

Guided Computer Tutorials

**Learning  
Adobe  
Illustrator CC  
Module 1**

By Greg Bowden

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# Learning Adobe Illustrator CC

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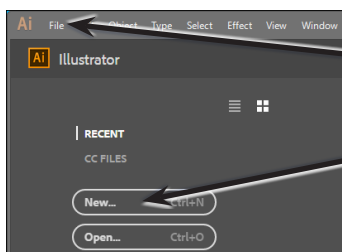


# Introduction to Adobe Illustrator

When accurate drawings are needed, a vector-based program such as Adobe Illustrator is used. Vector-based programs store the shapes that make up an image mathematically, which increases their accuracy and also usually significantly reduces the file size compared to screen-based (or bitmap) programs.

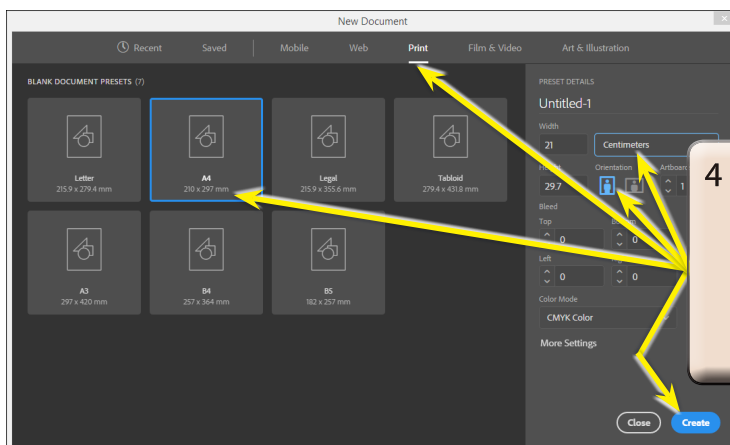
## The Adobe Illustrator Screen

- 1 Load Adobe Illustrator CC.



- 2 Select NEW from the ILLUSTRATOR START screen or from the FILE menu to start a new document.

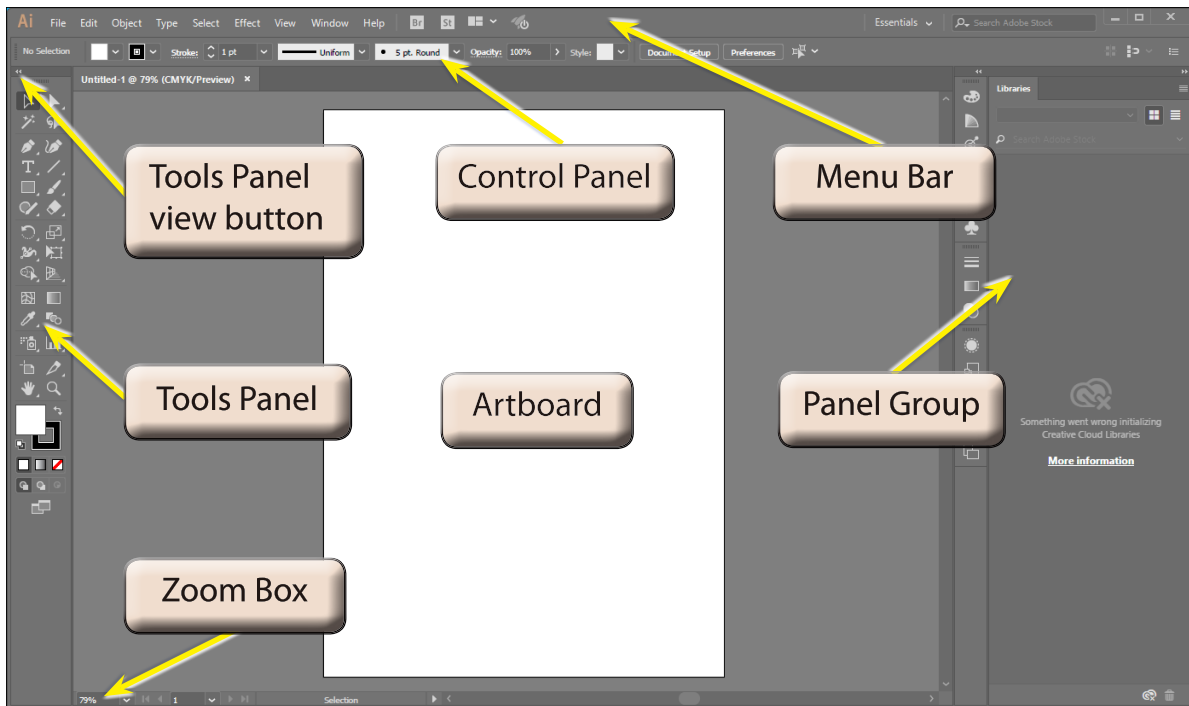
- 3 The NEW DOCUMENT dialogue box should open.



- 4 Select the PRINT category, set the SIZE to A4 (or the paper size your printer uses), the UNITS to CENTIMETRES, the ORIENTATION to PORTRAIT and select CREATE.

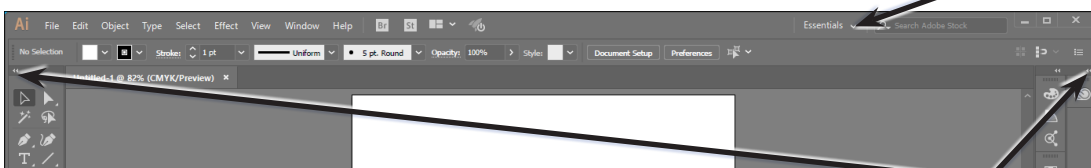
**NOTE:** There are a range of different document types which you can select from the PROFILE options along the top of the NEW DOCUMENT dialogue box. A standard A4 DOCUMENT will be predominately used here for simplicity, but when you are doing Assignments or Projects, select the document type that suits your needs.

- 5 The Adobe Illustrator screen should load and its sections have been labelled in the following diagram.



- 6 Refer to the labelled sections of the diagram until you become fully familiar with the different screen sections.
- 7 Numerous screen arrangements are also available.

8 Check that the WORKSPACES box in the MENU BAR is set to ESSENTIALS.

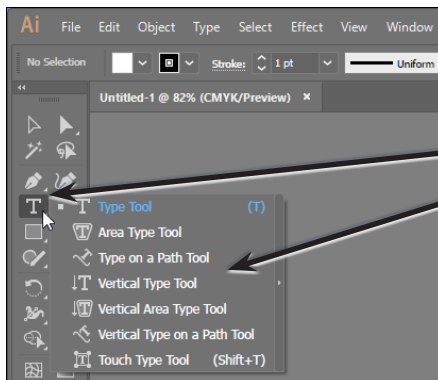


9 Check that the tools are displayed in two columns (click on the TOOLS PANEL VIEW BUTTON if necessary) and click on the double arrow icon at the top of the LIBRARY panel to collapse it as the LIBRARY panel will not be needed in this module.

**NOTE:** The ARTBOARD is the print area. It has a white background and solid border so that you can see where it is. Anything drawn in the WORKSPACE (shaded area) outside the ARTBOARD is not printed.

## The Tools Panel

The TOOLS panel at the left of the screen contains all the tools that Illustrator provides. Notice that some tools have a small arrow at their base. This indicates that more tools are available within that tool.



1 Click and hold the mouse button on the TYPE TOOL and the different tools for entering text will be displayed.

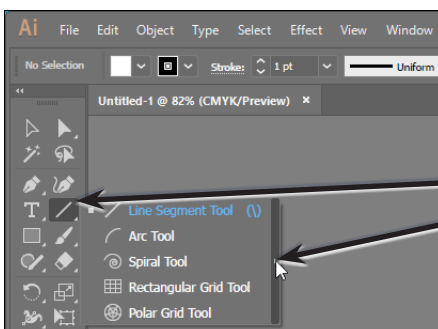
2 Try looking at the tools within some of the other tools in the TOOLS panel.

## Drawing Lines

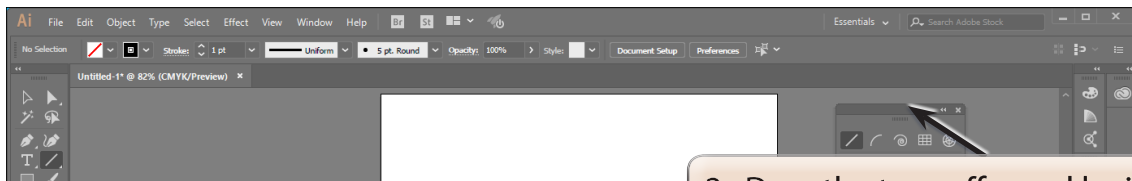
Adobe Illustrator provides numerous line drawing tools.

### A Tearing off a Panel

You can tear-off a panel so that all the tools within a particular tool can be displayed on the screen.

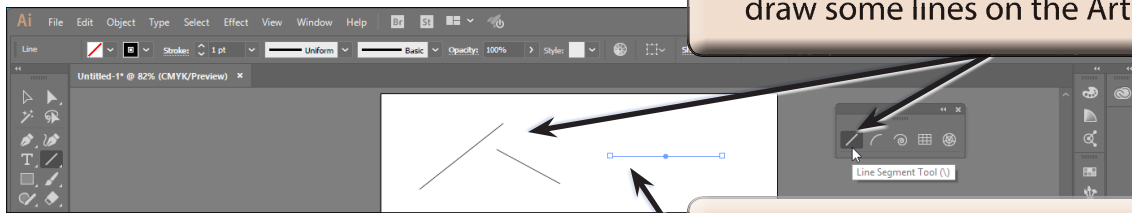


1 Click and hold the mouse button on the LINE SEGMENT TOOL to display the line tools, move the pointer over the TEAR OFF arrow at the right and click the mouse button.



2 Drag the torn off panel by its shaded TITLE BAR to the top right of the Artboard.

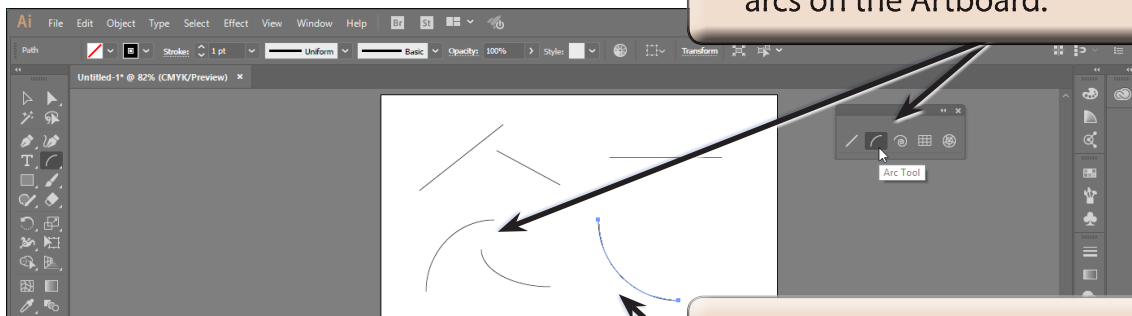
## B Drawing Different Line Types



1 Select the LINE SEGMENT TOOL and draw some lines on the Artboard.

2 Hold down the SHIFT key and draw some more lines.

**NOTE:** With the SHIFT key depressed, only horizontal, vertical or 45° lines can be drawn.



3 Select the ARC TOOL and draw some arcs on the Artboard.

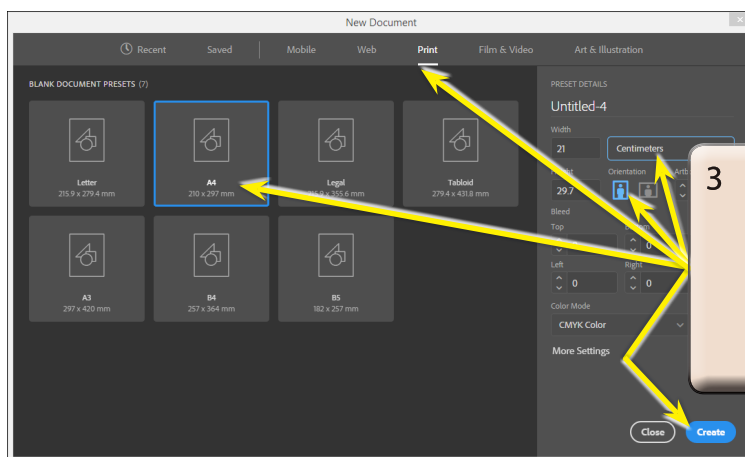
4 Hold down the SHIFT key and draw some arcs - they should be circular.

# Entering Text

Text is an important element in designs and Adobe Illustrator CC provides a wide range of text options.

## Starting a New Document

- 1 Load Adobe Illustrator CC or close the current document.
- 2 Select NEW from the START screen or FILE menu to start a new document.

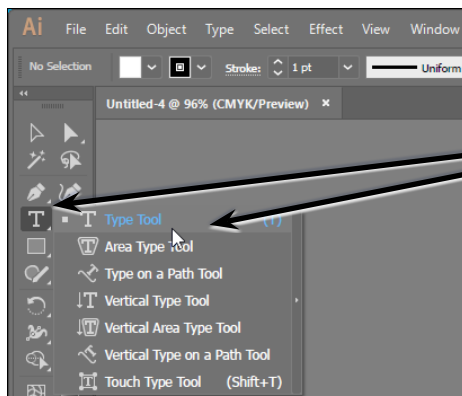


- 3 Select the PRINT category, set the SIZE to A4 (or the paper size your printer uses), the UNITS to CENTIMETRES, the ORIENTATION to PORTRAIT and select CREATE.

## Entering Horizontal Text

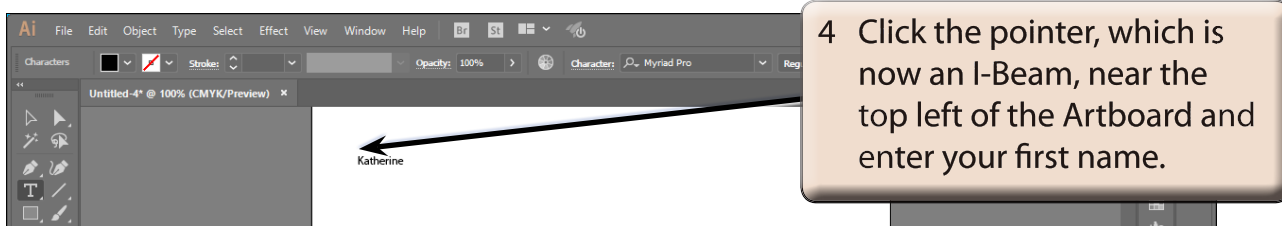
There are two types of horizontal text. POINT TEXT where you enter text at the point that you click on the Artboard and AREA TEXT where you drag a frame for the text to be contained within.

