the direction.

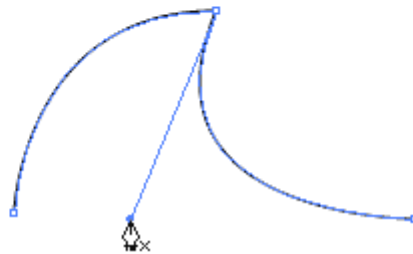
1.



2.

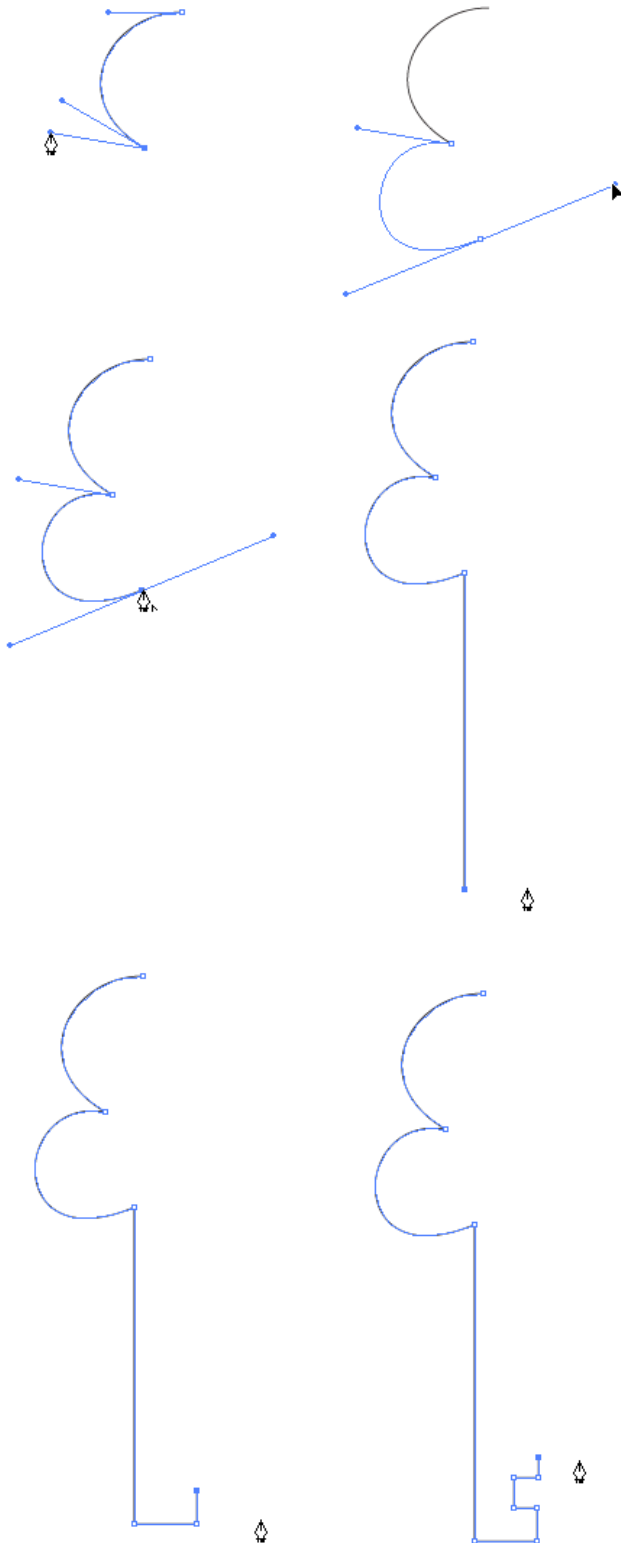


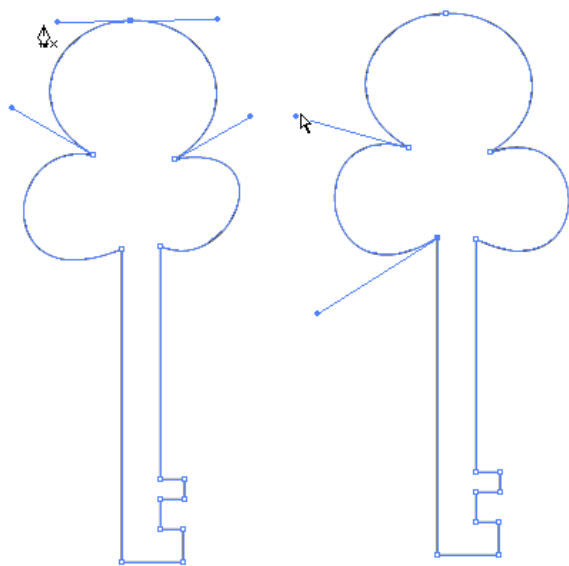
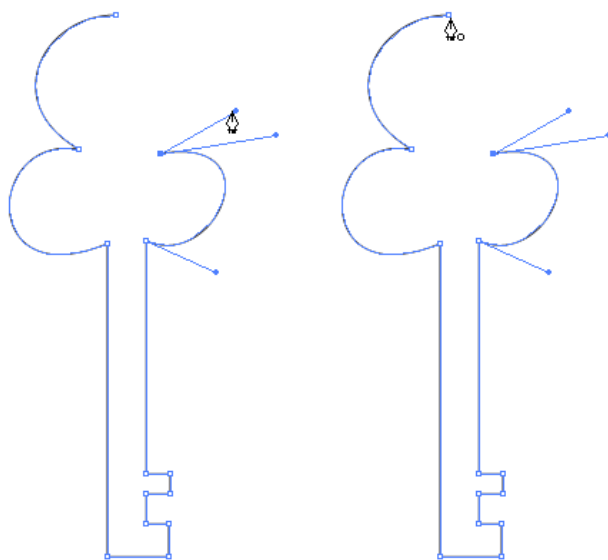
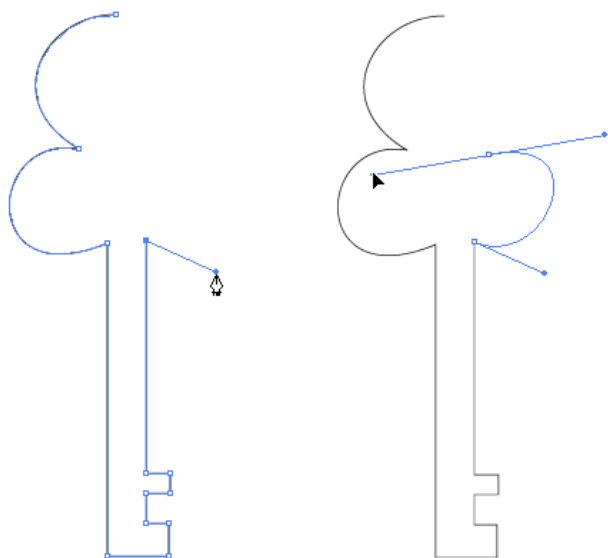
3.



Drawing an Old Key

After learning the concepts of how the Pen Tool works, we will apply what you have learnt to create this ancient old key shape. For the right angles, hold Shift before adding anchor point to constrain it to 90-degree. Click [here](#) for a demonstration video.





Final Illustration

This is the final illustration. Draw the key in Illustrator and save the file as **act4_key_done.ai**



Tips for Using Pen Tool

- Use as few anchor points as possible to create your shape
- Add anchor points where there is a change in direction of the line/curve
- Use shortcuts like Alt/Option or Ctrl/Command to quickly swap to other tools to edit your path
- Hold shift to lock your path while adding new anchor point for 45-degree increments.

More Training for Pen Tool

- 1) Open the file **pen.ai**

Zoom so that you can see the full page of the file. Then, zoom in on the “Stems” portion. Complete the steps for each portion of the file (Stems, Zigzag, Planter, Leaf, Branch). Be sure to deselect your drawing after each. Save the completed file into your Illustrator Module folder as **act4_pen_done.ai**

Click [here](#) for a demonstration video of Stems, Planter and Zigzag.

Click [here](#) for a demonstration video of Leaf and Branch.

- 2) Open the file **curves.ai**

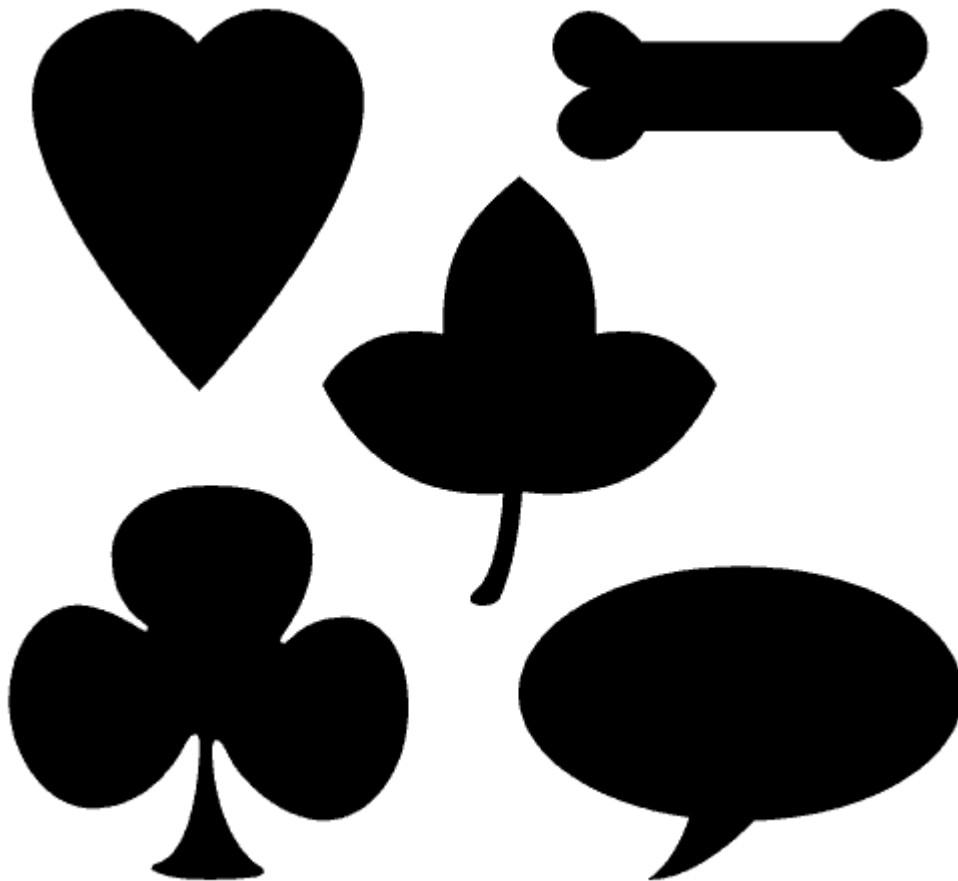
Zoom so that you can see the full page of the file. Then, zoom in on the “Paint” portion. Complete the steps for each portion of the file (Paint, Curve, Leaf, Pear, Stem) in a manner similar to pen.ai, except now you are practicing drawing curves. Be sure to deselect your drawing after each. Save the completed file into your Illustrator Module folder as **act4_curves_done.ai** Video demonstrations: [Paint, Curve, Leaf Pear](#) and [Stem](#)

3) Use the **pen tool** to create (in one drawing file) the basic shapes below. Save the completed file into your Illustrator Module folder as **act4_basicshapes_done.ai**

(You need to open the template file “**basic_shapes.ait**” and do the drawing on a new layer above the basic shapes image, using the template to trace over.)