### A Point Text



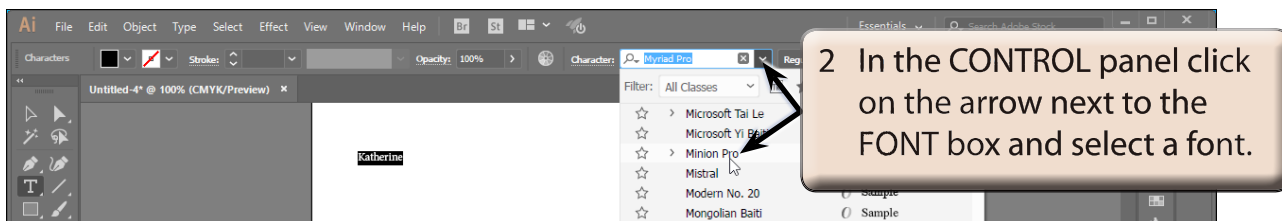
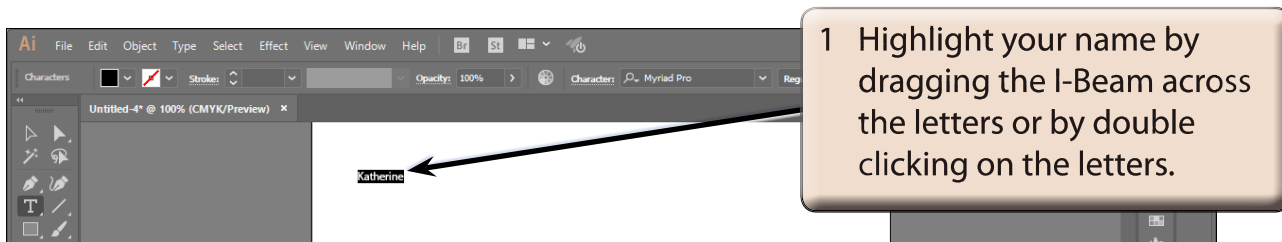
- 1 Click and hold down the mouse button on the TYPE TOOL in the TOOLS panel and select the TYPE TOOL.

- 2 The CONTROL panel (under the MENU BAR) displays the text options.
- 3 Press CTRL+1 or COMMAND+1 to set the zoom to 100%.

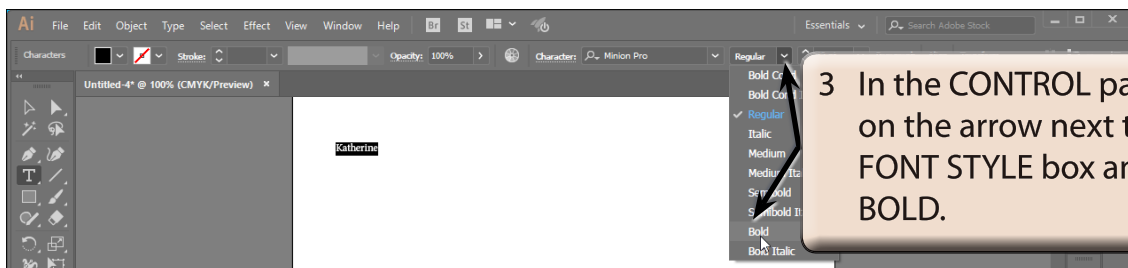


## B Altering Text

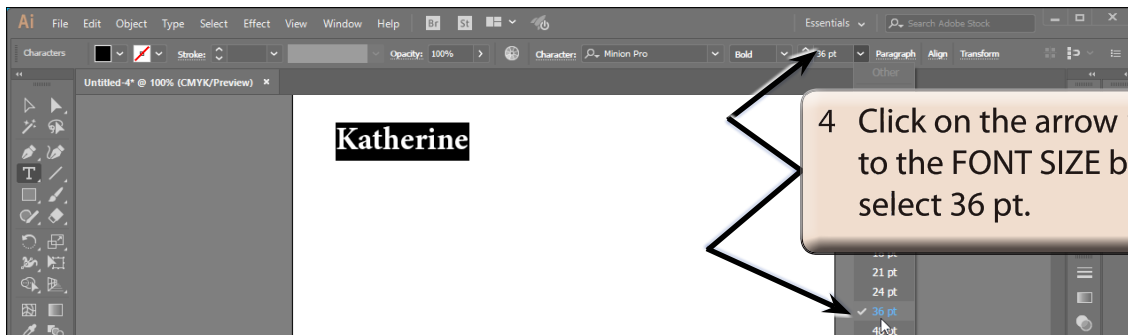
You can alter text once it has been entered.



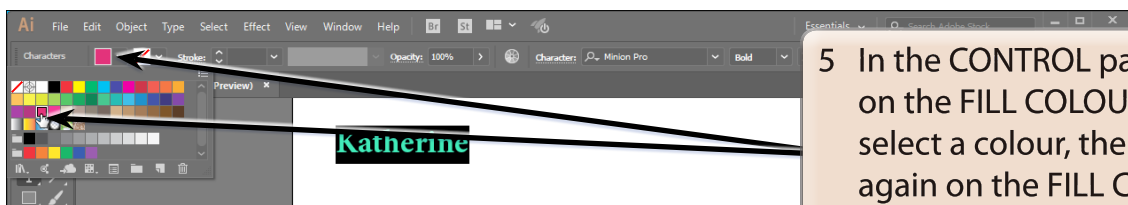
**NOTE:** Fonts with the word PRO after them are OpenType fonts which have been developed by Adobe. They are usually a more accurate font with many more style options than regular fonts.



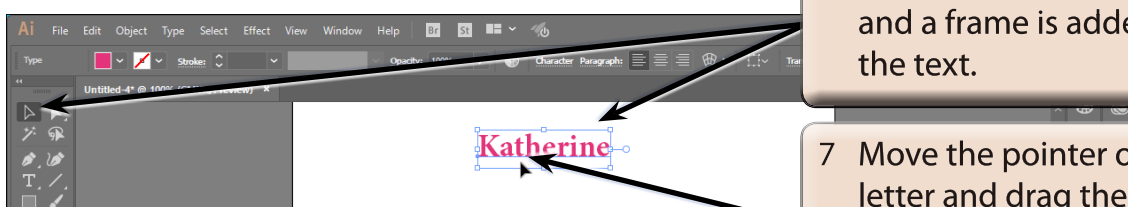
3 In the CONTROL panel click on the arrow next to the FONT STYLE box and select BOLD.



4 Click on the arrow next to the FONT SIZE box and select 36 pt.

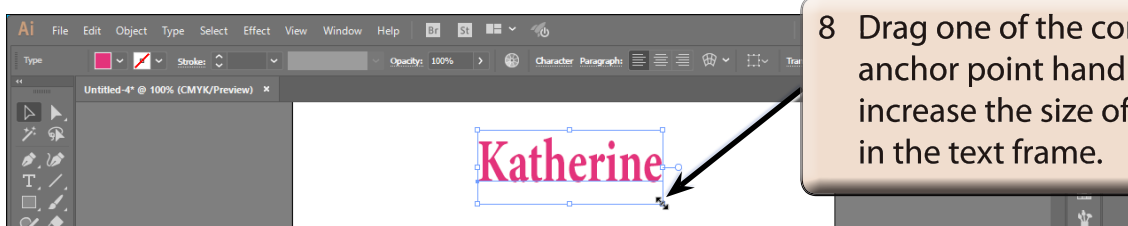


5 In the CONTROL panel click on the FILL COLOUR box and select a colour, then click again on the FILL COLOUR box to close the colours.



6 Select the SELECTION TOOL and a frame is added around the text.

7 Move the pointer over a letter and drag the text to the top centre of the Artboard.

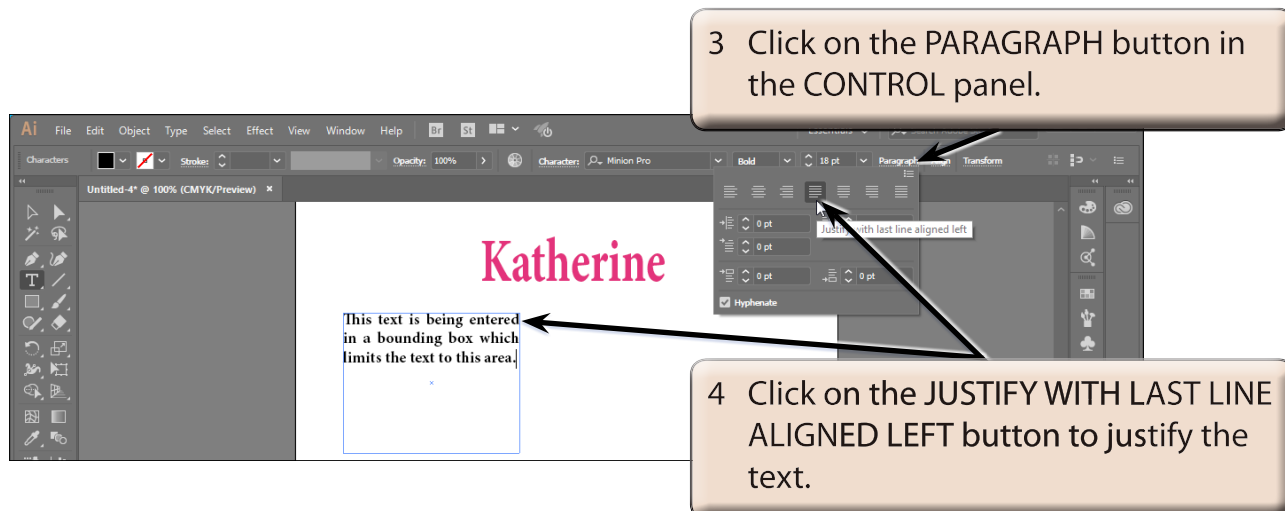
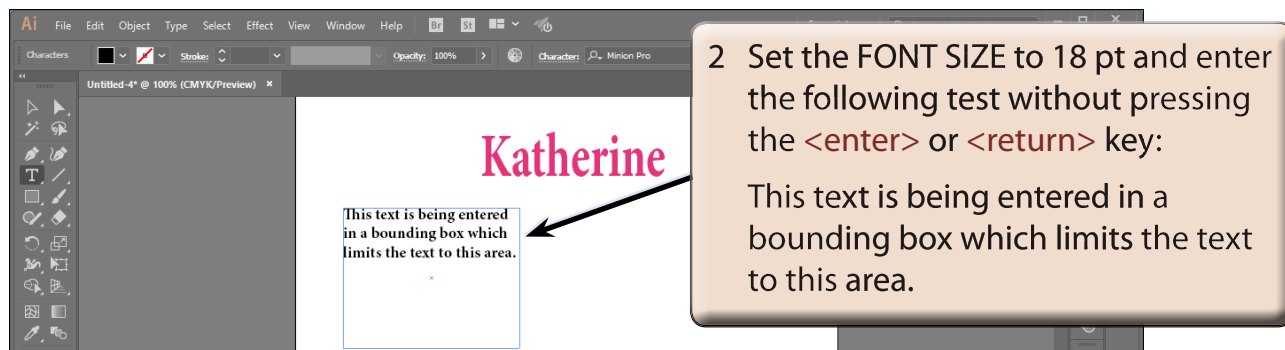
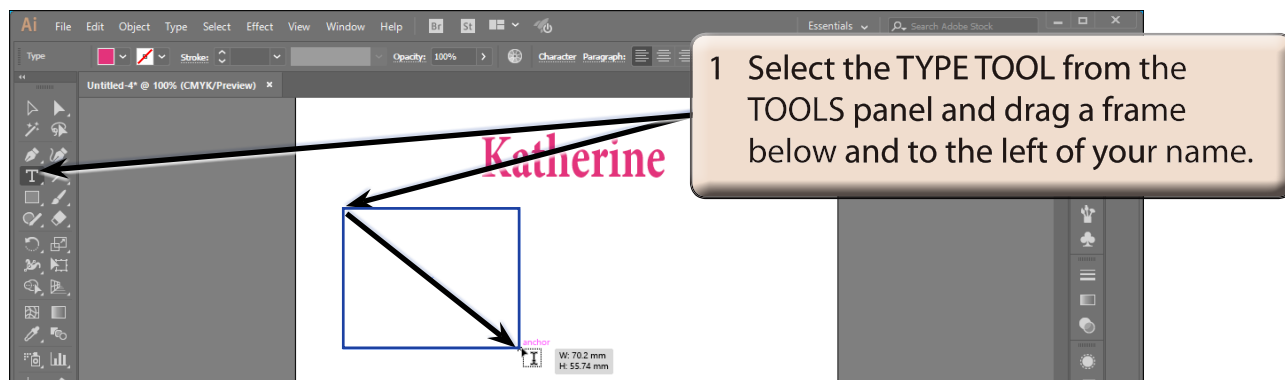


8 Drag one of the corner anchor point handles out to increase the size of the text in the text frame.

**NOTE:** The COLOUR boxes at the base of the TOOLS panel and the COLOUR panel can also be used to set the fill and stroke colours of the text.

## C Area Type

AREA TYPE is text that is set to be contained within a frame.



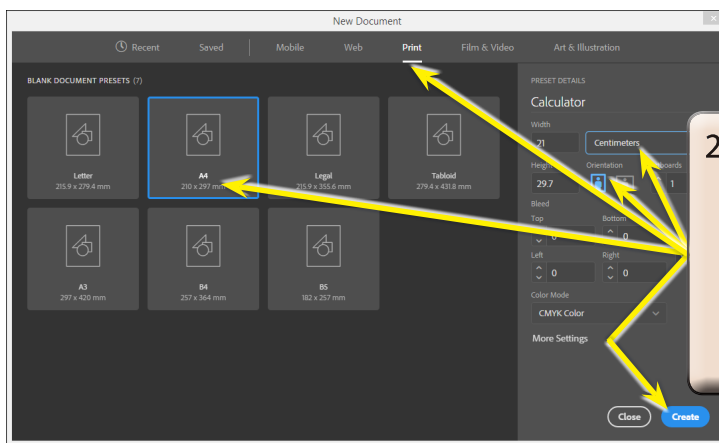


# Combining Objects into Designs

The production of designs usually involves the combining of many objects. There are many tools to make the process more efficient, such as grouping objects, duplicating objects and modifying objects. To illustrate these a sketch of a simple calculator will be produced.