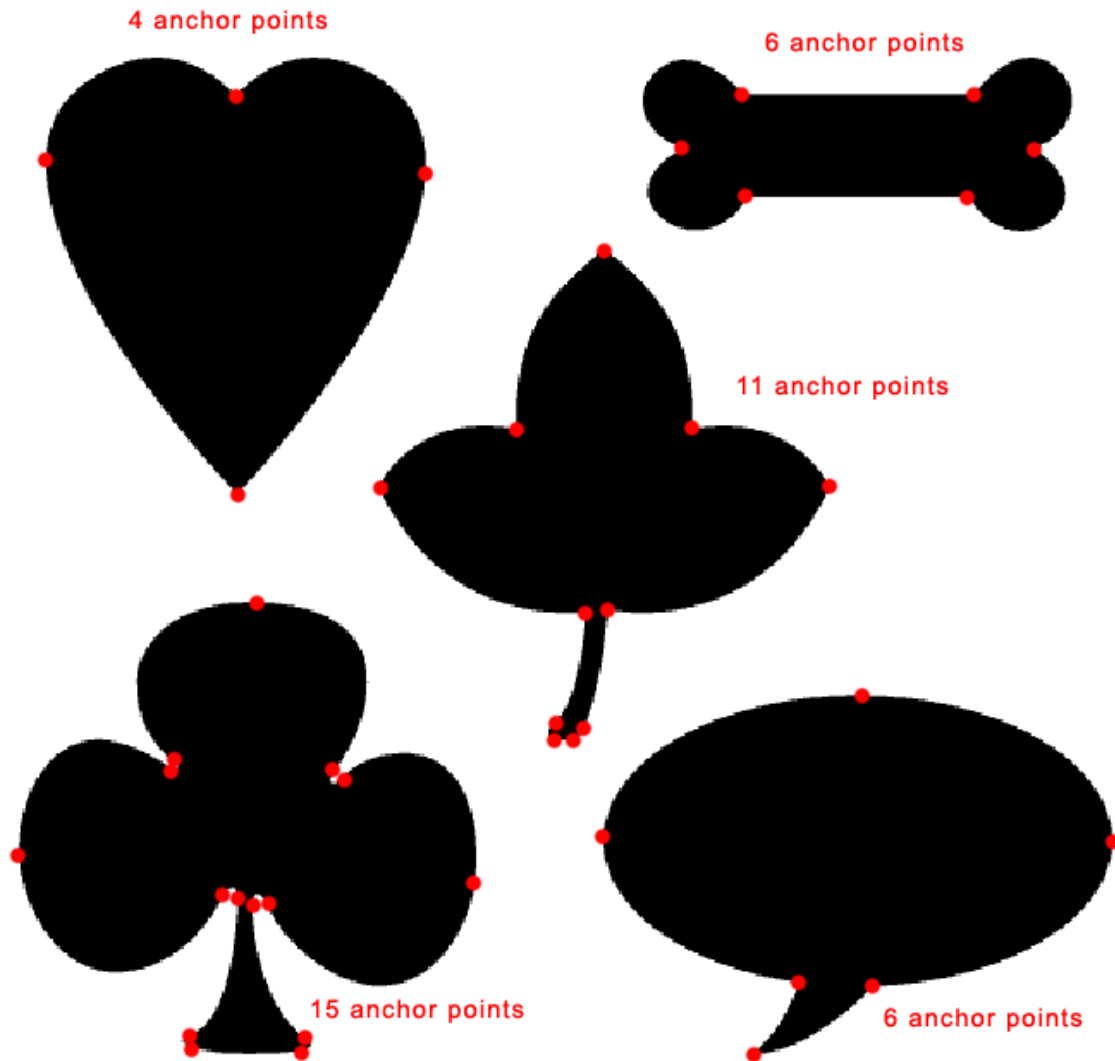
IMPORTANT: See the note at the bottom of this page, underneath this “Basic Shapes” image.

Click [here](#) for a demonstration video for **setting up the drawing file**, and [here](#) for a demonstration of the **heart**, and [here](#) for a demonstration of the **dialogue callout shape**, and [here](#) for a demonstration of the **shamrock**.



Basic Shapes

Note: Do each Basic Shape using the stipulated number of anchor points shown in the image on the next page of these instructions.



Basic Shapes

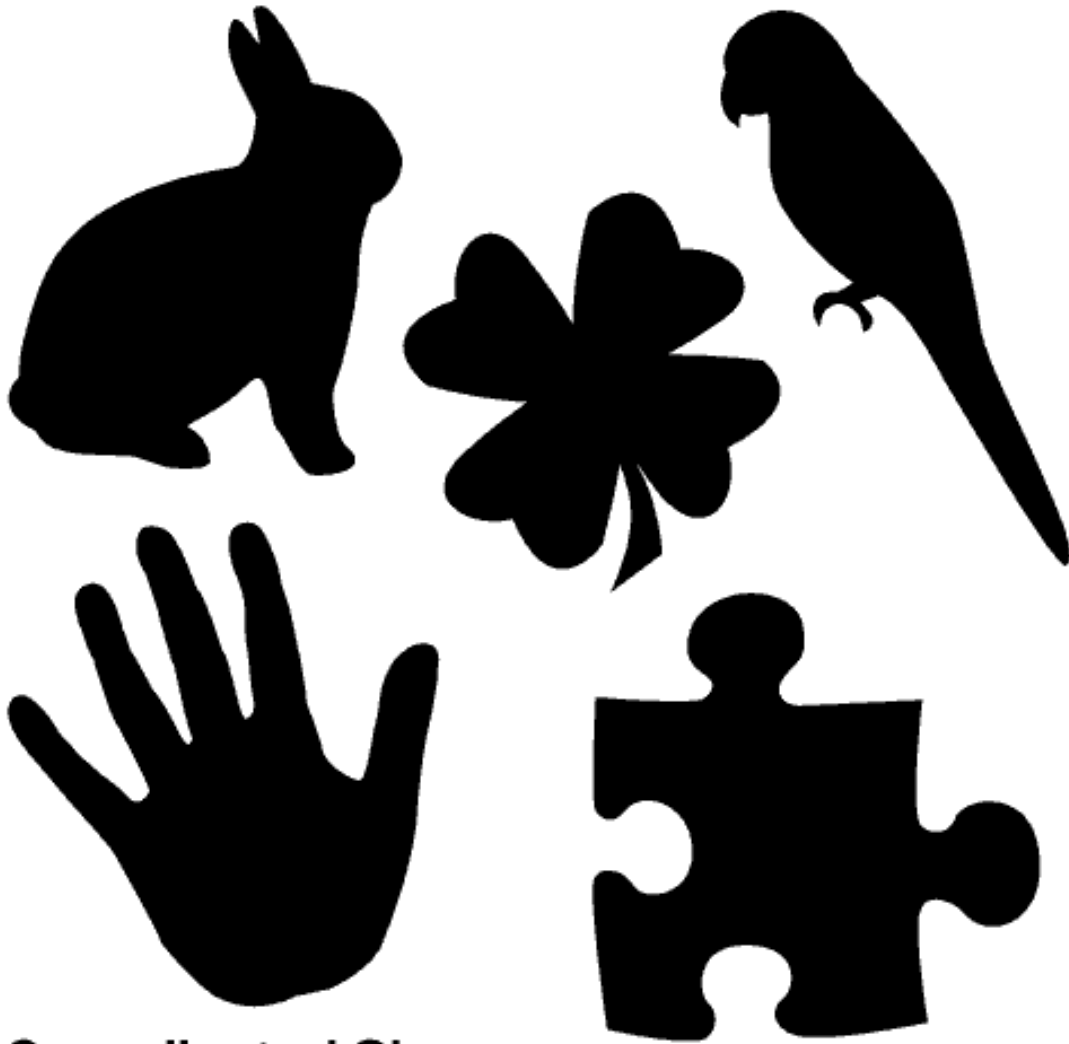
When the **act4_basicshapes_done.ai** file is completed, show it to your teacher.

4) Use the pen tool to create (in one drawing file) the complicated shapes below. Save the completed file into your Illustrator Module folder as **act4_complicatedshapes_done.ai**

(You need to open the template file “**complicated_shapes.ait**” and do the drawing on a new layer above the basic shapes image, using the template to trace over.)

Do each shape in as few anchor points as possible.

Click [here](#) for a demonstration video for the **rabbit**.



Complicated Shapes

When the **act4_complicatedshapes_done.ai** file is completed, show it to your teacher.

Activity 5

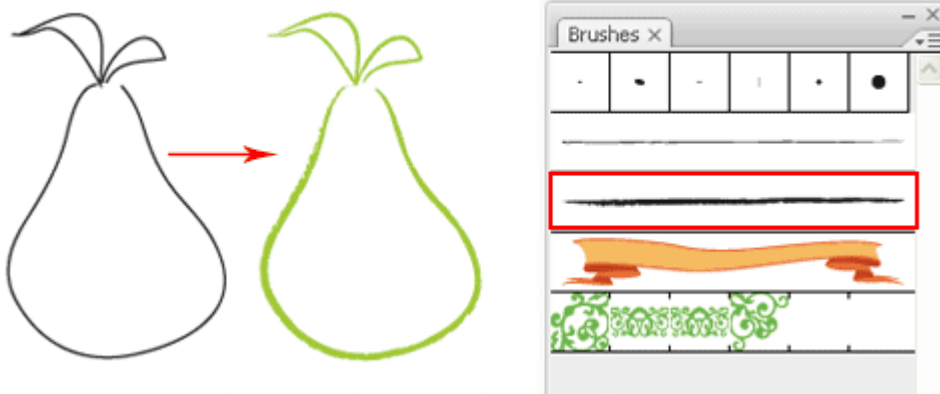
Using the Paintbrush Tool

Adobe Video Workshop – watch the Illustrator CS3 video: “**Using the Paintbrush tool**” [Click here](#) for the web site.

Using the Paintbrush Tool, you can add styles to your lines. It can also be used to mimic calligraphy, crayon and brush strokes. This will help you add more life to your line works.

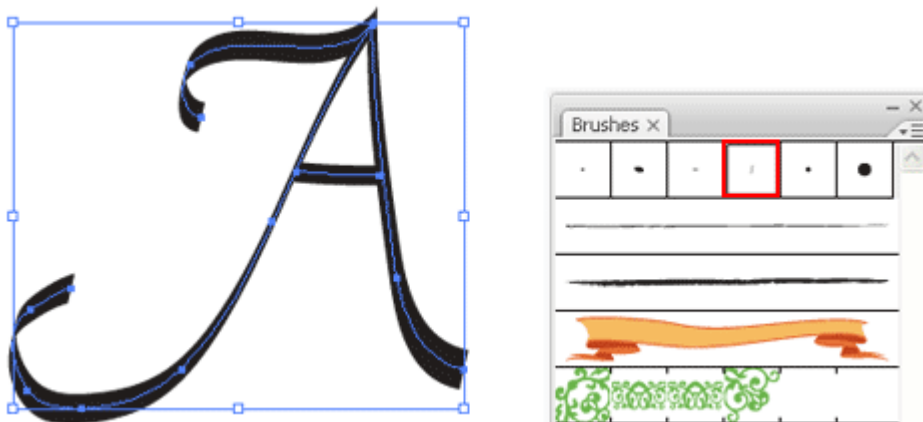
Applying Brush Stroke

Select the Brush Tool and draw your object. Then go to your Brushes Palette and select the charcoal brush to apply the effect.



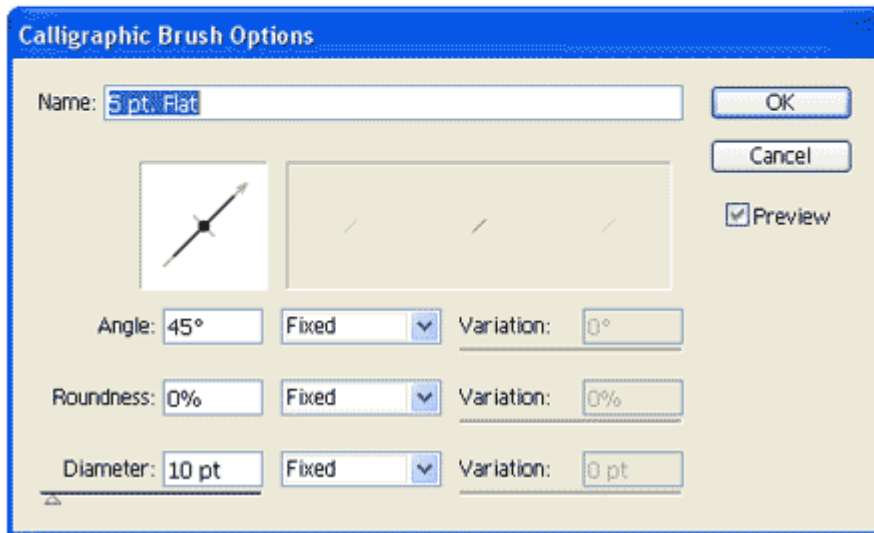
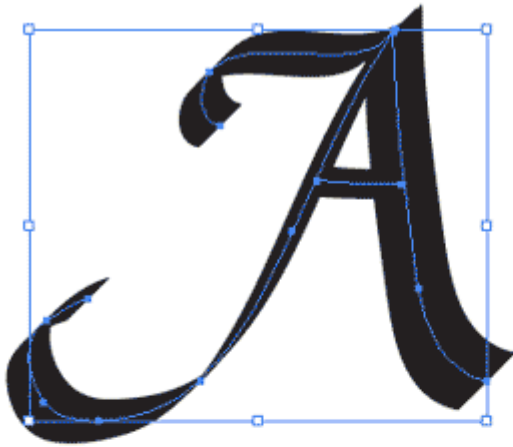
Calligraphy Brush Stroke

To apply a calligraphy brush stroke, draw your path and select the calligraphy brush. Increase the Stroke to make it thicker.