## Starting a New Document

- 1 Load Adobe Illustrator CC or close the current file and select NEW from the START screen or FILE menu to start a new document.



- 2 Select the PRINT category, set the name to CALCULATOR the SIZE to A4 (or the paper size your printer uses), the UNITS to CENTIMETRES, the ORIENTATION to PORTRAIT and select CREATE.

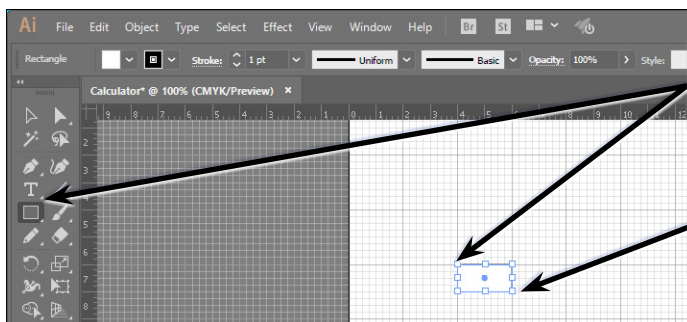
- 3 Use the VIEW menu to turn on SHOW RULERS, SHOW GRID and SNAP TO GRID.

## Drawing a Calculator Key

One calculator key will be drawn then duplicated so that all the keys that make up the calculator will be identical.

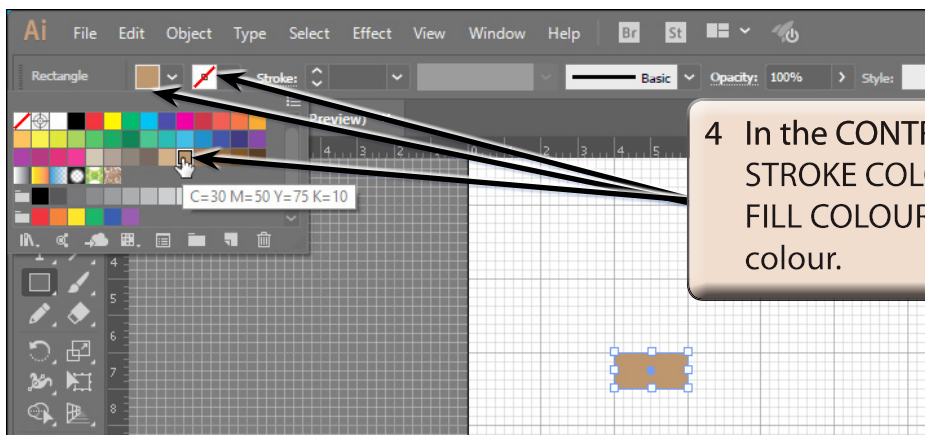
### A Creating the Key

- 1 Set the view to 100% by pressing CTRL+1 or COMMAND+1.



- 2 Select the RECTANGLE TOOL and move the cursor to (4,6).

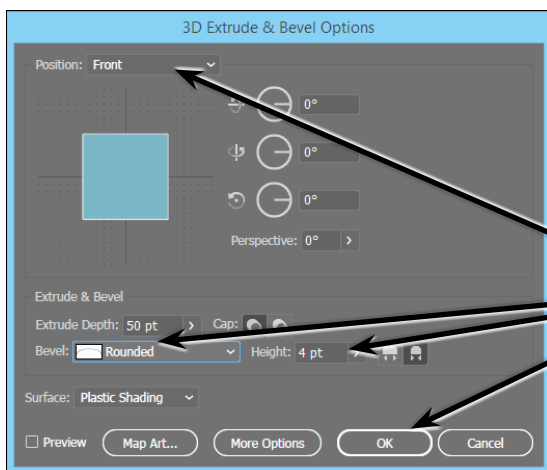
- 3 Drag a rectangle across 2 cm to the right and down 1 cm to (6,7).



## B Adding a 3D Effect

A three-dimensional effect can be added to the rectangle.

- 1 Display the EFFECT menu, highlight 3D and select EXTRUDE & BEVEL.



- 3 Display the SELECT menu and select DESELECT to remove the selection handles from the rectangle (you can also press SHIFT+CTRL+A or SHIFT+COMMAND+A).

## C Adding the Number

A text frame will be added over the rectangle.

- 1 Press CTRL+ on the Windows system or COMMAND+ in the Macintosh system a few times to zoom in on the rectangle.

# Drawing and Painting Tools

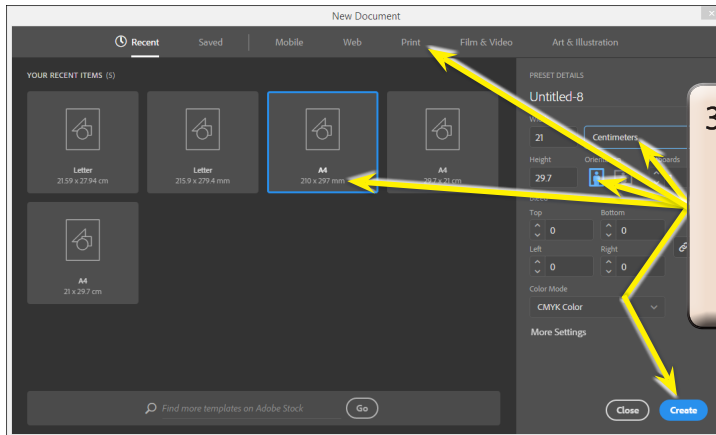
There are a range of drawing and painting tools that Adobe Illustrator provides. In this chapter we will look at the use of the PENCIL TOOL, the ERASER TOOL, the SMOOTH TOOL, the WIDTH TOOL, the PAINTBRUSH TOOL, the LIVE PAINT BUCKET and the JOIN TOOL.

When you create drawings in Illustrator you create a series of PATHS. A path is made up of one or more straight or curved lines, which can be closed (for example, a rectangle) or open with end points (called anchor points) at each end.

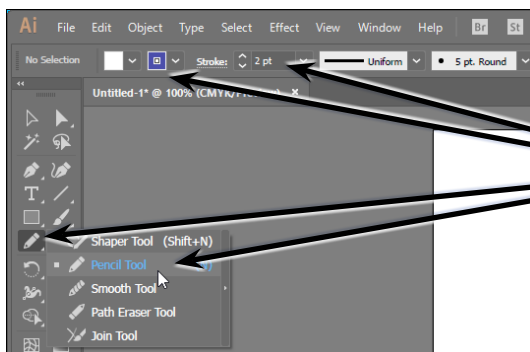
## The Pencil Tool

The PENCIL TOOL lets you draw freely on the ARTBOARD. Anchor points are added to the paths that you draw.

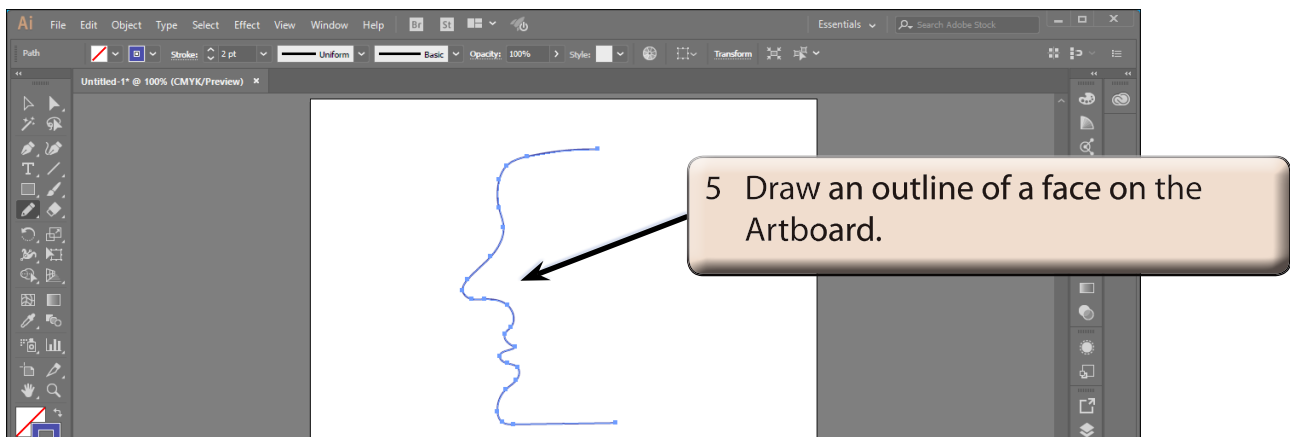
- 1 Load Adobe Illustrator CC or close the current document.
- 2 Select NEW from the START screen or FILE menu to start a new document.



- 3 Select the PRINT category, set the SIZE to A4 (or the paper size your printer uses), the UNITS to CENTIMETRES, the ORIENTATION to PORTRAIT and select CREATE.



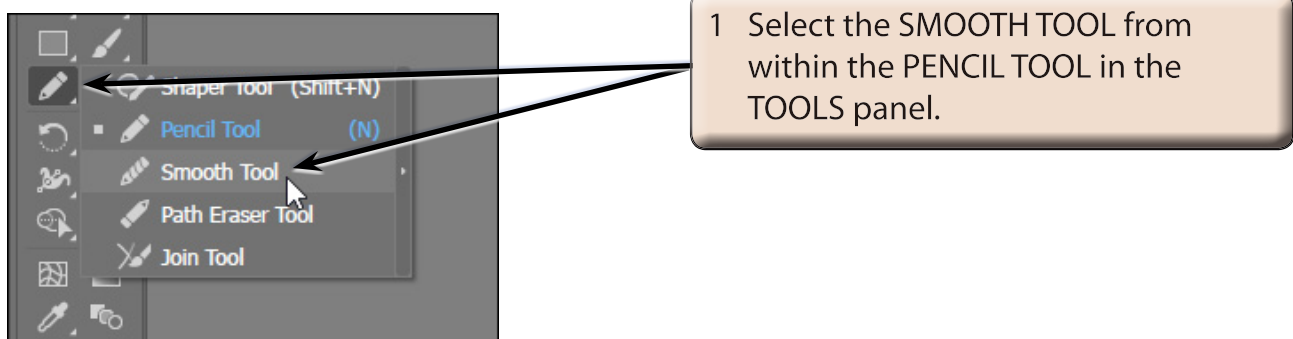
- 4 Check that the TOOLS panel is set to 2 columns then select the PENCIL TOOL from the TOOLS panel and, in the CONTROL panel, set the STROKE WEIGHT to 2 pt and select a STROKE COLOUR.

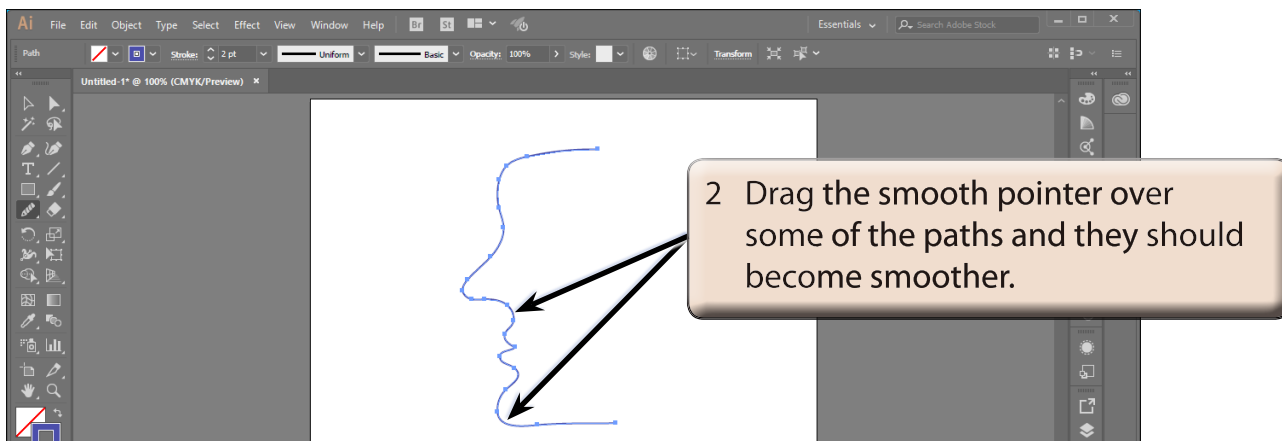


- NOTE:**
- i The outline does not need to be accurate. We will use the **SMOOTH** and **ERASER TOOLS** shortly to improve it.
  - ii Notice that a series of anchor points have been added to the paths. These anchor points can be clicked on using the **DIRECT SELECTION TOOL** and adjusted if need be.

## The Smooth Tool

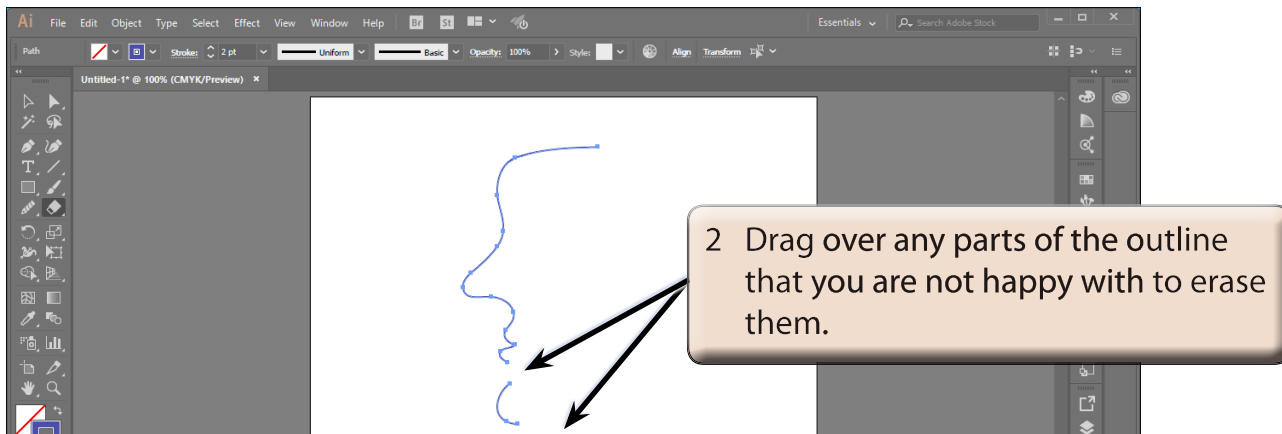
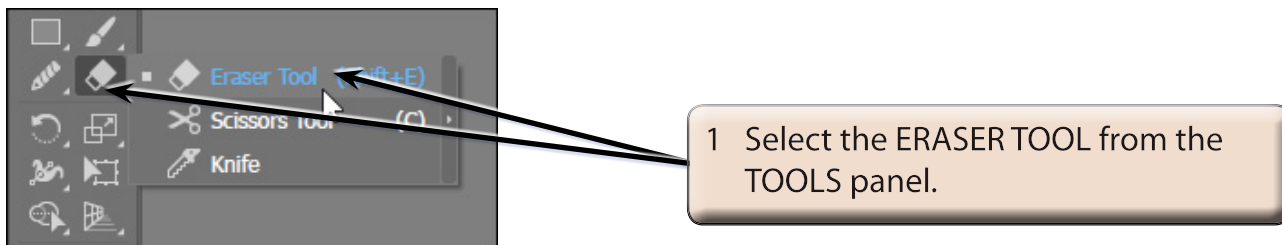
The **SMOOTH TOOL** allows you to smooth the paths so that the curves are more accurate.

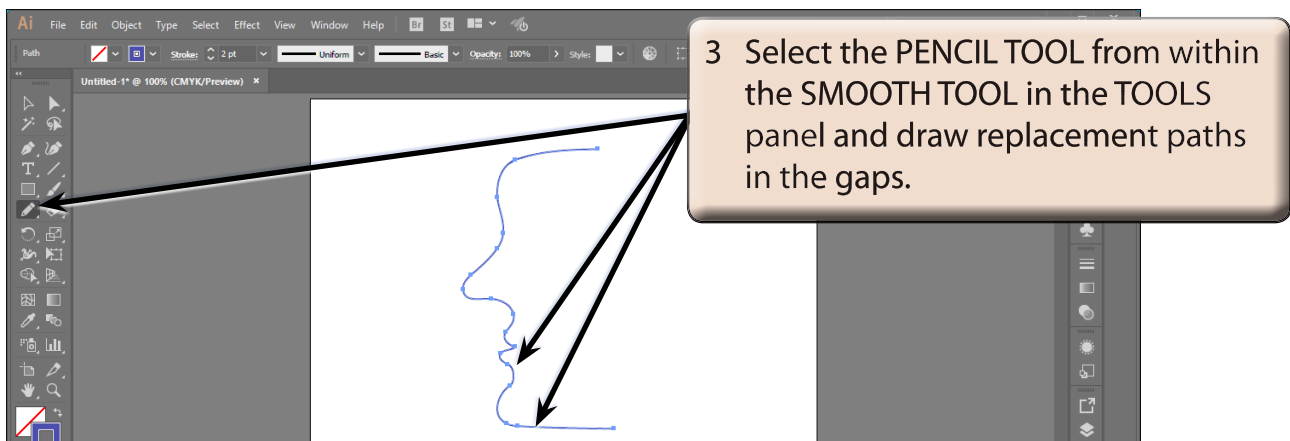




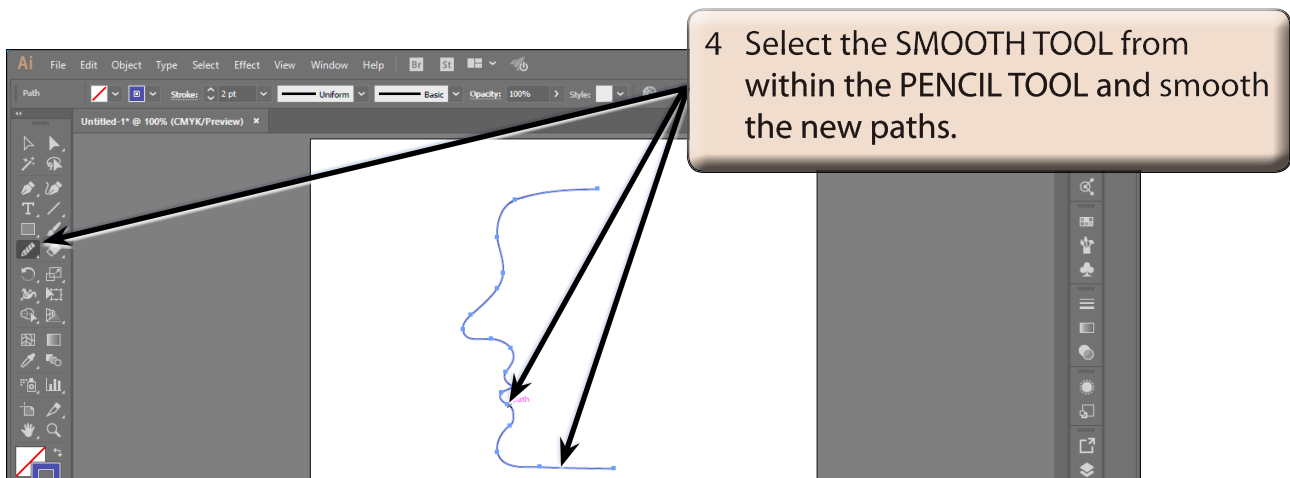
## The Eraser Tool

The ERASER TOOL can be used to remove any parts of paths that are not correct.





**NOTE:** You can zoom the screen by pressing **CTRL+** or **COMMAND+** to ensure that the paths meet, then **CTRL+0** or **COMMAND+0** to return the view to **FIT ON SCREEN**.



5 Save the document if you wish to then close it.

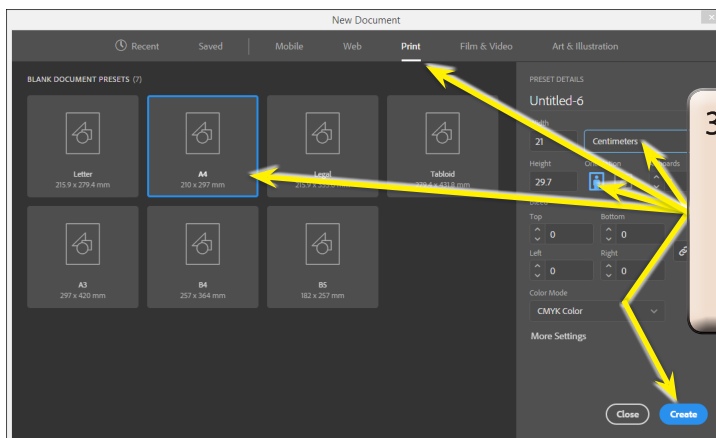
# The Blob Brush Tool

The BLOB BRUSH TOOL acts like a paint tool in a painting program, such as Adobe Photoshop, producing shapes as you paint and those shapes can be added to. The BLOB BRUSH TOOL also lets you combine multiple shapes into one shape.

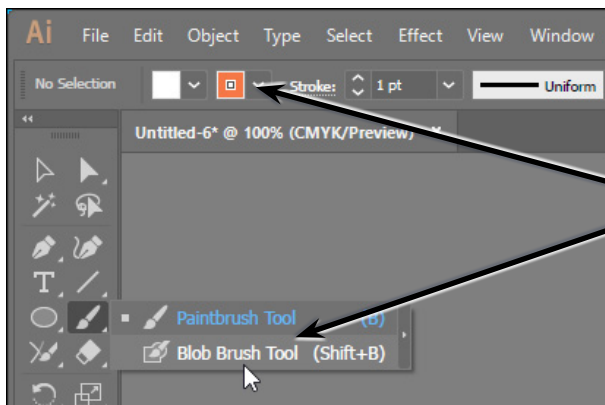
## Using the Blob Brush Tool

### A Painting Shapes

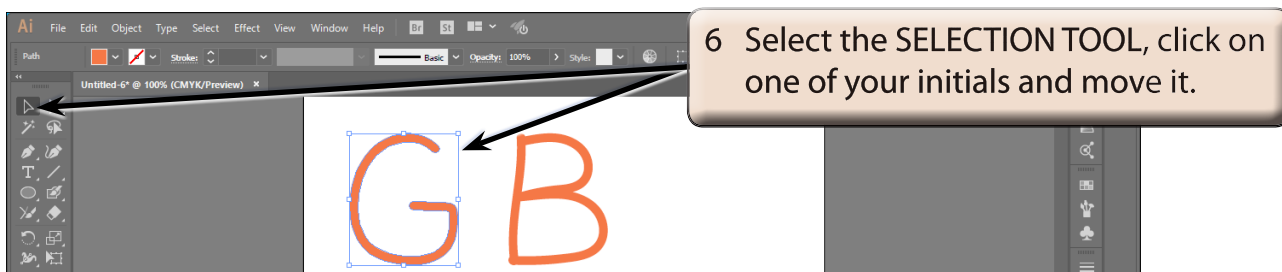
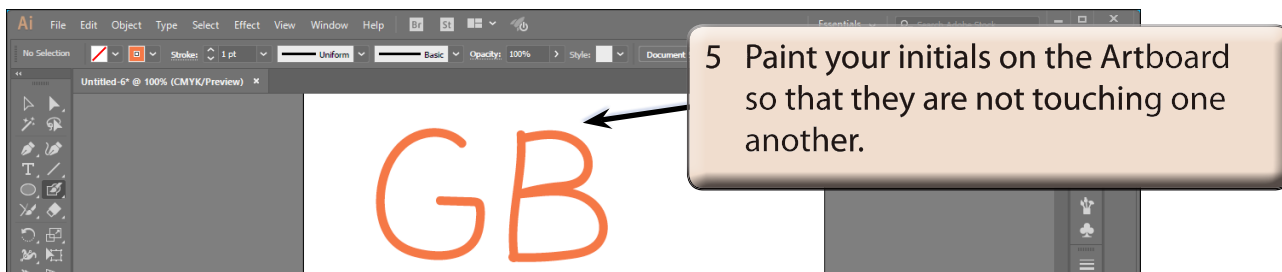
- 1 Load Adobe Illustrator CC or close the current document.
- 2 Select NEW from the START screen or FILE menu to start a new document.



- 3 Select the PRINT category, set the SIZE to A4 (or the paper size your printer uses), the UNITS to CENTIMETRES, the ORIENTATION to PORTRAIT and select CREATE.



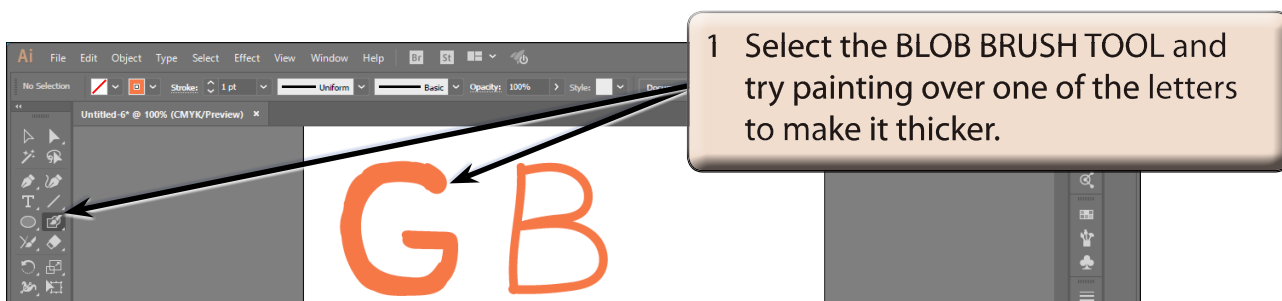
- 4 Select the BLOB BRUSH TOOL from within the PAINTBRUSH TOOL in the TOOLS panel and, in the CONTROL panel, select a STROKE COLOUR.



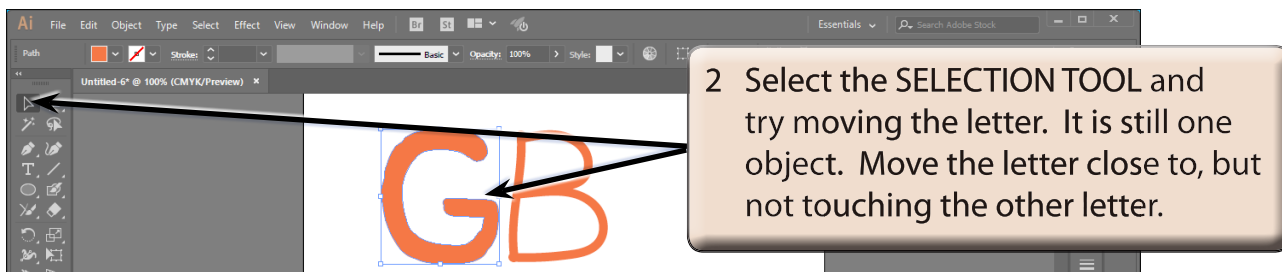
**NOTE: Each letter is a separate object just as the PAINTBRUSH TOOL would have created.**

## B Adjusting the Letters

The advantage of the BLOB BRUSH TOOL over the PAINTBRUSH TOOL is that you can add paint to the existing objects.