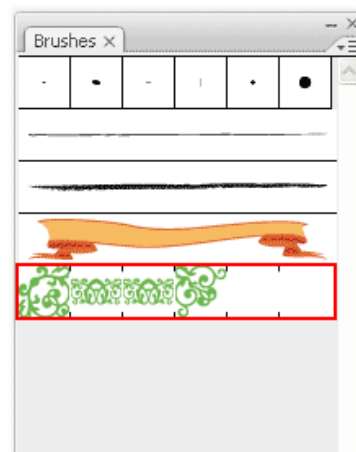
Calligraphy Brush Options

To make changes to your calligraphy brush, you can double click the Calligraphy Brush to pop up the calligraphic brush options. Drag the brush to change the angle in the thumbnail. Change the Diameter makes it thicker.



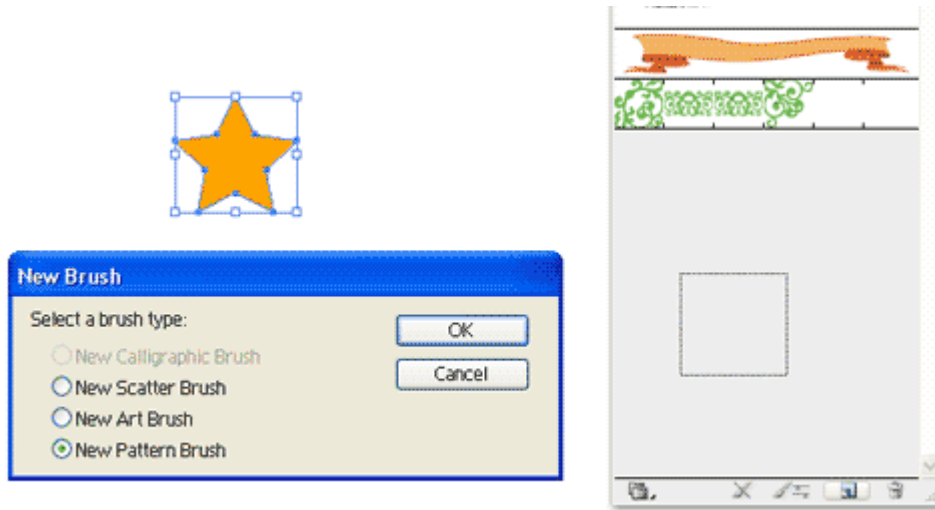
Create a Border Pattern

Draw a rectangle and pick the border pattern. This will create a frame for it.



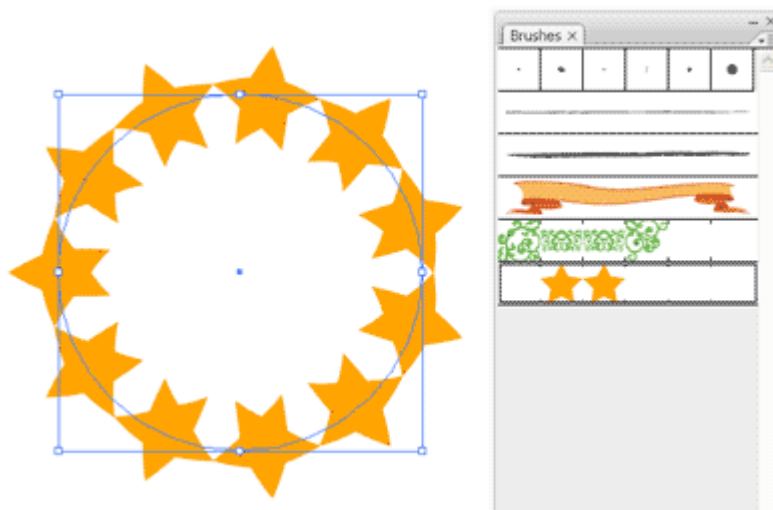
Creating a New Pattern Brush

To create a new brush, draw a Star and drag it to the Brushes Palette. A New Brush selection appears. Choose New Pattern Brush for it.

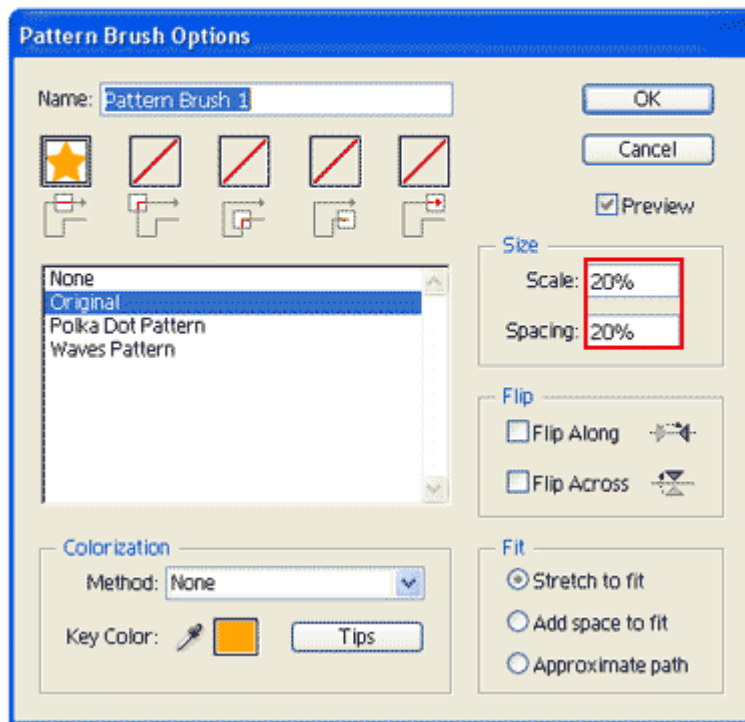


Applying Pattern Brush

Draw a circle and apply our new brush stroke.



Next draw a line path and apply the brush stroke. Double click the star brush from your brushes and set Scale and Spacing to 20% to get the effect below.



Brushes are very good for aligning objects and creating borders. So experiment with it and have fun!

Adobe Video Workshop – watch the Illustrator CS3 video: “**Using brushes from brush libraries**” [Click here](#) for the web site.

Open your cartoon drawing from Lesson 3 (**act3_cartoon.ai**). Select the whole drawing and apply the charcoal brush to it. After that, change the stroke color to a dark shade of green. Save the changed file as **act5_brush.ai**

Activity 6

Shapes and Pathfinder

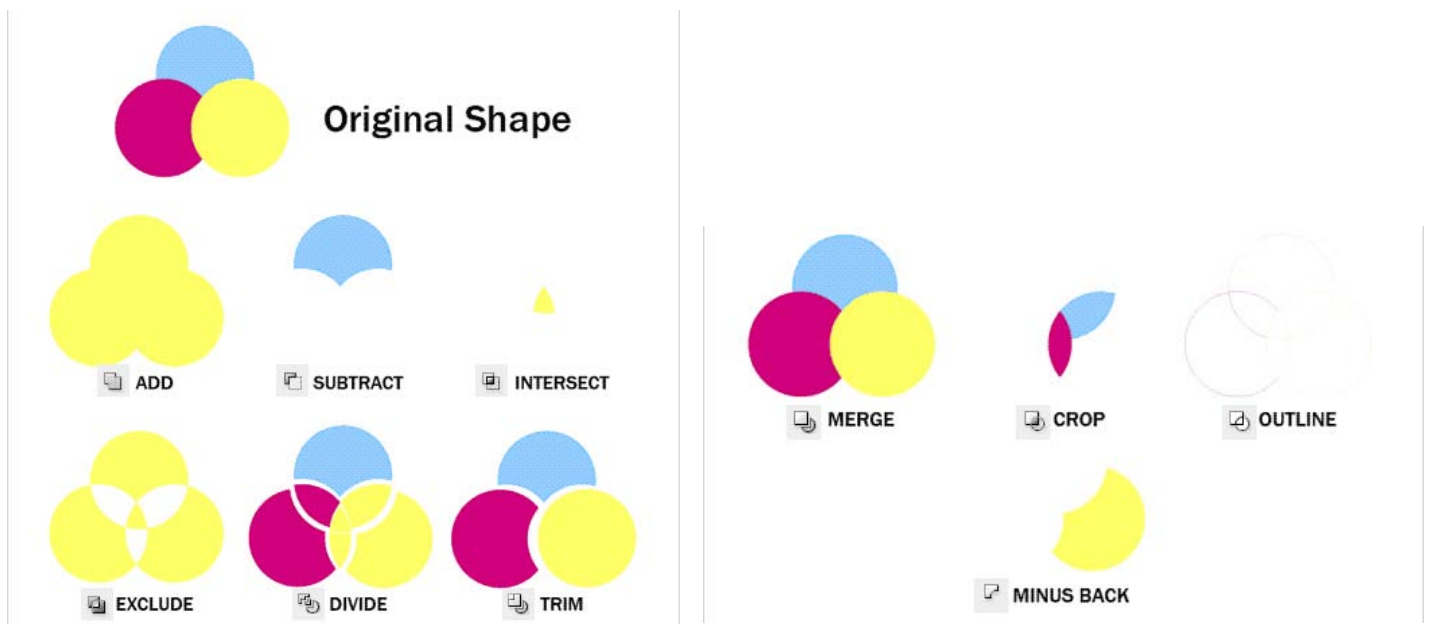
Almost all objects in over daily life can be built with basic shapes. By drawing shapes using our basic shape tool, we can use compound path to combine or subtract shapes to create what we need.

What is Compound Path?

Compound path is made out of at least two objects. You can add, subtract and intersect shapes to form a compound path.

Compound Path Cheat Sheet

I have compiled a cheat sheet to show how it looks like using different functions of compound path. You can see the final effect after we applied the compound path to three colored circles.

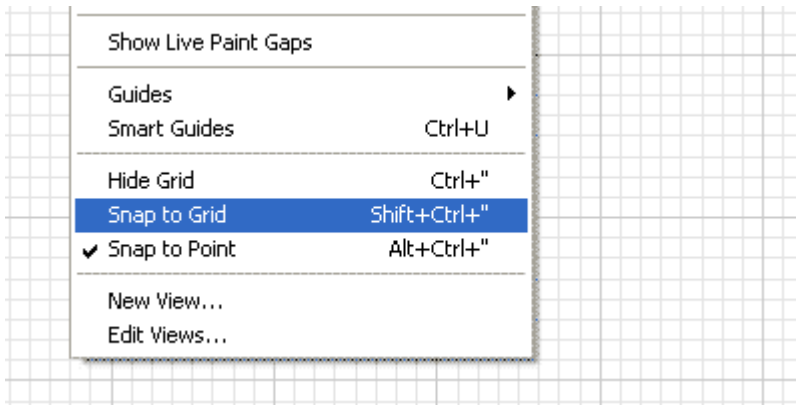


Creating an Ancient Key Using Compound Path

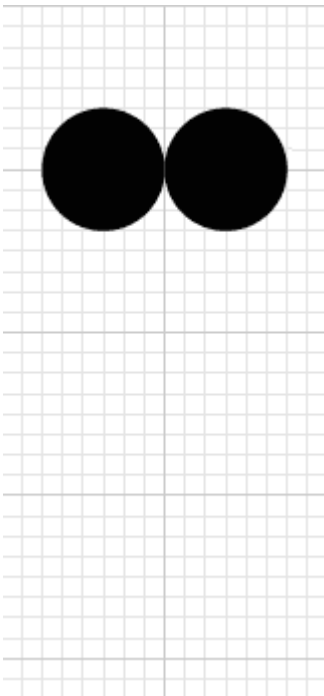
In this tutorial, I will show you how to create an ancient key using compound paths rather than using Pen Tool in our previous tutorial.

Turning on the Grids

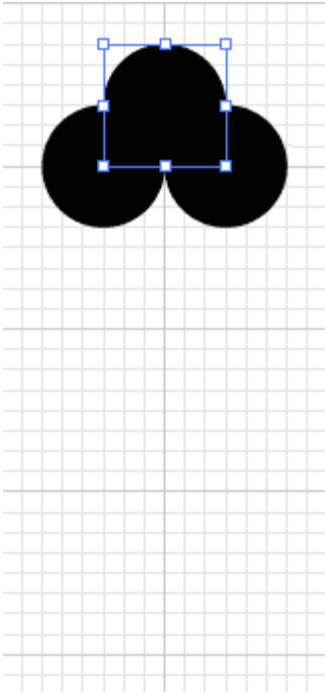
Go to View>Show Grid to turn on the grids, then go and turn on Snap to Grid. With the grid and snapping turned on, you can easily snap objects to the grid.



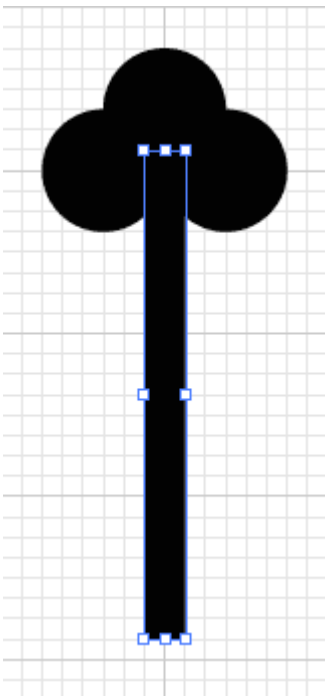
First draw a Circle using your Shape Tools, hold Alt/Option as you click and drag a new copy beside it.

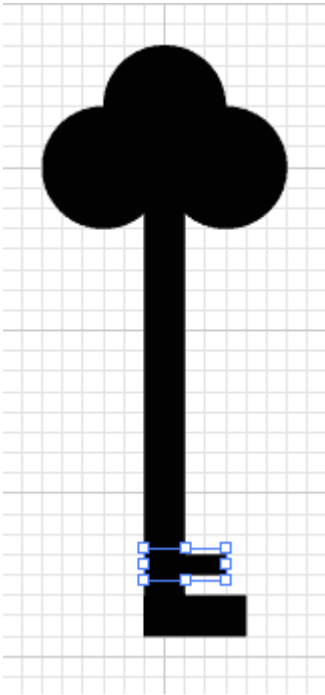
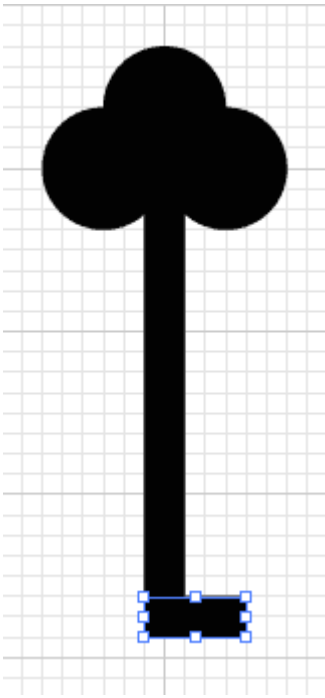


Duplicate a new circle and place it on top.

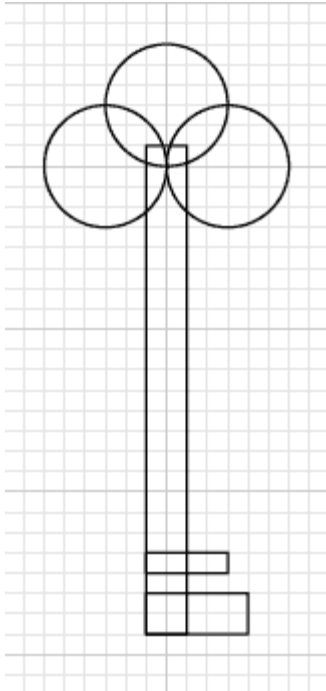


Next, select the Rectangle Tool and continue building up your key shape.

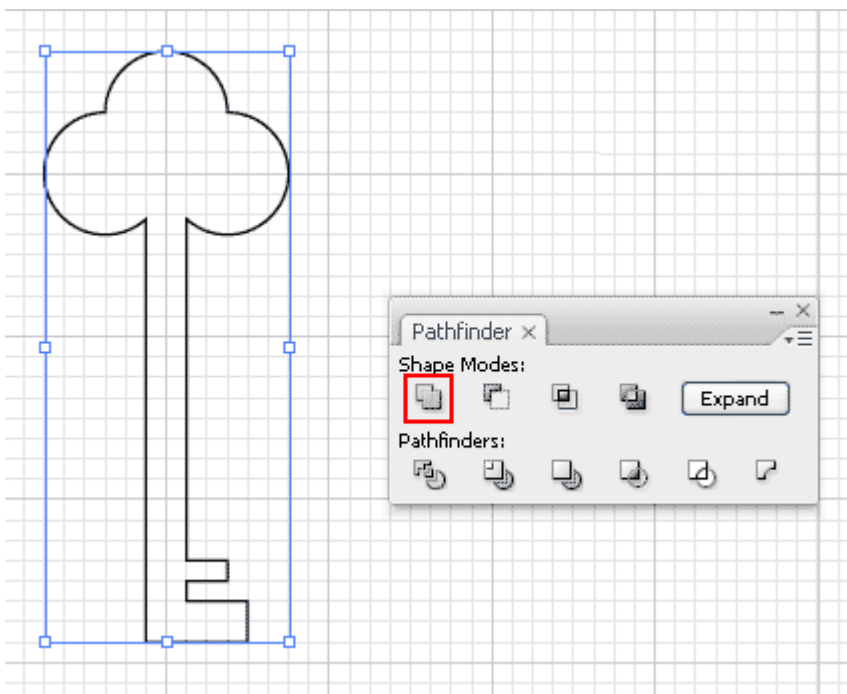




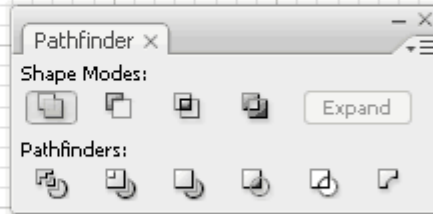
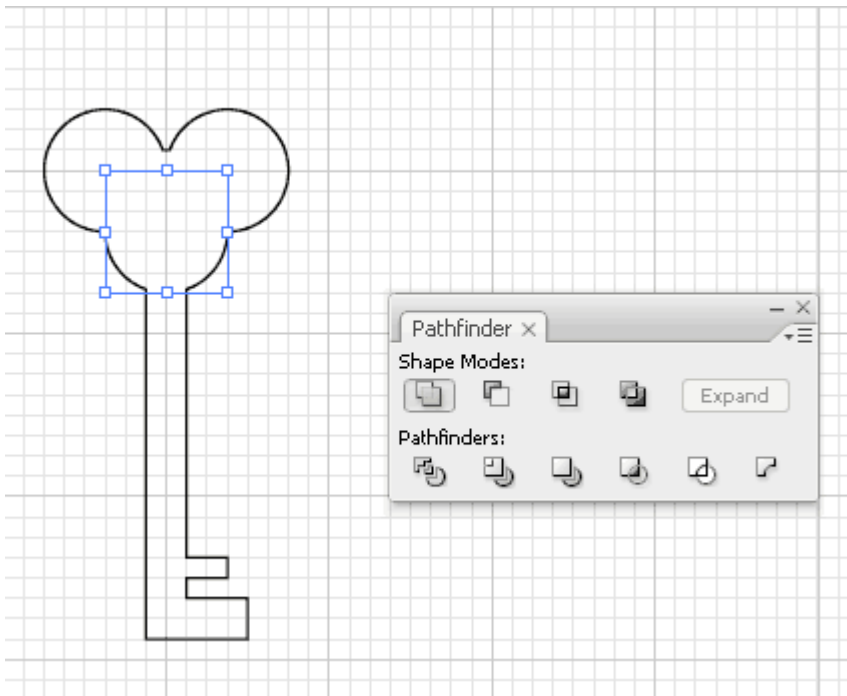
Swap the Fill and Stroke for the object, this will show you all the objects we have.



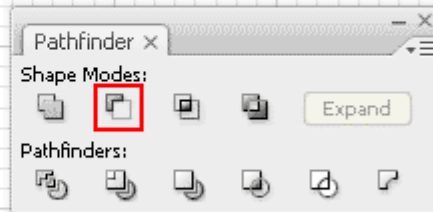
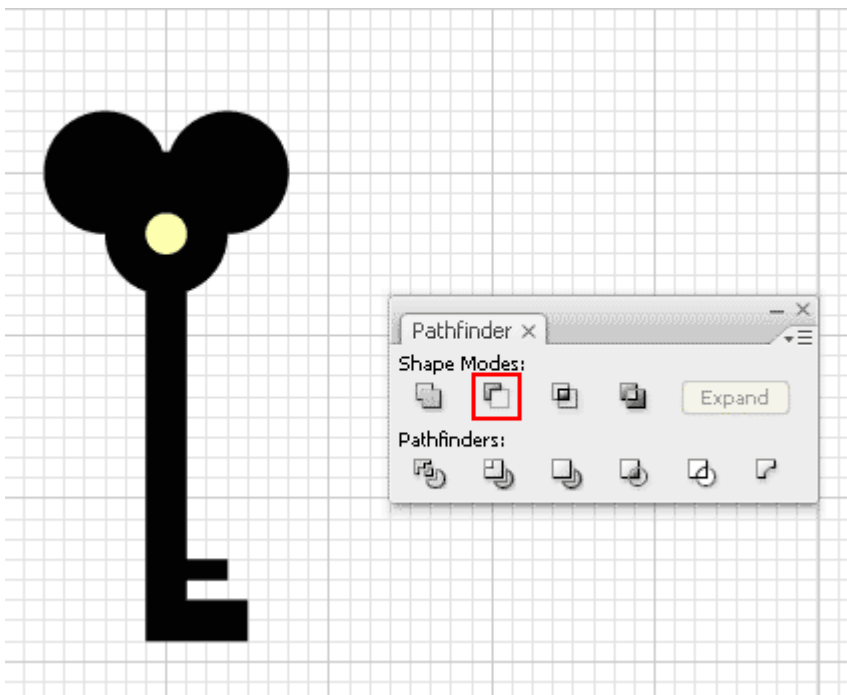
Using the Selection Tool, select the whole shape and go to Window>Pathfinder to bring up the Pathfinder. Select Add to shape to combine the objects.



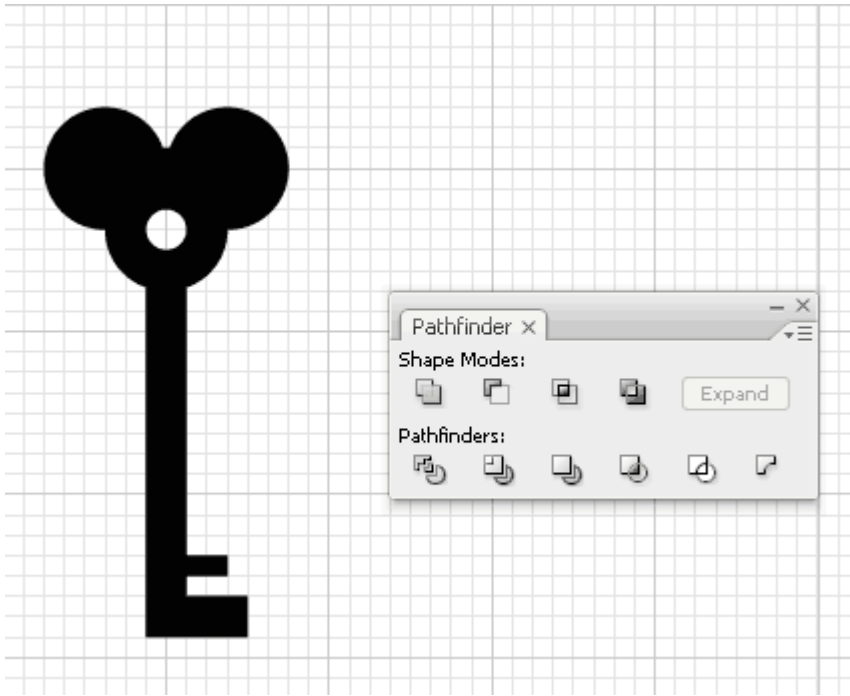
You can still make changes to the compound path at this stage. Try moving the top circle below to see how it works. To do this, double click with the Selection Tool to go into isolation mode to move the individual shapes.



Next we will swap it back to black fill again, draw a circle in the middle which we will punch a new hole there. Select both shapes and select Subtract from shape area.



Here is the final illustration.



Save your finished drawing of the key (which you made by following the instructions above) as **act6_key.ai**

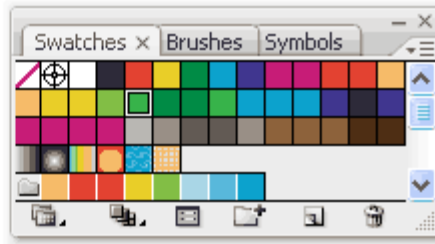
Adobe Video Workshop – watch the Illustrator CS3 video: “**Working with clipping masks and Pathfinder effects in Illustrator**” [Click here](#) for the web site.