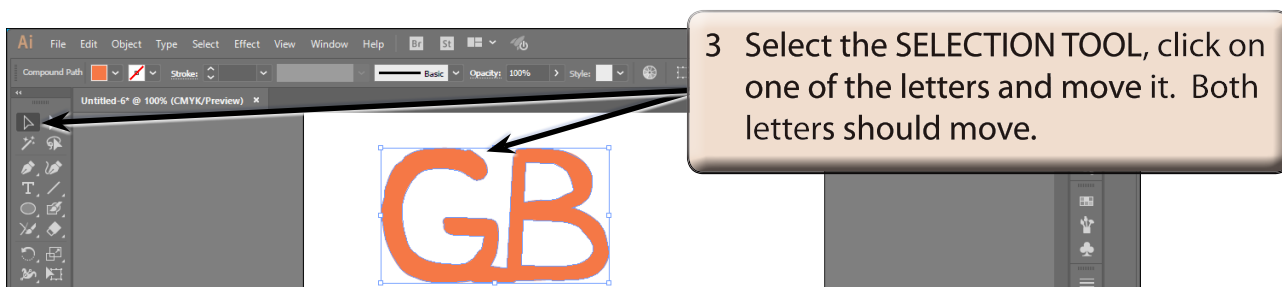
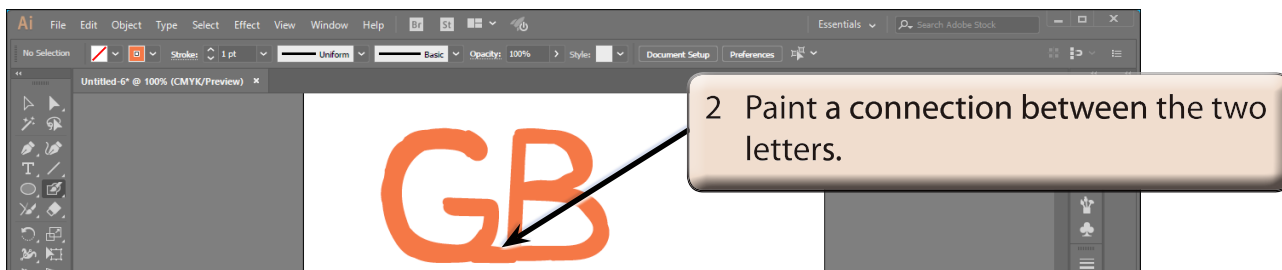
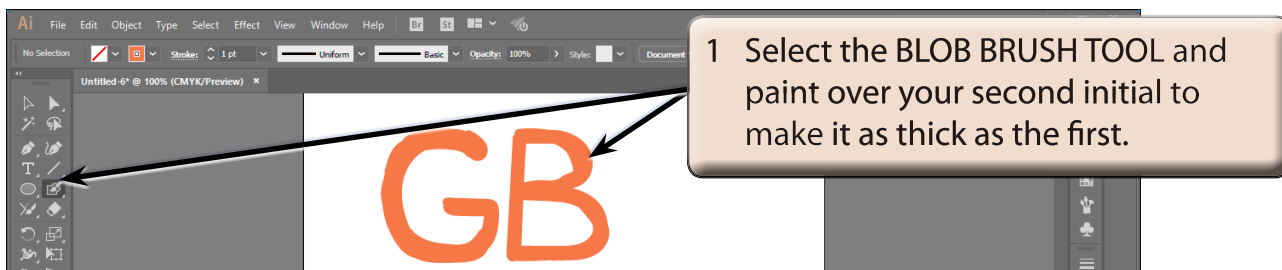






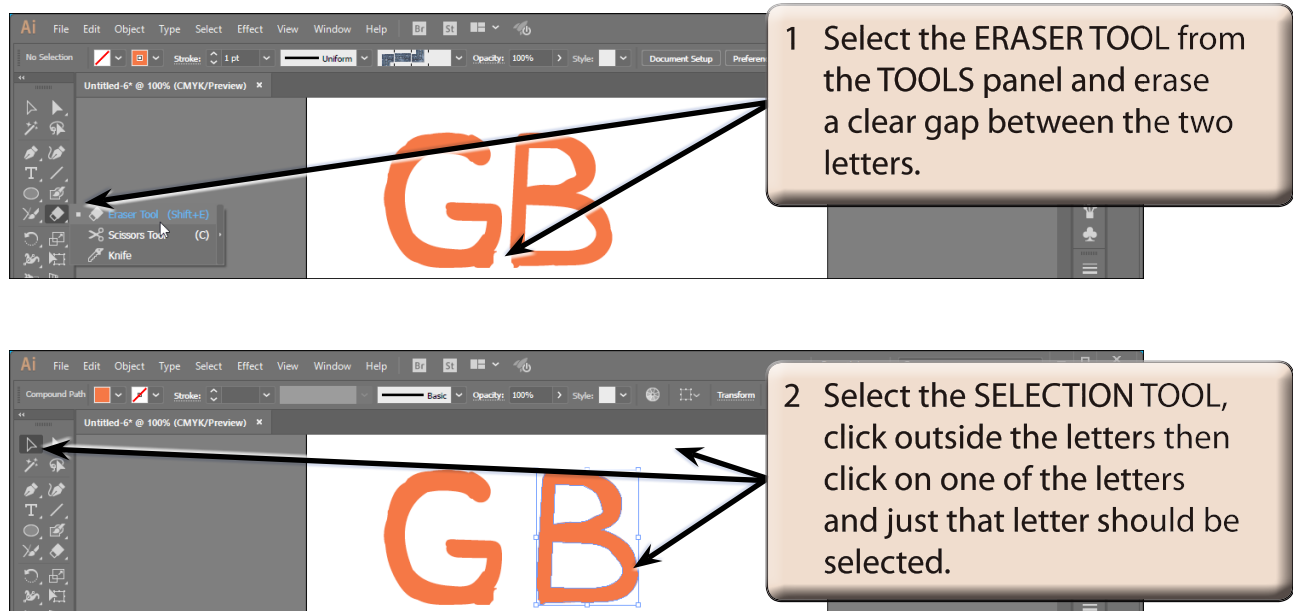
## C Combining Objects

The BLOB BRUSH TOOL can be used to combine one object into another so long as their colours are very similar. Let's combine the two initials into one object



## D Splitting the Letters

The letters can easily be returned to two separate objects.

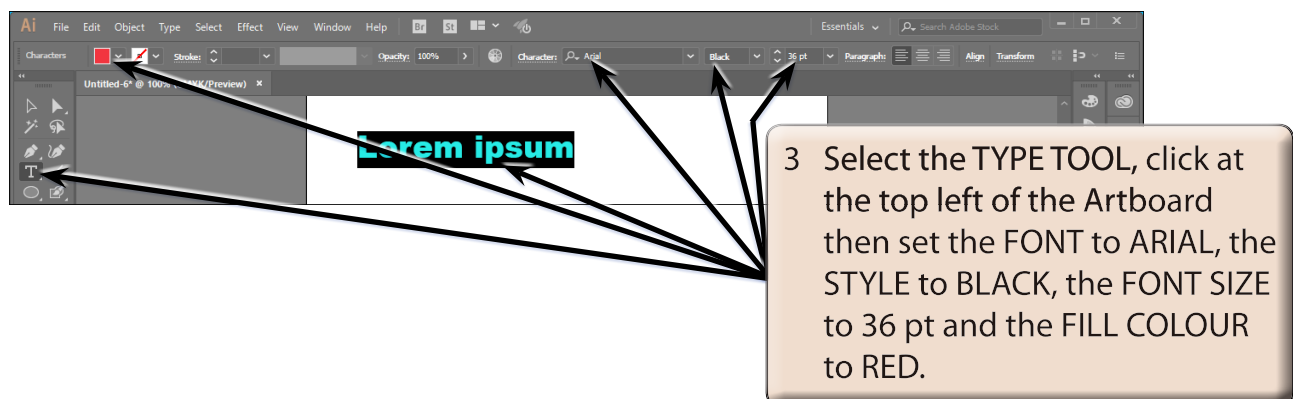


## Modifying Text With the Blob Brush Tool

You can create some interesting text effects by using the BLOB BRUSH TOOL to adjust the letters. Let's create a simple poster for a horror movie.

### A Entering the Text

- 1 Press CTRL+A or COMMAND+A to select all the letters.
- 2 Press the DELETE or BACKSPACE key to remove them.

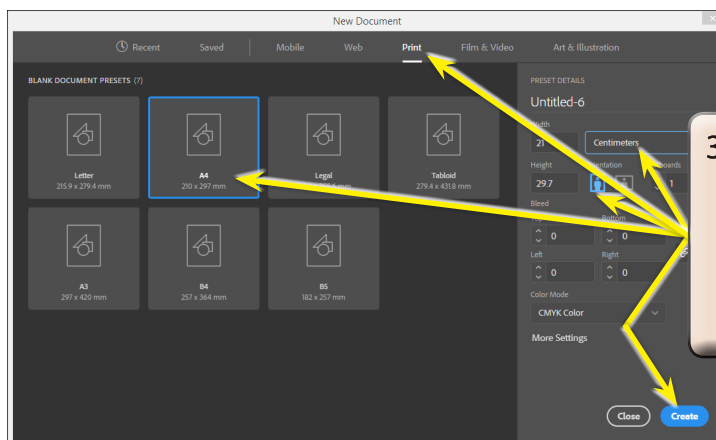


# Shape Edits, Fills and Effects

Adobe Illustrator provides a wide range of ways to fill objects and apply effects to them to make the objects look more realistic. In this chapter you will learn how to fill objects with colours and gradients, and how to apply effects to those objects.

## Starting a New Document

- 1 Load Adobe Illustrator CC or close the current document.
- 2 Select NEW from the START screen or FILE menu to start a new document.

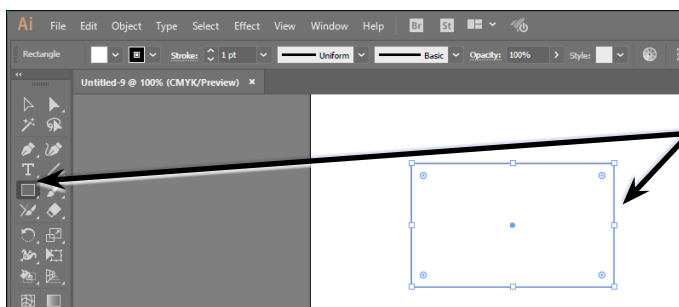


- 3 Select the PRINT category, set the SIZE to A4 (or the paper size your printer uses), the UNITS to CENTIMETRES, the ORIENTATION to PORTRAIT and select CREATE.

## Editing Shapes

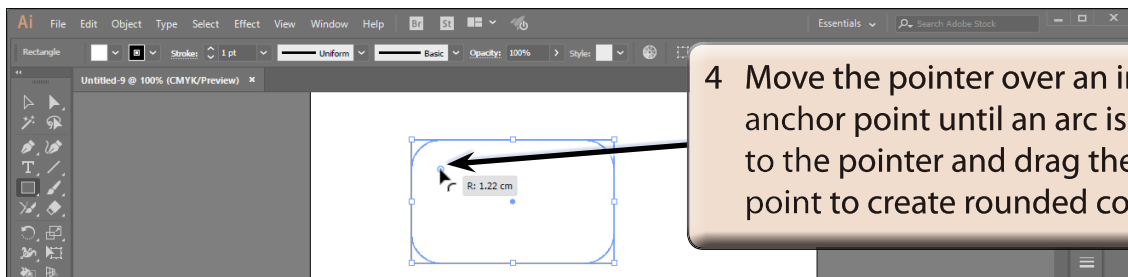
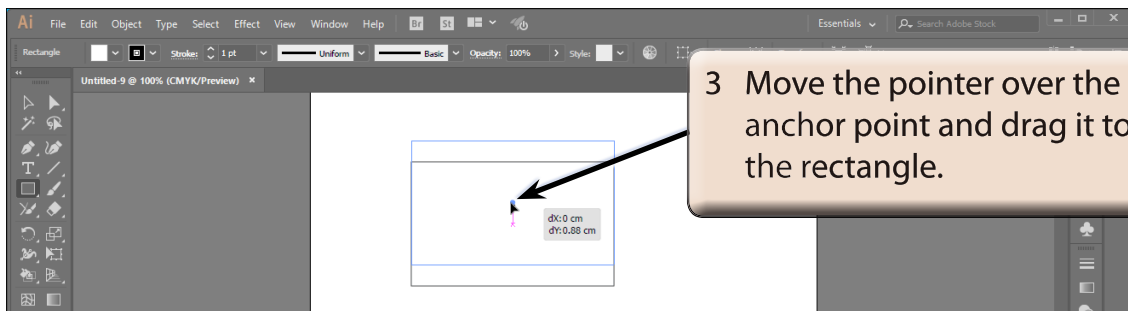
When shapes such as rectangles are drawn a series of anchor points or handles are provided to allow the shapes to be edited. Once the shape is deselected, the SELECTION TOOL or DIRECT SELECTION TOOL can be used to edit it.

### A Anchor Points

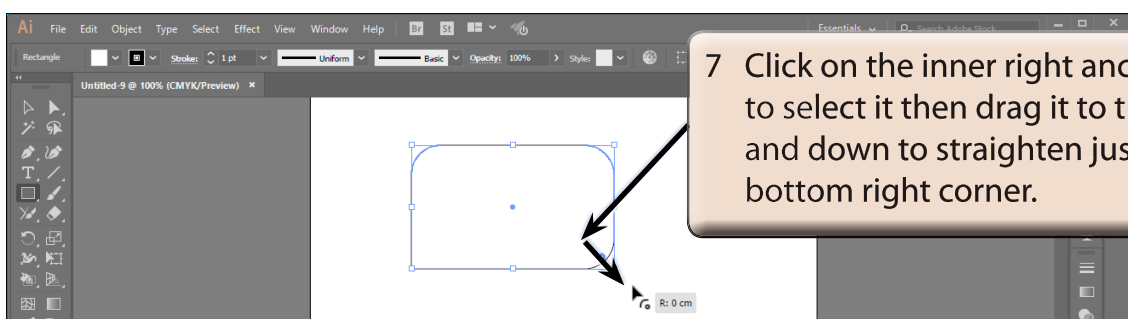
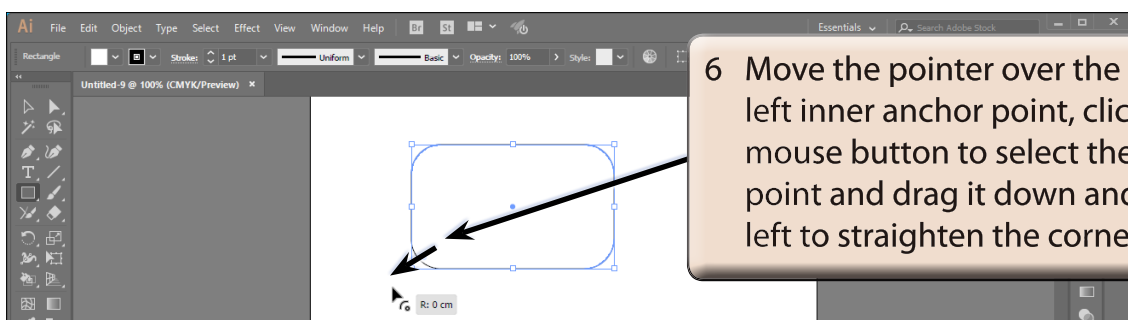


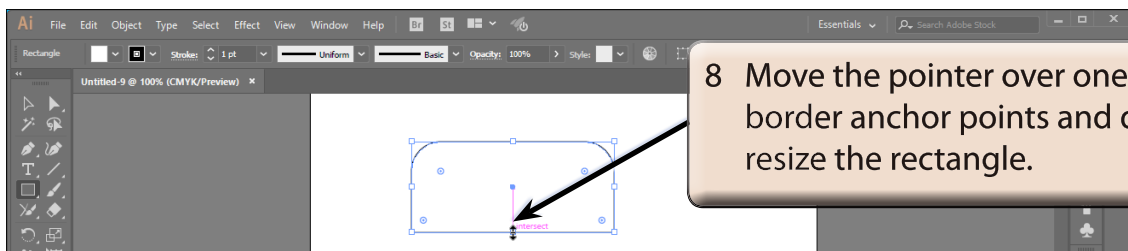
- 1 Select the RECTANGLE TOOL and draw a rectangle near the top centre of the Artboard. The default settings for the rectangle, which are a WHITE fill and a thin BLACK stroke (border). The D key can be pressed to apply them.