Activity 7

Stroke and fill color

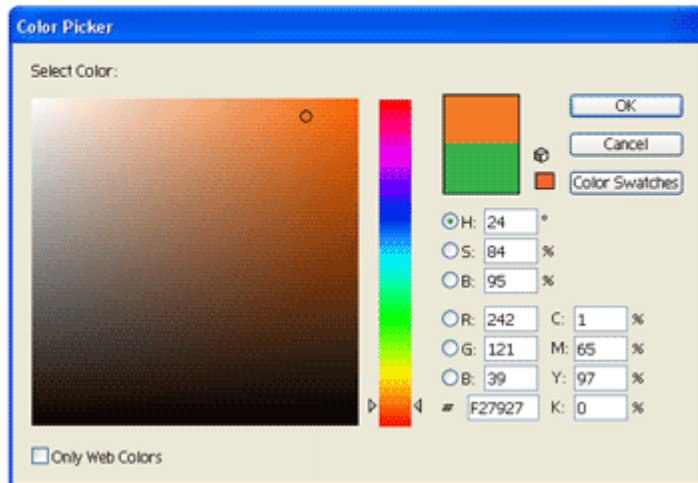
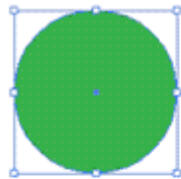
Filling Color Using Swatches

To fill an object, open up your Swatches Palette. Select your object and pick any color from the swatches.



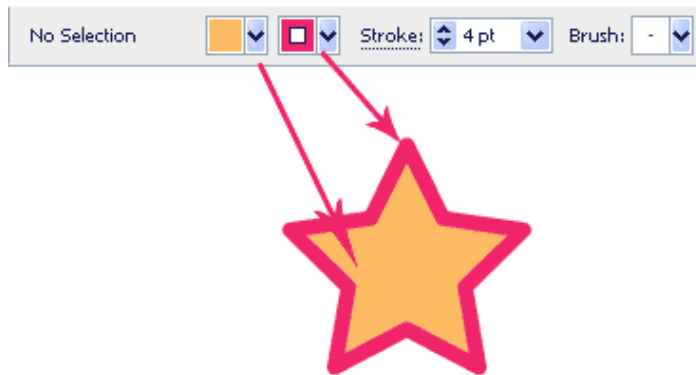
Filling Color Using Color Picker

Another way to fill color is by double clicking on the Fill in your Tool Palette. A Color Picker window will appear and you can pick your color.



Changing Fill and Stroke Using Control Palette

You can also easily change fill, stroke color and stroke width by accessing your Control Palette at the top of your artboard.



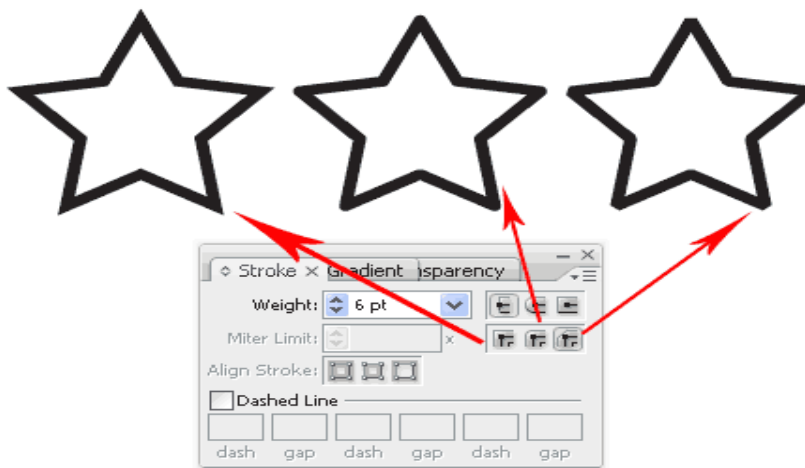
Stroke Caps

The Stroke Caps determine the start and end points of a stroke. This applies to open paths only. You can choose between a Butt, Round, or Projecting cap.



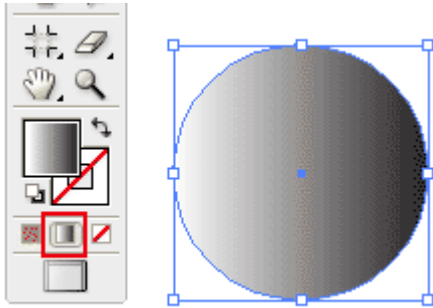
Miter Limit

The stroke's Miter Limit specifies the appearance for the joins in a shape. Notice how the joins look after we applied different miter settings to the stars.

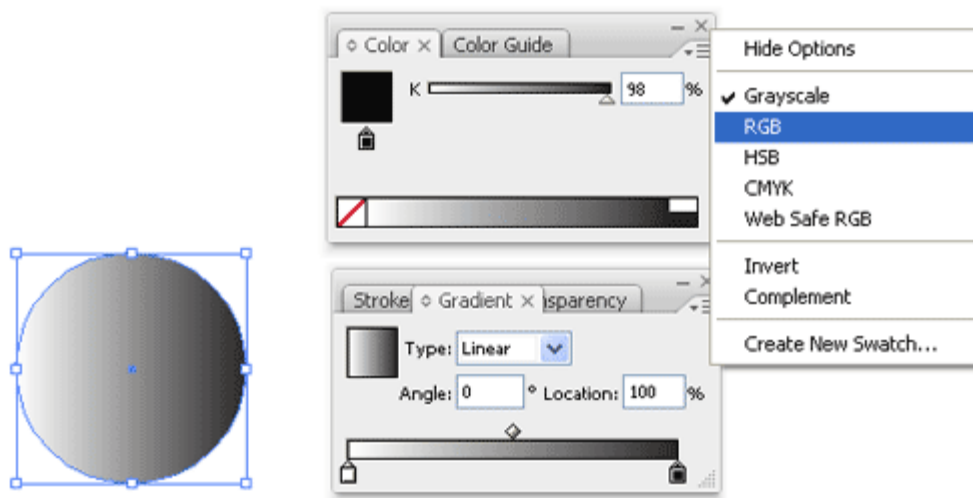


Applying Gradient to Objects

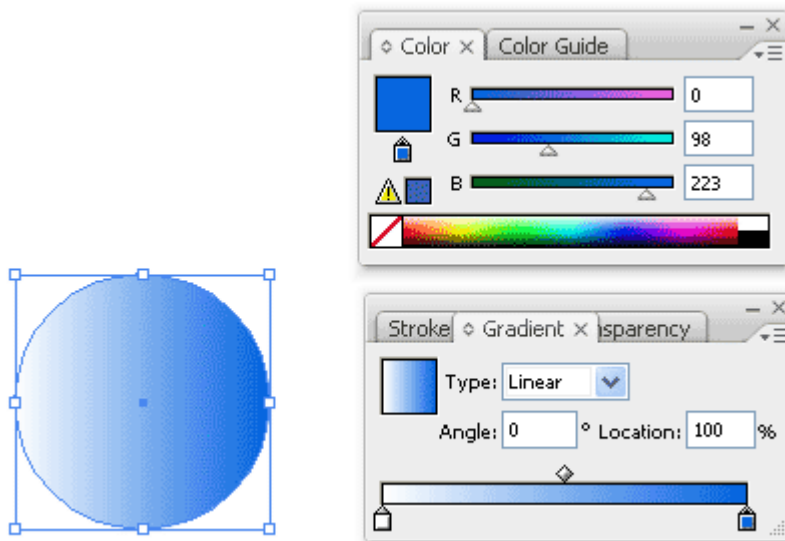
To apply gradient to your object, go to the Tool Palette and set it to Gradient Fill.



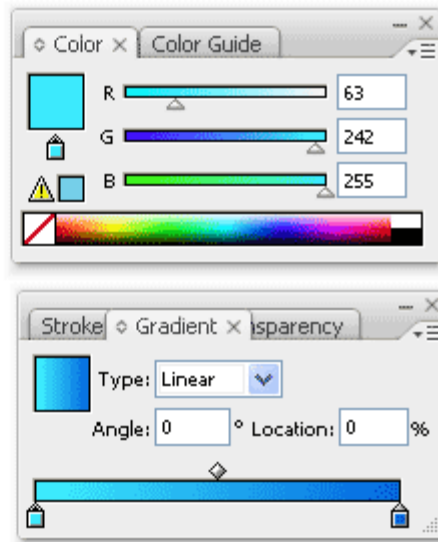
Open up your Gradient and Color Palette. By default it is a Grayscale gradient. Click Options icon at the corner and change it to RGB mode.



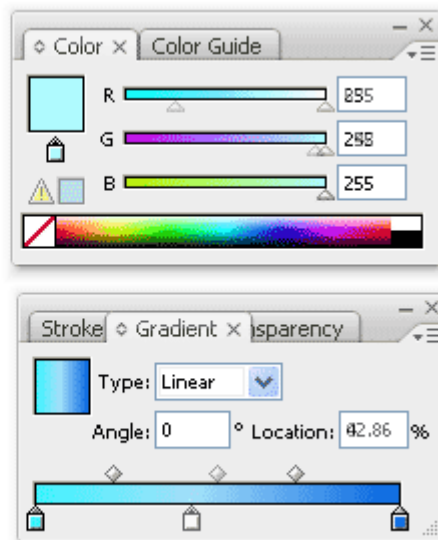
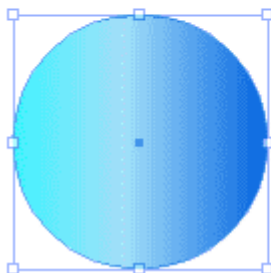
After we switched to RGB there will be slider and a color chart to pick the color. Choose a dark blue for it.



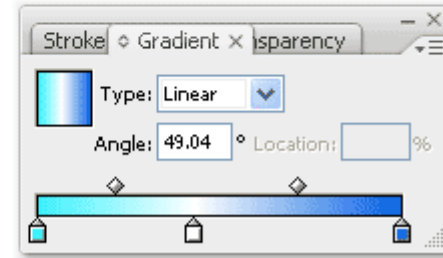
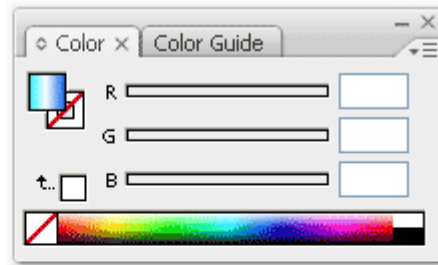
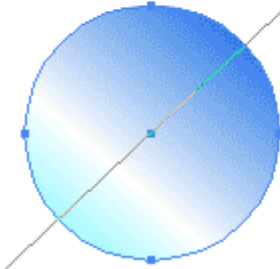
Do the same for the start point, change it to RGB and choose a light blue.



To add a new gradient stop to the gradient, click right below the gradient ramp to create a new stop. Change it to white color. To remove it, you can drag the stop out of the Palette.

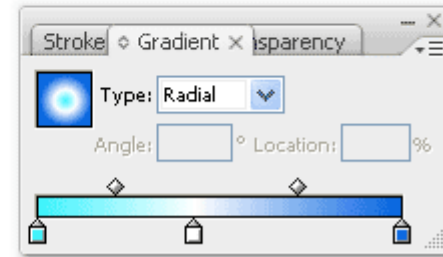
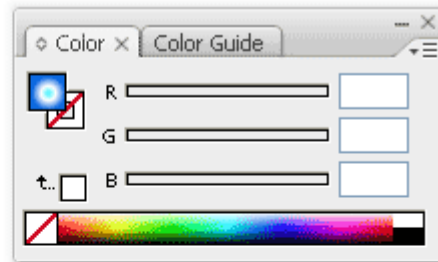
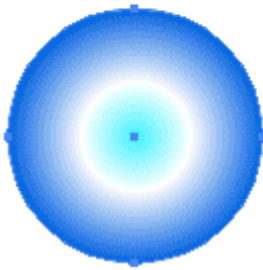


To change the direction of the gradient, select the Gradient Tool from the Tool Palette. Click and drag in the direction you want the gradient to follow.



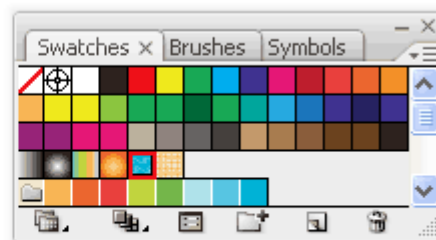
Radial Gradient

To set it to radial gradient, Choose Radial instead of Linear.



Pattern Fill

To create seamless pattern fill, we can choose the pattern fill from the Swatches.