- 2 A set of anchor points (or handles) are provided around the shape which allow for 'live editing'. The inner anchor points control the corners, the outer anchor points control the sides and the centre anchor point allows the shape to be moved.



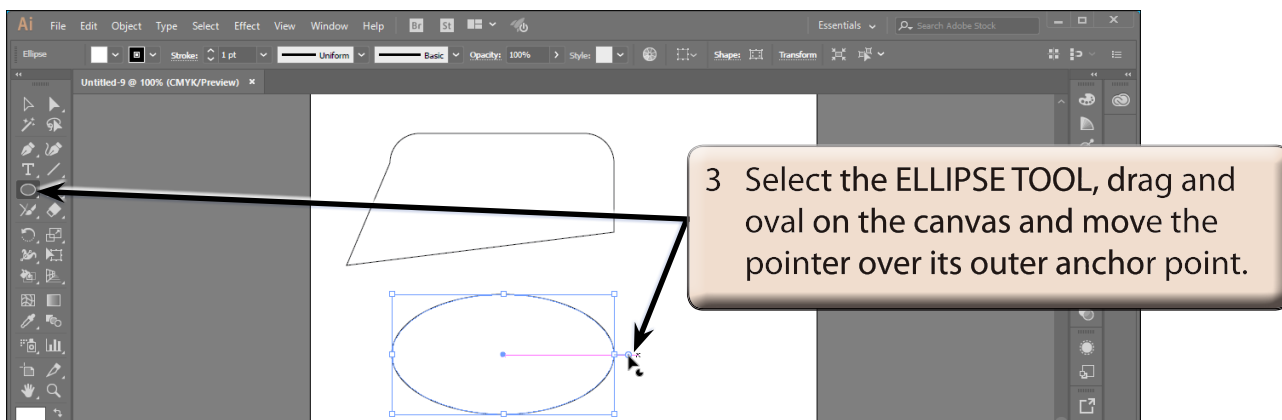
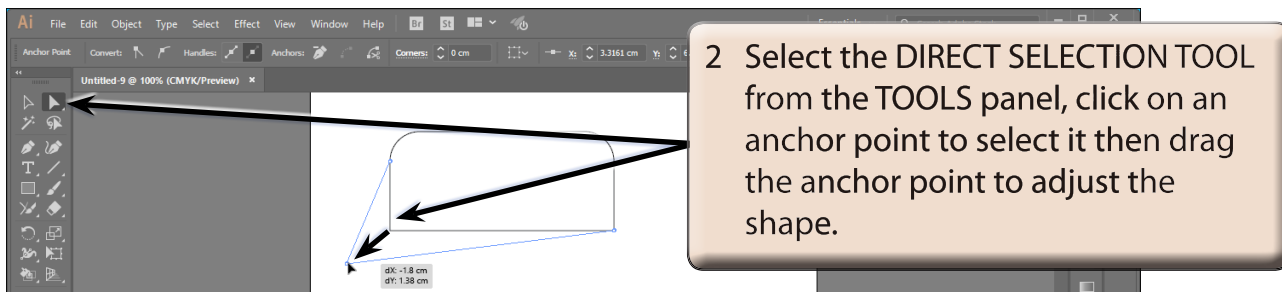
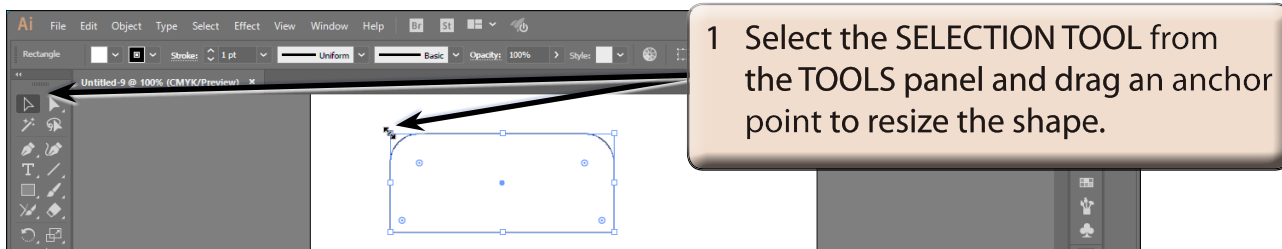
- 5 Just individual corners can be adjusted.

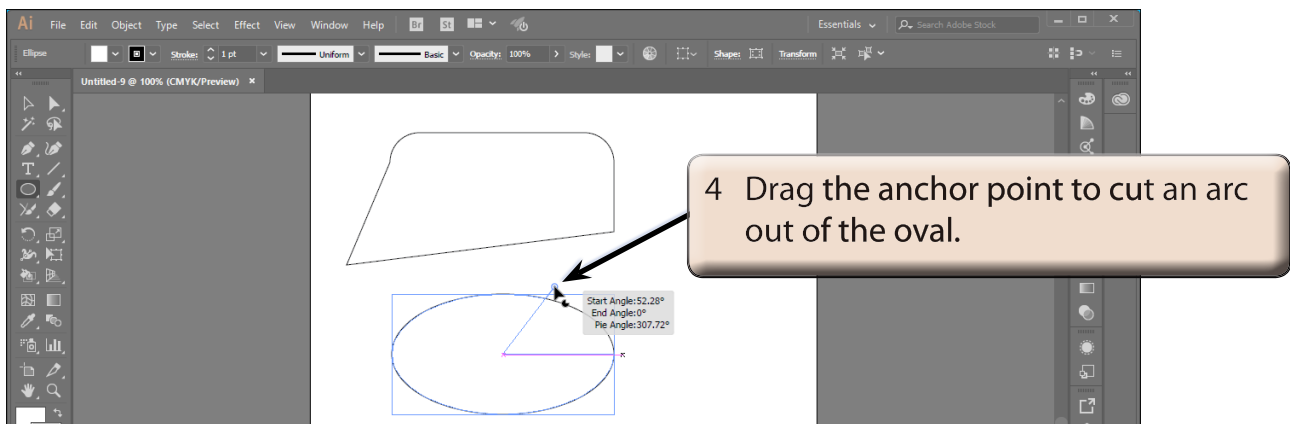




## B The Selection Tools

Once a shape has been set, the SELECTION TOOL can be used to adjust the whole shape or the DIRECT SELECTION TOOL can be used to just individual anchor points.



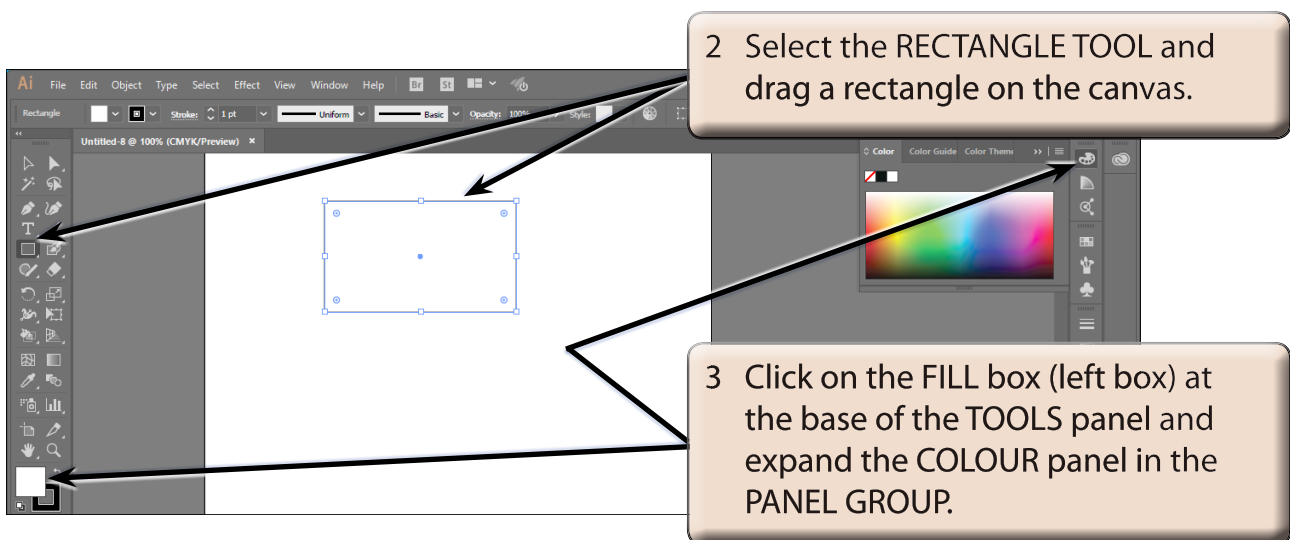


- 5 Try using the SELECTION and DIRECT SELECTION tools to further edit the oval.
- 6 Experiment with editing other shapes.

## Filling Objects

Objects can be filled using the CONTROL panel or the tools at the base of the TOOLS panel.

- 1 Press CTRL+A or COMMAND+A to select all the objects and delete them.

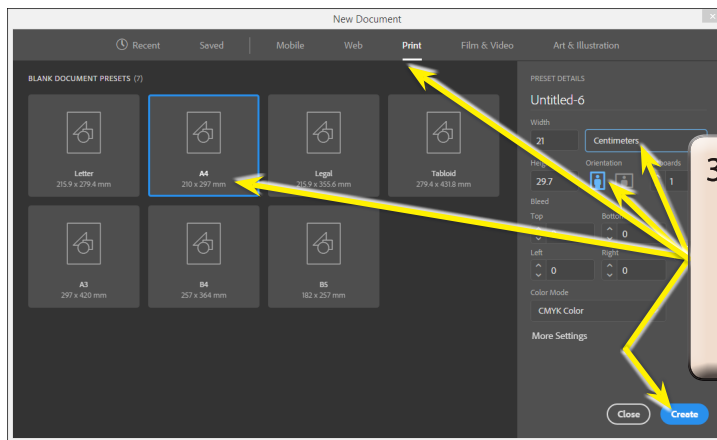


# Creating 3D Shapes

The EFFECT menu can be used to create 3D shapes. In this chapter you will create a cylinder, a box, a chess shape and a sphere.

## Starting a New Document

- 1 Load Adobe Illustrator CC or close the current document.
- 2 Select NEW from the START screen or FILE menu to start a new document.

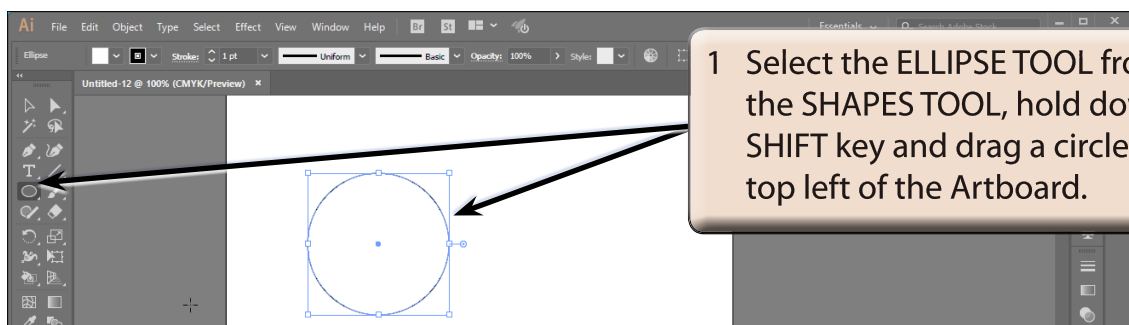


- 3 Select the PRINT category, set the SIZE to A4 (or the paper size your printer uses), the UNITS to CENTIMETRES, the ORIENTATION to PORTRAIT and select CREATE.

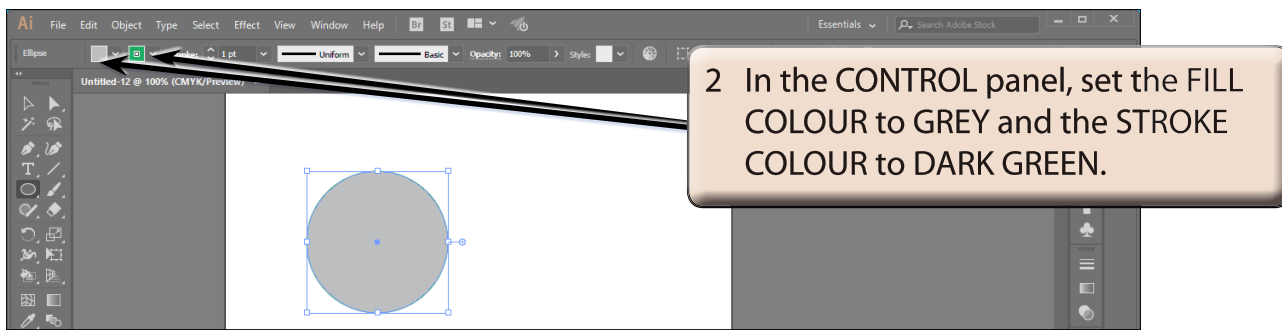
## Creating a Cylinder from a Circle

### A Setting the Colours

When creating a cylinder the FILL area will be the top and the STROKE (or border) will be extruded (or stretched) to become the body of the cylinder, so you need to set the colours for the FILL and STROKE to match the cylinder you want.

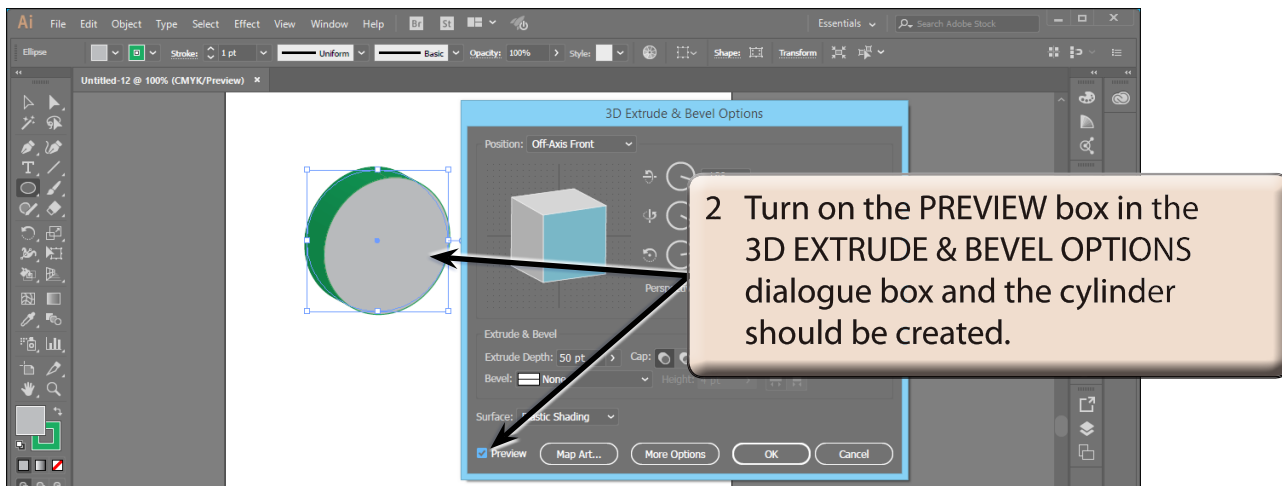


- 1 Select the ELLIPSE TOOL from within the SHAPES TOOL, hold down the SHIFT key and drag a circle near the top left of the Artboard.