Adobe Video Workshop – watch the Illustrator CS3 video: “**Working with gradients and blends**” [Click here](#) for the web site.

Conclusion

Using radial and linear gradient, we can achieve a lot of realism to our artwork. Radial patterns can add depth and volume to circle, and linear pattern can used to create volume for cylinders. Here is an example of gradients used to create a jingle bell.



Activity 8

Working with layers and groups

Open the Illustrator file Layers and groups.ai

Adobe Video Workshop – watch the Illustrator CS3 video: “**Working with layers and groups**” [Click here](#) for the web site.

As you start working on complicated illustrations, layers will start to build up. And you will have to group and arrange them so that you can move and edit the layers easily. I will show you an example of an illustration I did so that you can see how I name and group my layers. Open the Illustrator file named **activity8.ai**



Layers Palette

You can access your Layers Palette from Window>Layers. As you can see below, I have grouped my objects into 6 different layers. You can see the stacking order with the background at the bottom and towel at the top for my illustration. Below is a list of layer settings and their uses.

Visibility Icon: Click to hide/unhide layer

Lock Icon: Click the lock to lock the layer

Layer Name: Double click to rename it

Target Indicator: Click to select layer

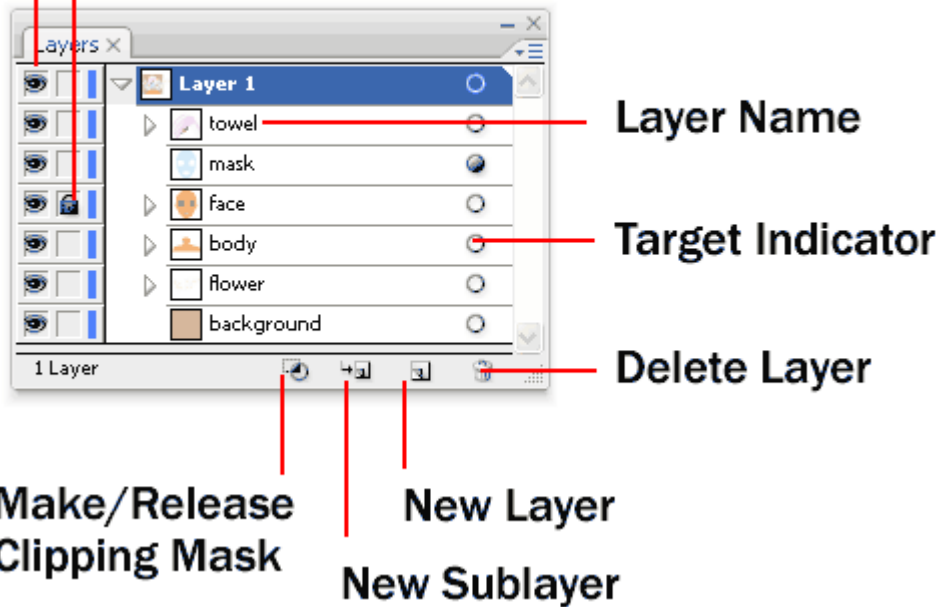
Delete Layer: Click to delete layer

New Layer: Add new layer on top

New Sublayer: Add new sublayer under Layer 1

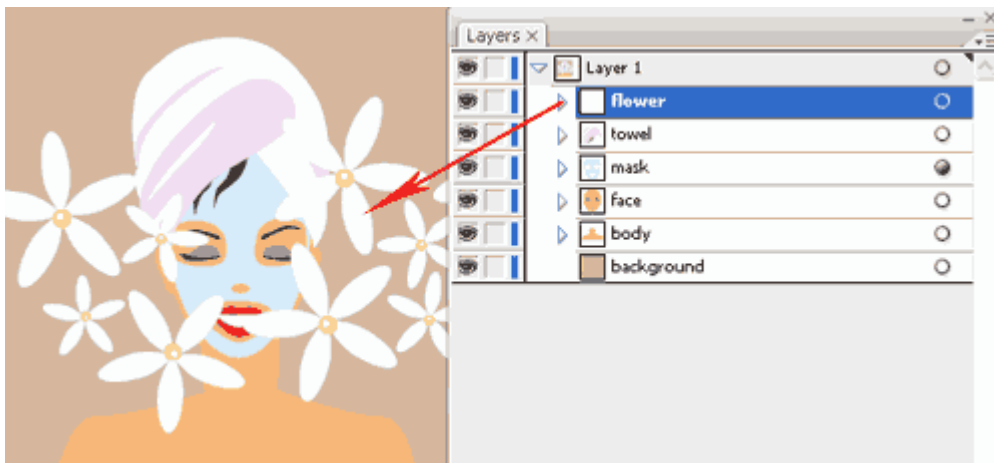
Visibility Icon

Lock Icon



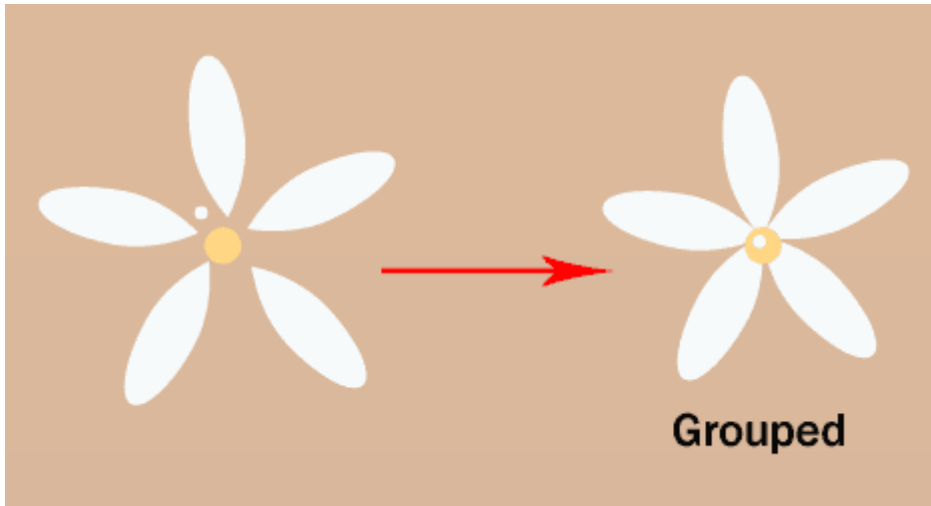
Arranging Objects

To bring a layer on top, select the layer and drag it to the top. Now the flower is at the top layer and covers the whole picture.

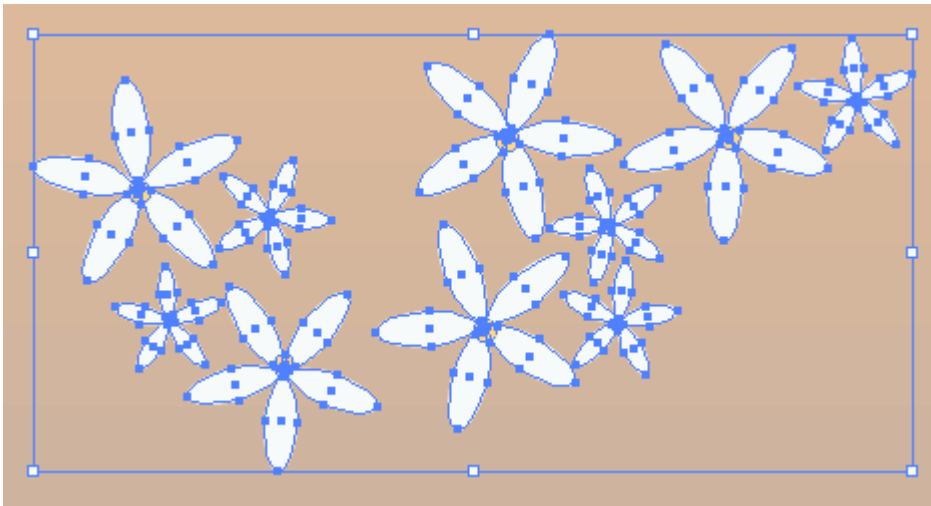


Grouping Objects

By grouping objects, you can move them together rather than spend time selecting all the objects individually. Here is an example of a flower made up of 63 layers. By selecting my object and grouping them by pressing Ctrl/Command+G, I am able to group them together and move. To edit the grouped object, double click to go into isolation mode to edit the objects. If you want to ungroup them, press Ctrl+Shift+G/Command+Shift+G.

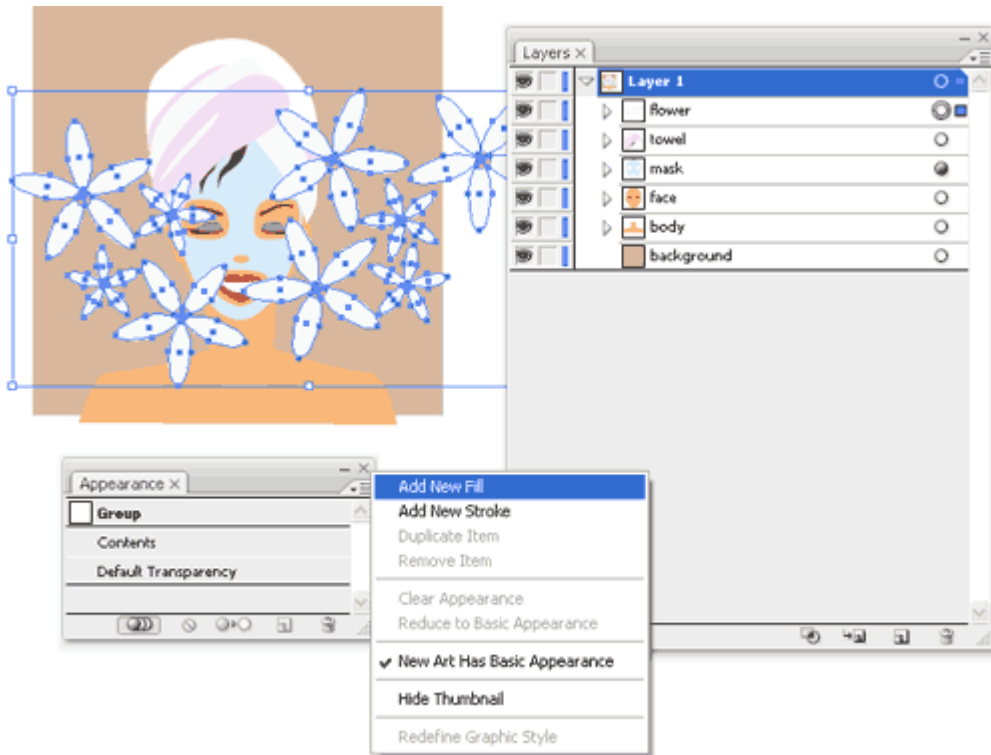


Next, I duplicate a few more of my grouped flower and group them again to form my flower layer.

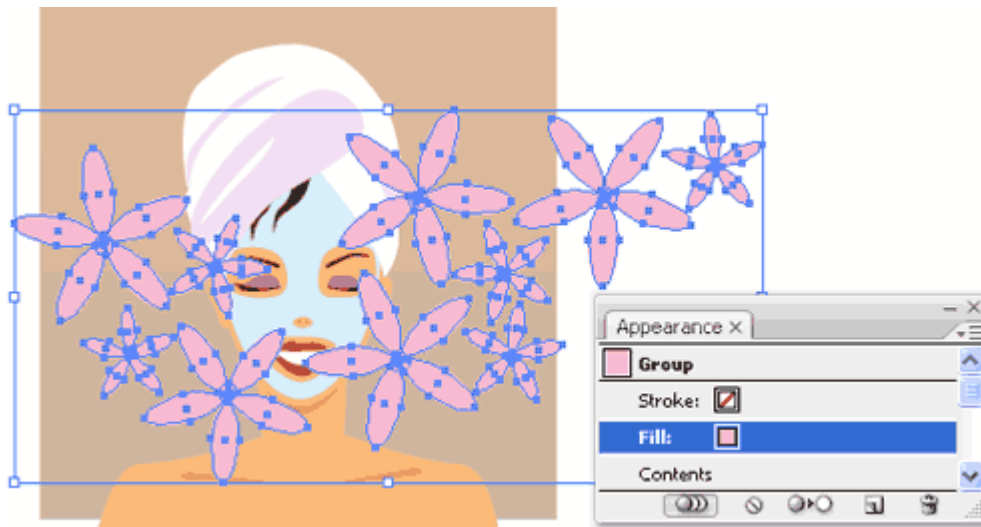


Appearance Palette

The Appearance Palette shows what effect is applied to a layer. You can Add New Fill or Add New Stroke to the whole layer or individual objects. Go **Windows>Appearance** to open up your Appearance Palette. Let's see how it looks when we apply a new fill. Click the option icon and choose Add New Fill.