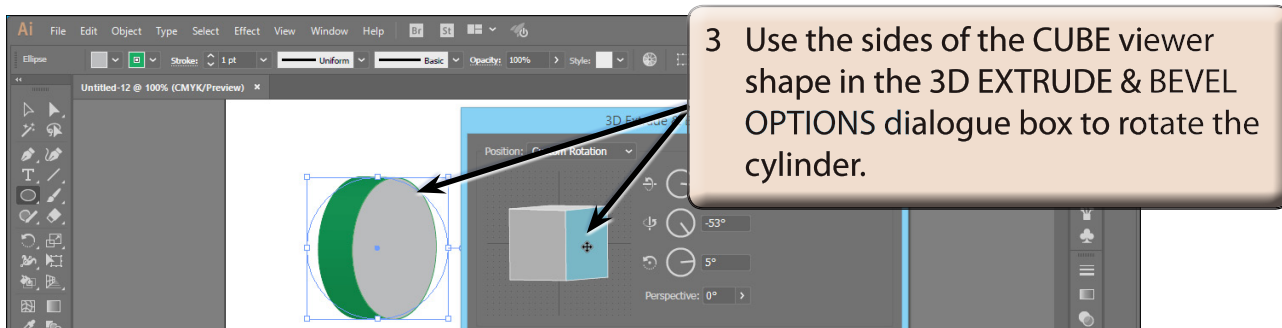


## B Creating the 3D Shape

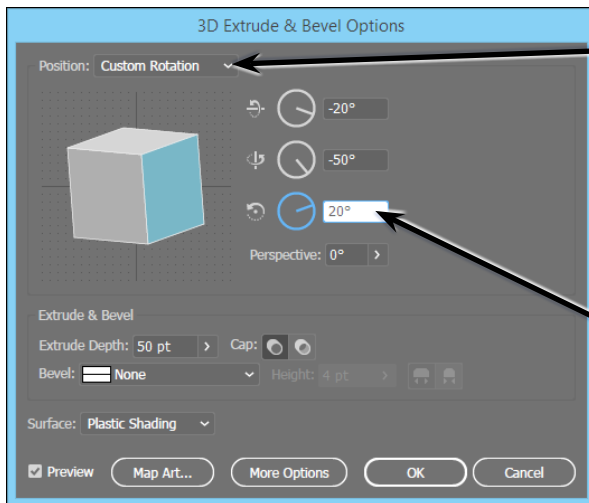
- 1 Display the EFFECT menu, highlight 3D and select EXTRUDE & BEVEL.



**NOTE:** Notice that the top (or cap) of the cylinder is the fill colour (grey) and the body (or depth) is the stroke colour (green).



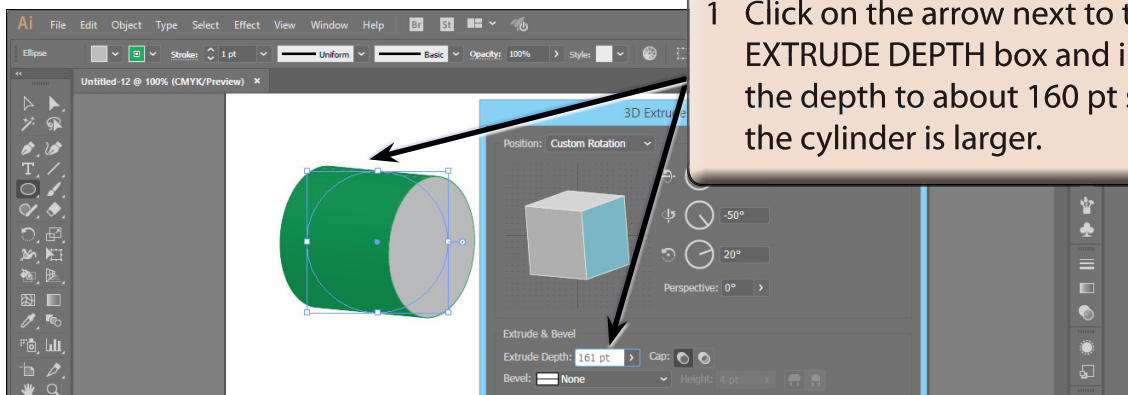




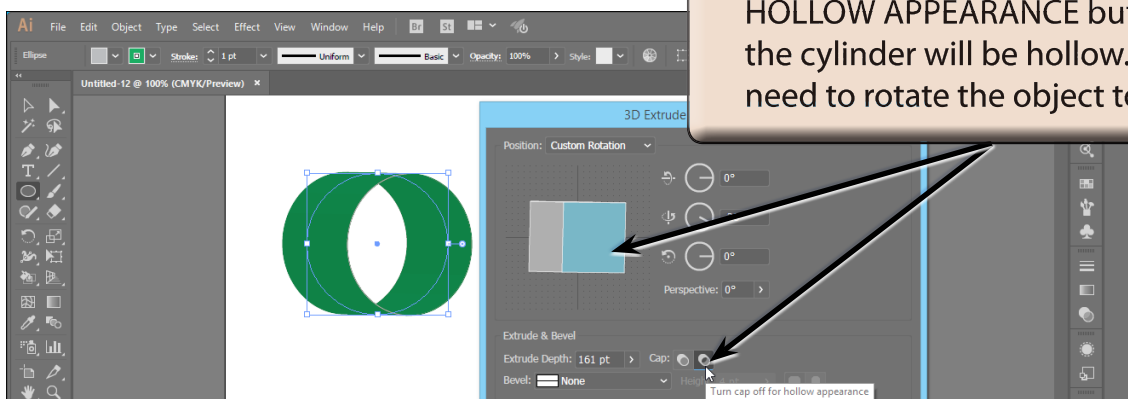
4 You can use the POSITION box at the top of the 3D EXTRUDE & BEVEL OPTIONS dialogue box to select from preset positions

5 You can also use the POSITION VALUE boxes to set the position of the shape. Try some.

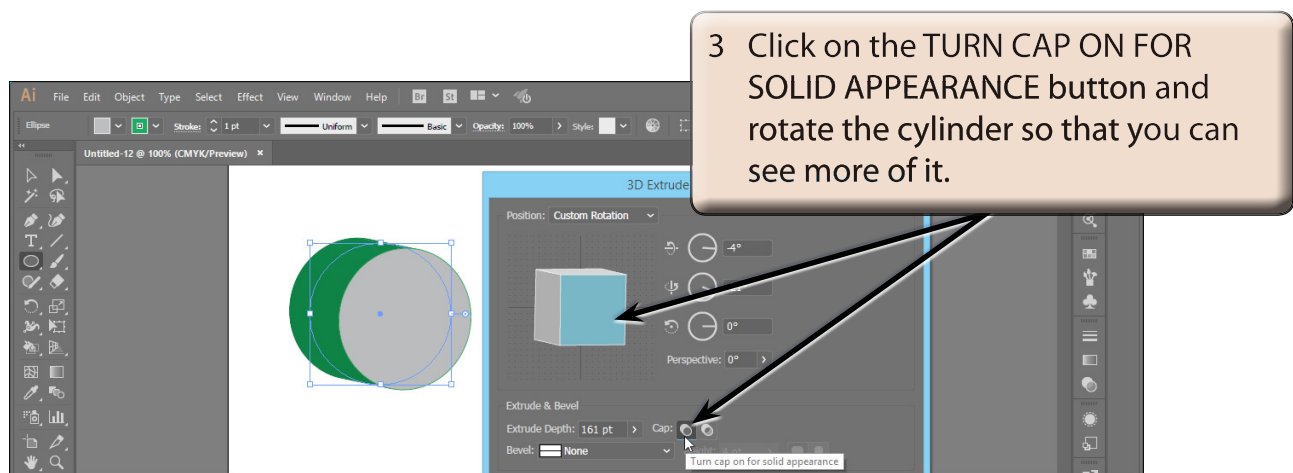
## C Increasing the Size of the Cylinder



1 Click on the arrow next to the EXTRUDE DEPTH box and increase the depth to about 160 pt so that the cylinder is larger.

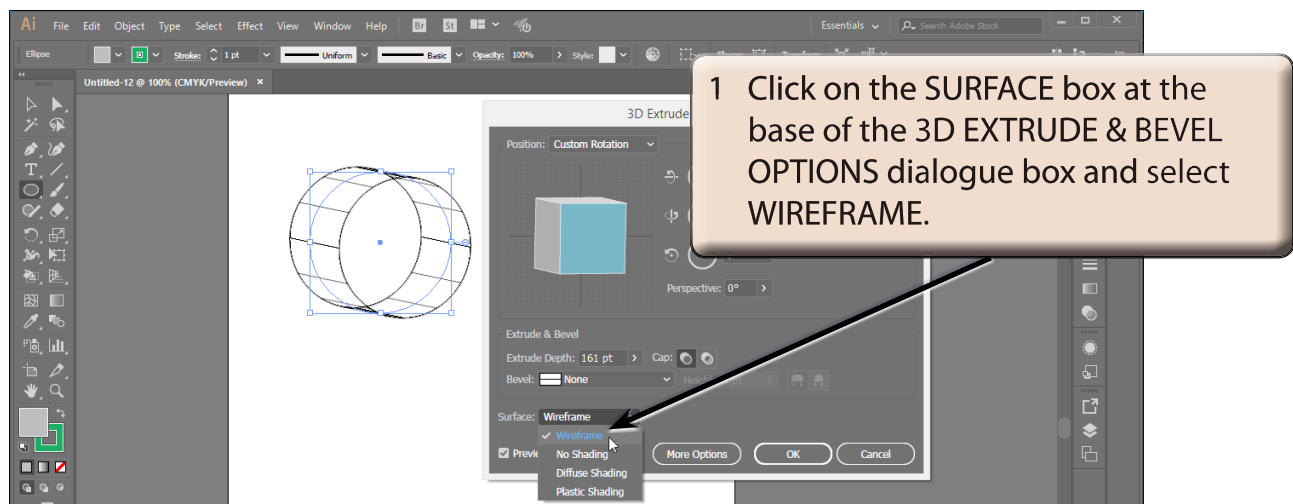


2 Click on the TURN CAP OFF FOR HOLLOW APPEARANCE button and the cylinder will be hollow. You may need to rotate the object to see it.



## D Changing the Surface Type

The default surface type for the shape is PLASTIC SHADING which provides slight lighting effects. The surface type can be changed.



- 2 The shape is changed to an outline of the 3D shape.
- 3 Try the other surfaces then set the SURFACE back to PLASTIC SHADING.

# The Shaper Tool

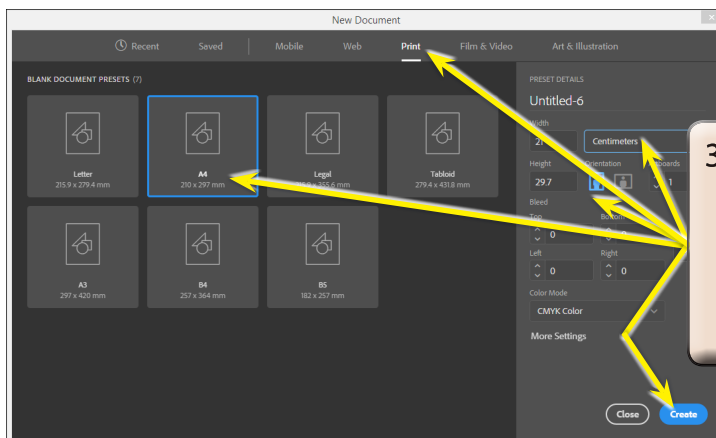
The SHAPER TOOL converts rough sketches into shapes. These shapes can then be edited, deleted or grouped to create designs.

## Drawing Shapes

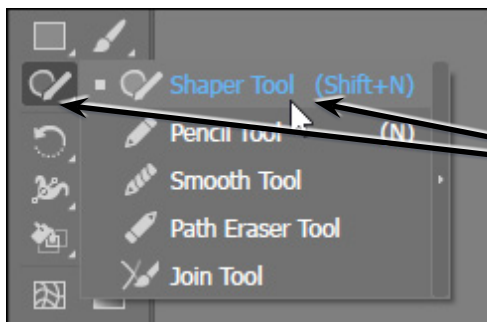
Some simple shapes will be created to introduce the SHAPER TOOL.

### A Creating Regular Shapes

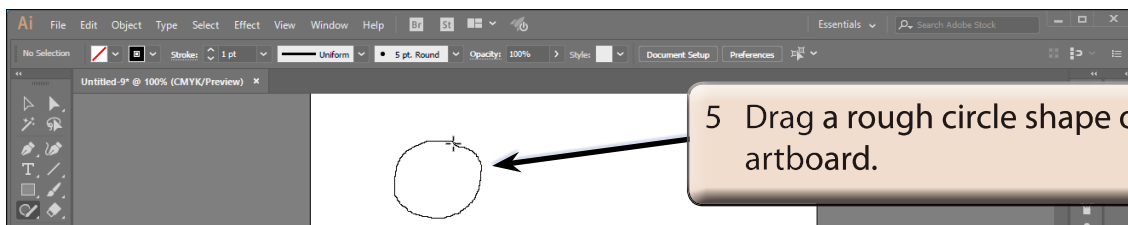
- 1 Load Adobe Illustrator CC or close the current document.
- 2 Select NEW from the START screen or FILE menu to start a new document.