After we set the Fill with pink color, it turns the whole layer to pink.



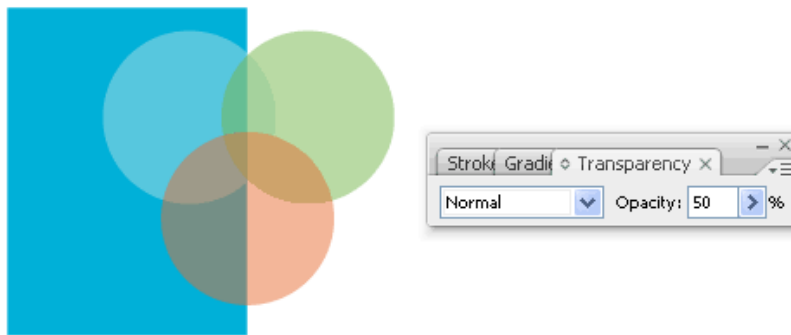
Move the changed “flower” layer back behind the person and save the file as act8_ done.ai

Activity 9 – Transparency & Graphic Styles

Adobe Video Workshop – watch the Illustrator CS3 video: “**Working with transparency in Illustrator**” [Click here](#) for the web site.

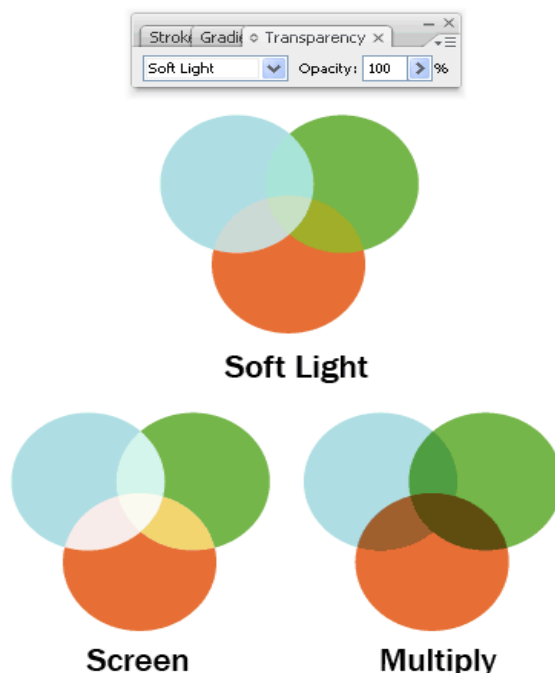
Adding Transparency

You can add transparency in Illustrator by lowering the opacity of objects so that underlying artwork becomes visible. Go Window>Transparency to open up your Transparency Window. Select a few stacked objects and set it to a lower opacity of 50% for the underlying color to show through.



Blending Modes for Objects

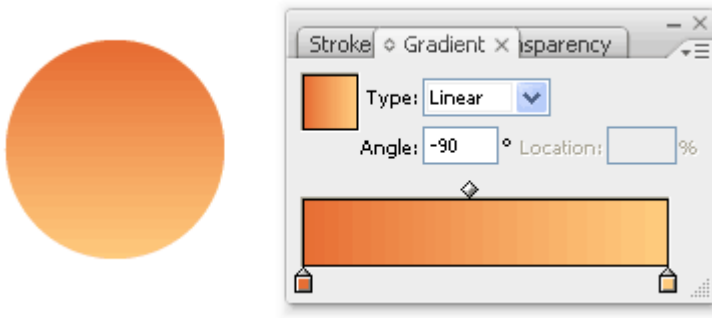
If you are familiar with Photoshop, you may have heard of Blending Modes. Blending modes let you vary the ways that the colors of objects blend with the colors of underlying objects. Here I have an example of 3 popular blending modes to show you the effect. I shall not go through how each blending mode in detail as it is quite technical for beginners. If you are interested, you can read Adobe livedocs [here](#).



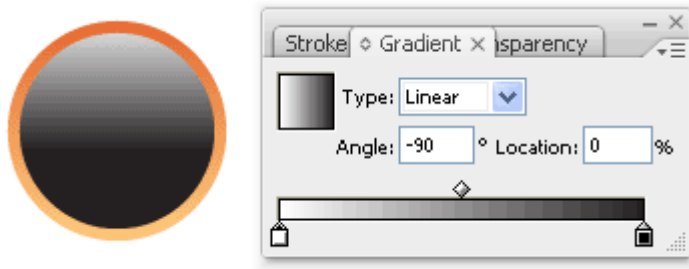
Button Reflection Using Screen

Screen blending mode is one of my favorites as it allows me create reflection effortlessly. I will be showing you a popular technique on creating a button reflection using Screen.

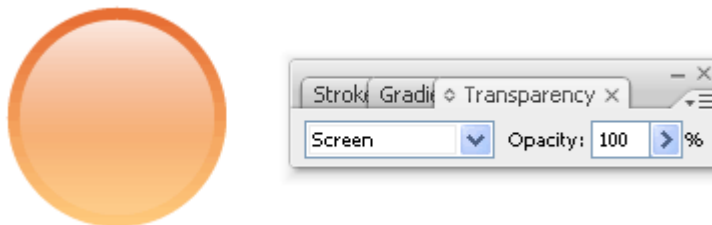
First draw a circle and apply a gradient of light to dark orange to it.



Draw another circle on top and apply a gradient from black to white.



Finally, select the black to white circle and change the blending mode to Screen. And you're done!

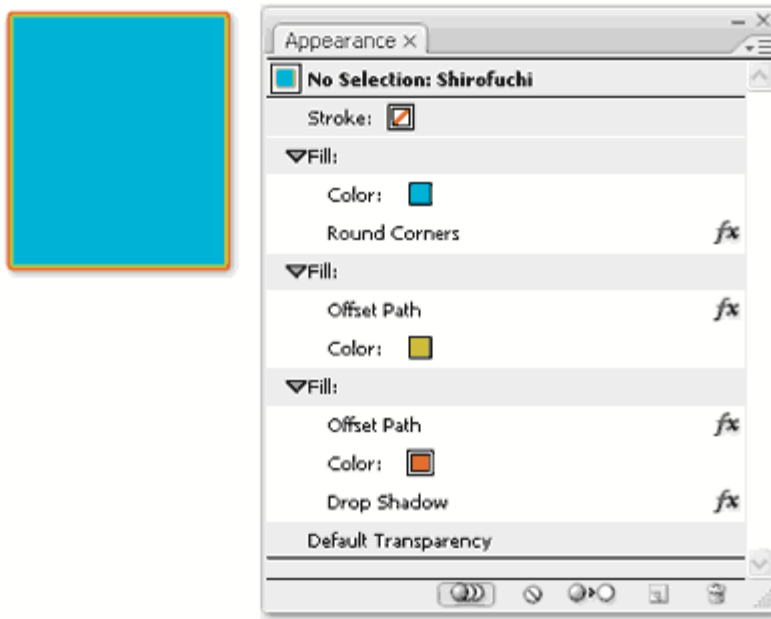


Applying Graphic Styles

Illustrator has some built in graphic styles which you can quickly apply to your objects. It is like a saved set of attributes. Once you have created an object style, you can apply it across different objects.



To see the attributes of a graphic style, go Window>Appearance. Here we can see that there are 3 fills with effects (fx icon) applied. We will learn more about using effects in the later lessons.



Activity 10 – Resize and Reshape objects

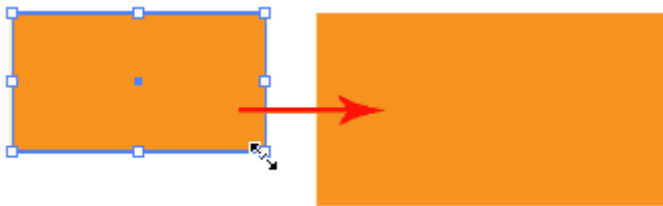
Open the file Scale and Scew.ai

Adobe Video Workshop – watch the Illustrator CS3 video: “**Scaling, scewing and rotating objects**” [Click here](#) for the web site.

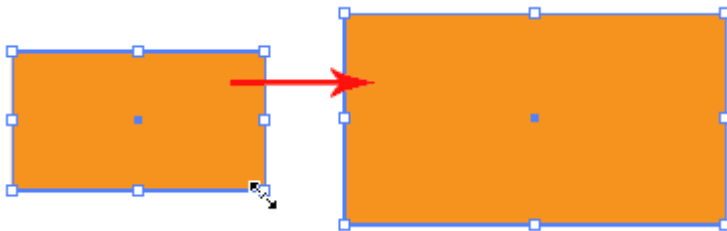
In this lesson, you will learn how to quickly resize and rotate objects using the Transform functions. I will be showing some useful transform tricks to create random rotating objects using the Transform Each function.

Resizing Objects

Method 1: Select the object with Selection Tool and the bounding box will appear. Select the corner handle and resize while holding Shift to constrain proportion.

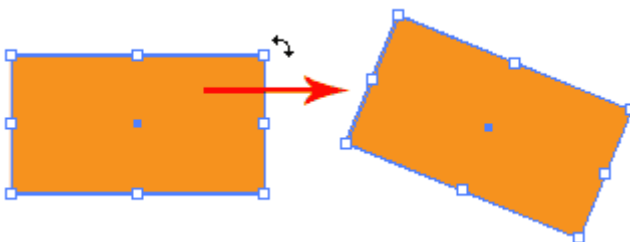


Method 2: To resize from the origin point (the center point of the object), hold Alt/Option while holding Shift.

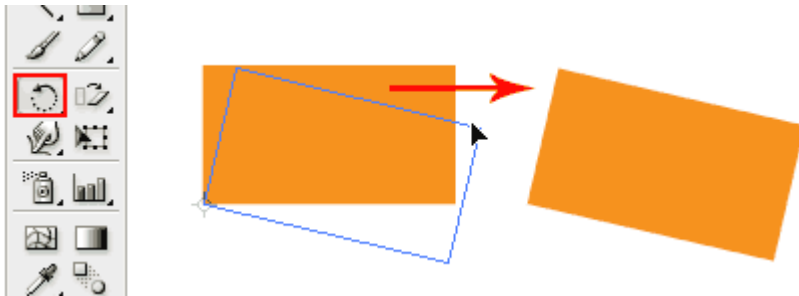


Rotating Objects

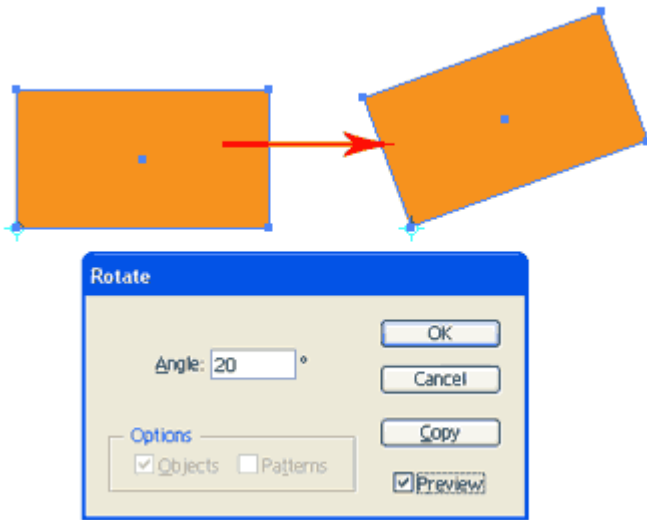
Method 1: Select the object with Selection Tool and the bounding box will appear. Select the corner handle and rotate to turn the object.



Method 2: To rotate the object from a corner, select the Rotate Tool. Click once at the corner to set the rotation point, next grab the opposite corner and rotate the object.

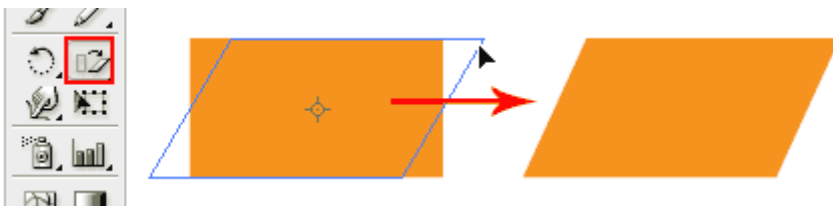


Method 3: At times you may want to rotate to a specific angle. To do this, select the Rotate Tool and Alt/Option click on the point you want to rotate from. The option window pops up. Enter your Angle and click OK.



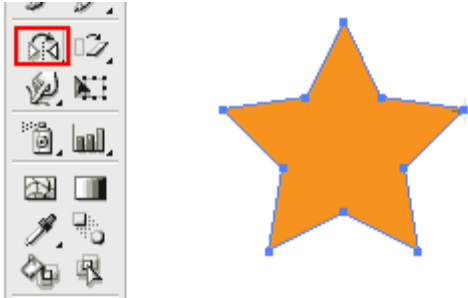
Shearing Objects

Select the Shear Tool. Click and drag to shear the object. Hold Shift to constrain horizontally or vertically.

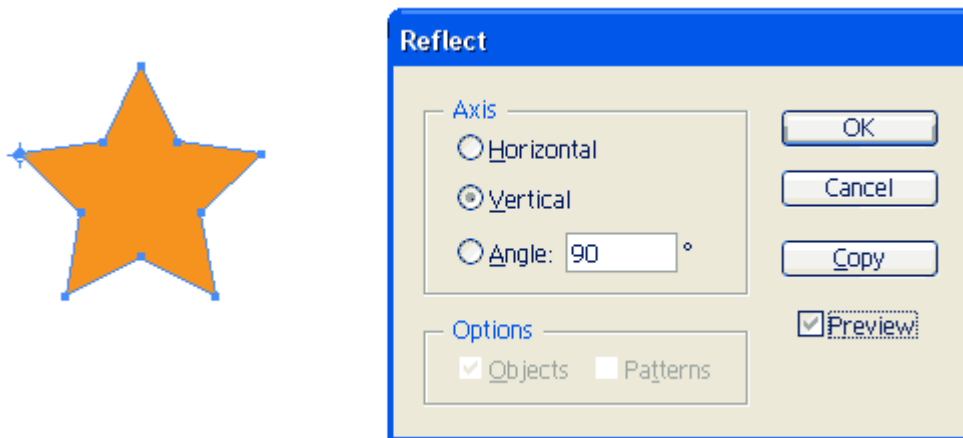


Reflecting Objects

Select the Reflect Tool, Alt/Option click to select the reflection axis.



An option window pop up select Vertical and click Copy.

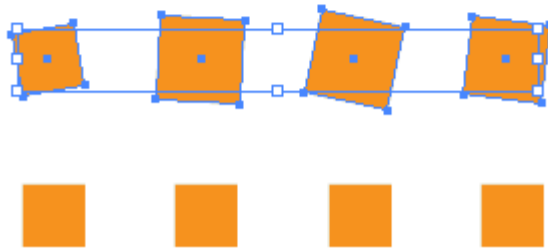
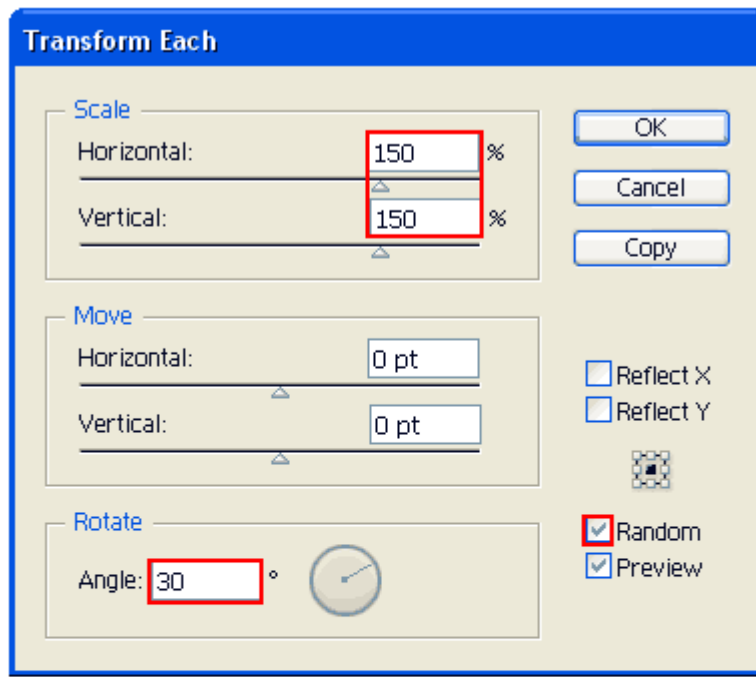


You will get a star mirrored to the right.



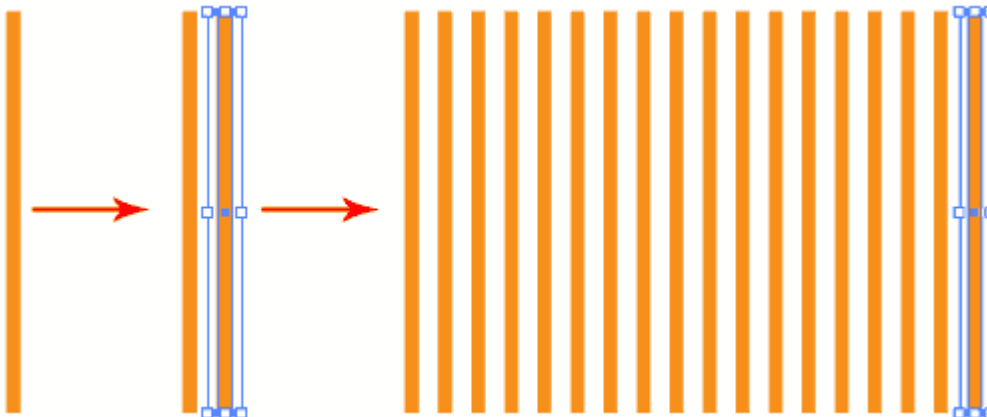
Transform Each Object

To quickly transform a number of objects we can use the Transform Each function. Select your objects and go Transform>Transform Each. Under the settings, I have randomly rotate the squares to a maximum angle of 30 degrees and enlarge them to a maximum of 150%. Make sure to check Random if you want each object to have random settings.



Repeating the Last Transformation Again

There's a very useful function call Transform Each to redo your last transformation. You can easily duplicate a row of objects or rotate an object using this trick. With your object selected with the Selection Tool, Alt/Option and drag a new instance to the right while holding Shift. Press Ctrl/Command+D to duplicate a few more instances.



Activity 11 – Point and Area Type

Open the file weekend_warrior.ai

Adobe Video Workshop – watch the Illustrator CS3 video: “**Creating point and area type**” [Click here](#) for the web site.

The type tools allow some simple common text formatting. You will learn about columns, wrap text and text on a path. This will help you create aesthetic type effects on brochures and newsletter covers.

Typing Text Using Point Text

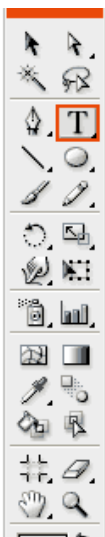
To create a point text, simply click once on the artboard using the Type Tool and type out your text. Point text only allows you to write a one line text without any text wrap.



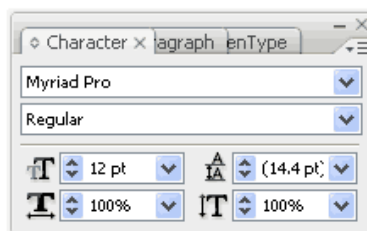
Typography is fun...

Typing Text Using Area Type Tool

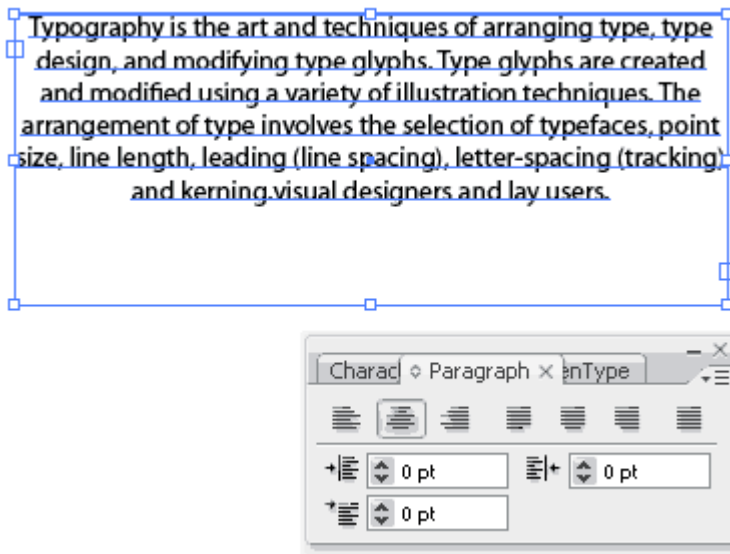
With area type you can have much control over your text. To create an area type, click and drag out a box using your Type Tool. The text will wrap inside the text area. To edit the font characters and sizes, go to Window>Type>Character.



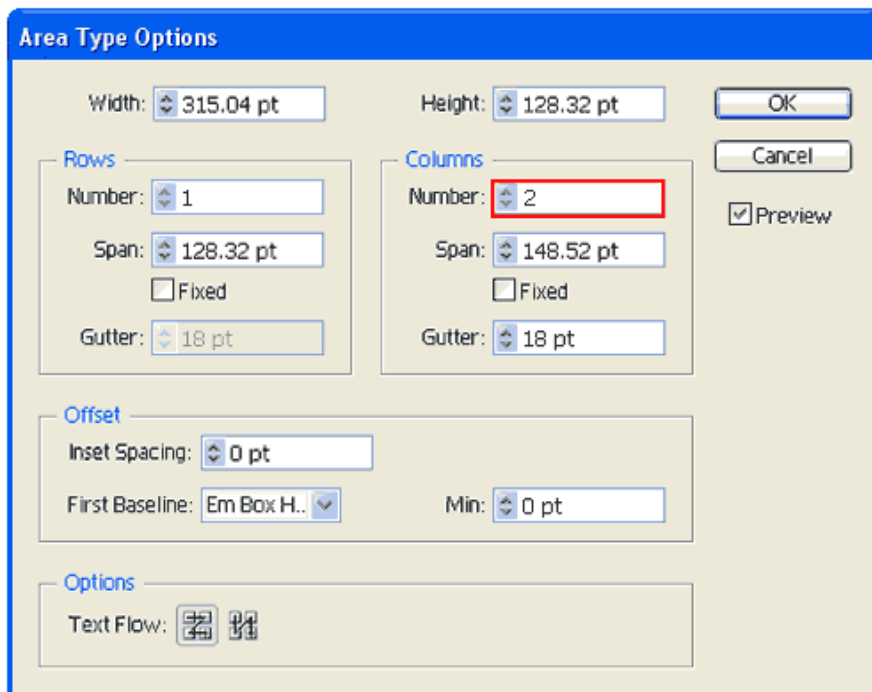
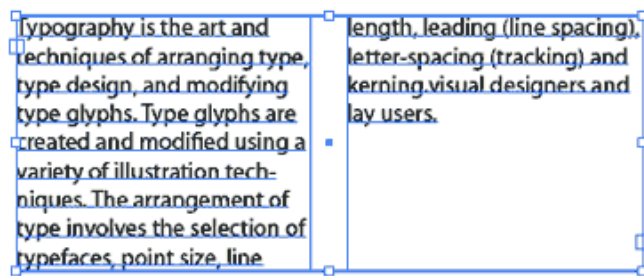
Typography is the art and techniques of arranging type, type design, and modifying type glyphs. Type glyphs are created and modified using a variety of illustration techniques. The arrangement of type involves the selection of typefaces, point size, line length, leading (line spacing), letter-spacing (tracking), and kerning, visual designers and lay users.



To show paragraph options, click Paragraph tab. You can try out different alignments and set indents for paragraphs.



To show more area type options, choose Type>Area Type Options. You can edit the number of columns to create more columns for your text.



Adobe Video Workshop – watch the Illustrator CS3 video: “**Creating type on a path**” [Click here](#) for the web site.



Open the file **activity11.ai**

Use that file and the type on a path tool to create the following result (below):

The image shows a circular arrangement of text in a handwritten-style font. The text is arranged in three curved lines. The top line reads "Frederickton High School". The middle line is split into two parts: "Willy O'Ree Center" on the left and "June 18 7:30 PM" on the right. The bottom line reads "Graduation 2009".

Note: use **Rage Italic** font, regular style, **36 pt** size for the top and bottom text, **24 pt** size for the text through the middle.

Save your finished file as **activity11_finished.ai**

Outline Text

If you need to convert a type to path, select your text and choose Type>Create Outlines. This will break the text into paths. Note that once you outline it, the text cannot be edited with the Type Tool. However, after it becomes a path, you can apply gradient and edit anchor points using the Pen Tool.