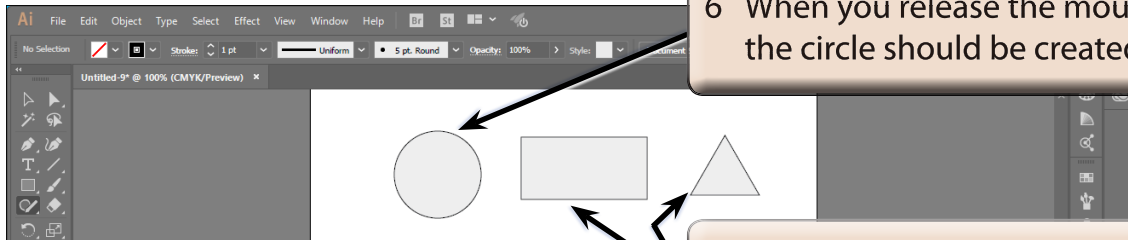
- 3 Select the PRINT category, set the SIZE to A4 (or the paper size your printer uses), the UNITS to CENTIMETRES, the ORIENTATION to PORTRAIT and select CREATE.



- 4 Select the SHAPER TOOL from the TOOLS panel.

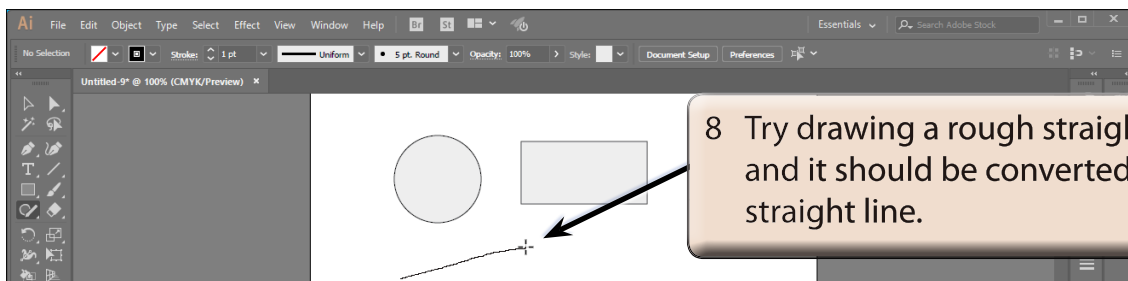


5 Drag a rough circle shape on the artboard.



6 When you release the mouse button the circle should be created.

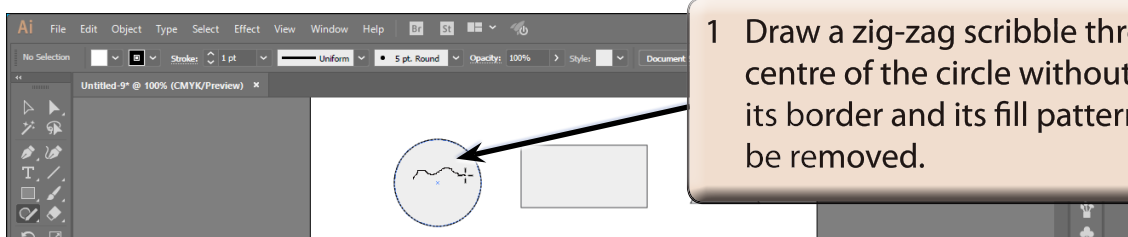
7 Try drawing a rectangle and a triangle.



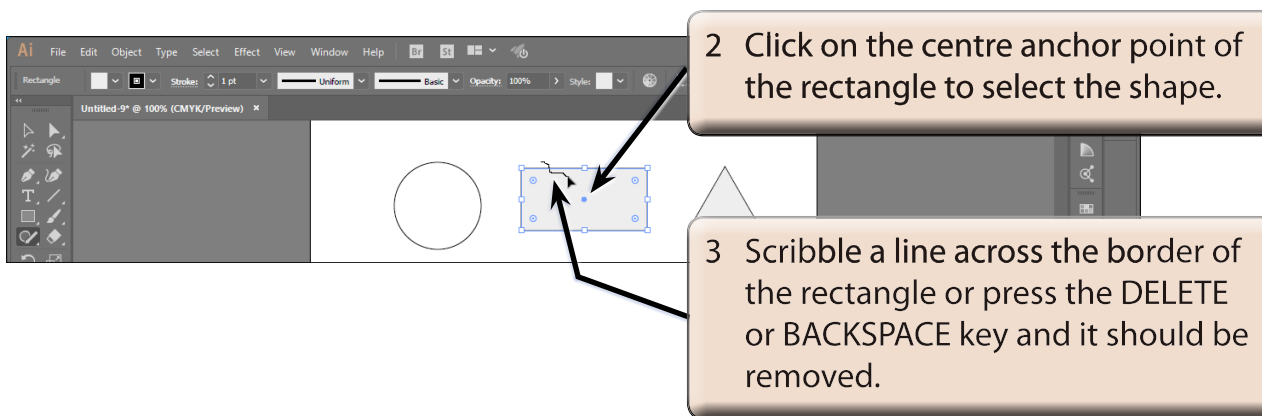
8 Try drawing a rough straight line and it should be converted to a straight line.

## B Editing Shapes and Fills

The shapes created using the SHAPER TOOL are live and can be edited at any time, which includes removing fills.



1 Draw a zig-zag scribble through the centre of the circle without touching its border and its fill pattern should be removed.

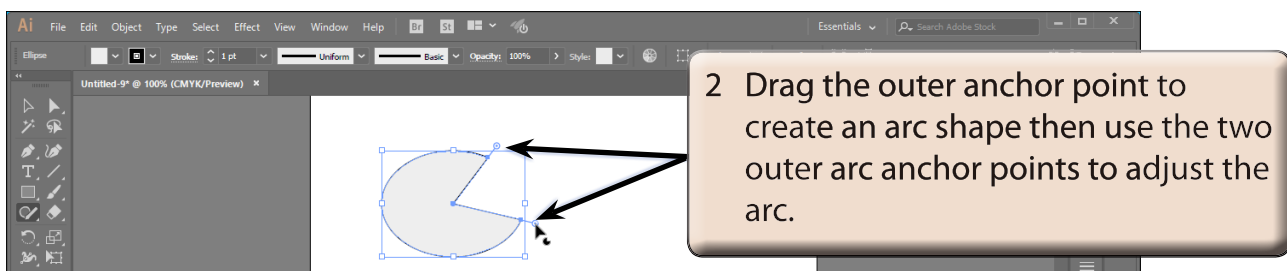
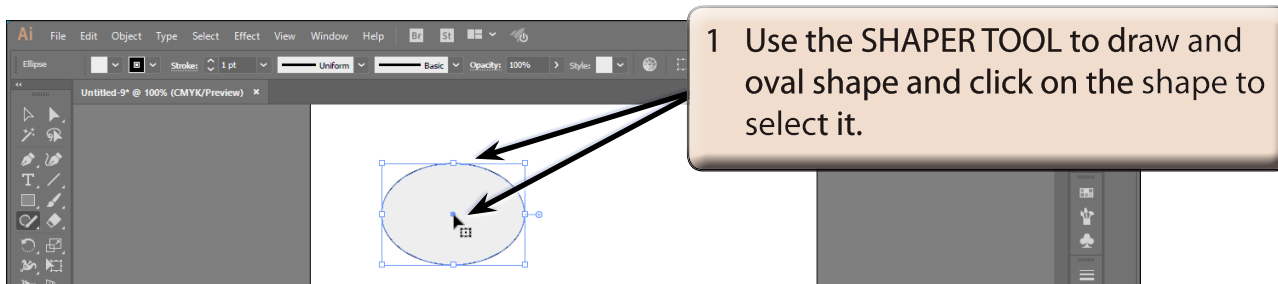


4 Delete the other shapes from the Artboard.

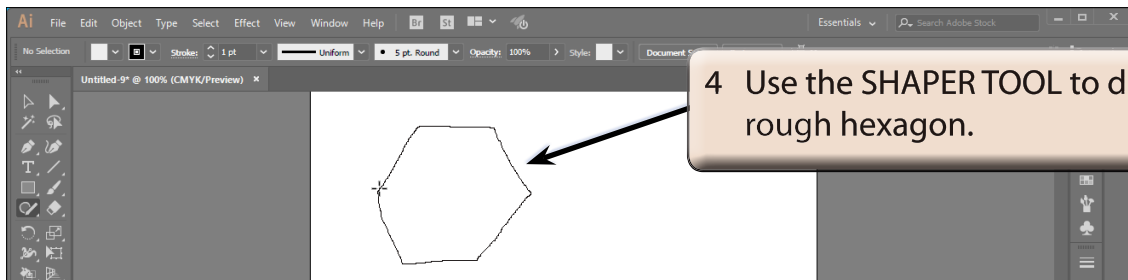
**NOTE:** A shape does not need to be selected first to scribble across its border to delete it. Scribbling across the inside of the shape cuts the fill from the shape and makes it transparent.

## C Editing Shapes

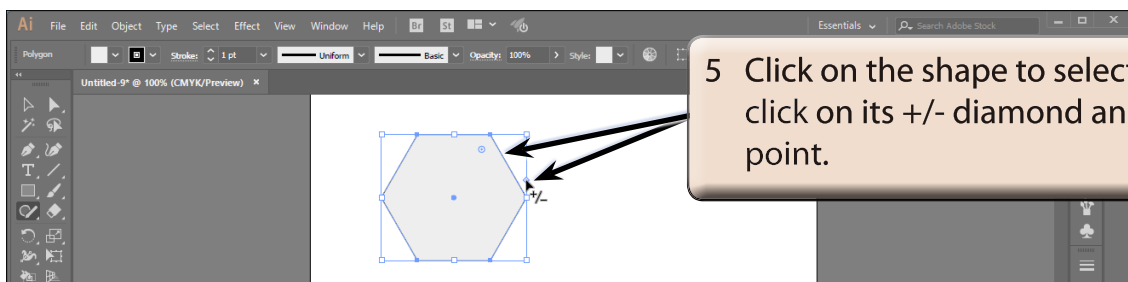
The SHAPER TOOL can be used to adjust shapes. Shapes that have been partially deleted can also be edited.



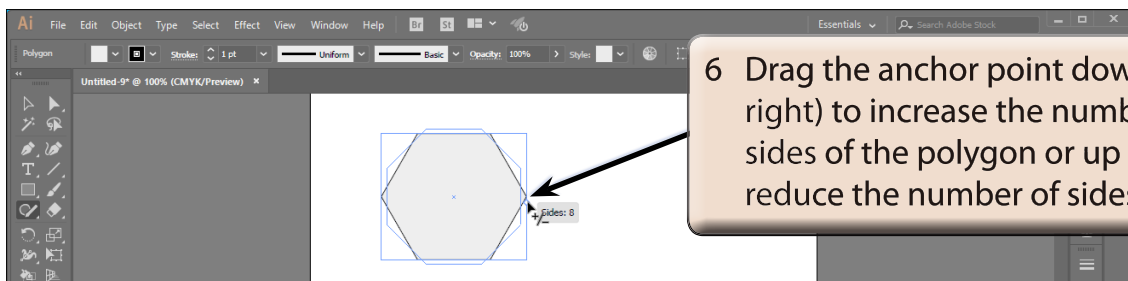
3 Press the DELETE or BACKSPACE key to delete the shape.



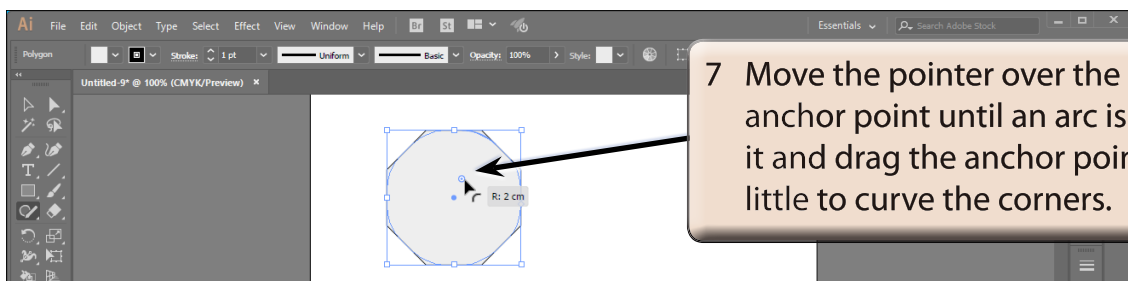
4 Use the SHAPER TOOL to draw a rough hexagon.



5 Click on the shape to select it then click on its +/- diamond anchor point.



6 Drag the anchor point down (or right) to increase the number of sides of the polygon or up (or left) to reduce the number of sides



7 Move the pointer over the inner anchor point until an arc is added to it and drag the anchor point down a little to curve the corners.

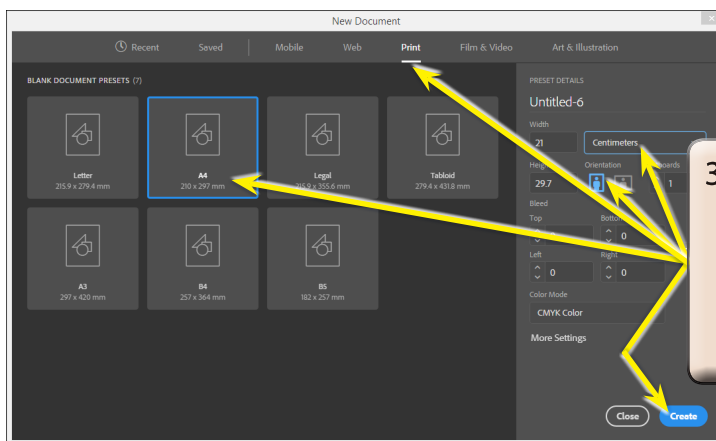
**NOTE:** A polygon drawn using the POLYGON TOOL can be adjusted in the same way.

# Images and Symbols

Photos and predrawn graphics can be inserted into Adobe Illustrator documents or symbols that Illustrator provides can be inserted.

## Starting a New Document

- 1 Load Adobe Illustrator CC or close the current document.
- 2 Select NEW from the START screen or FILE menu to start a new document.



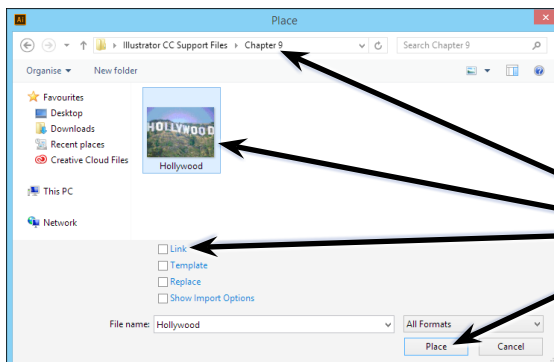
- 3 Select the PRINT category, set the SIZE to A4 (or the paper size your printer uses), the UNITS to CENTIMETRES, the ORIENTATION to PORTRAIT and select CREATE.

## Using Images

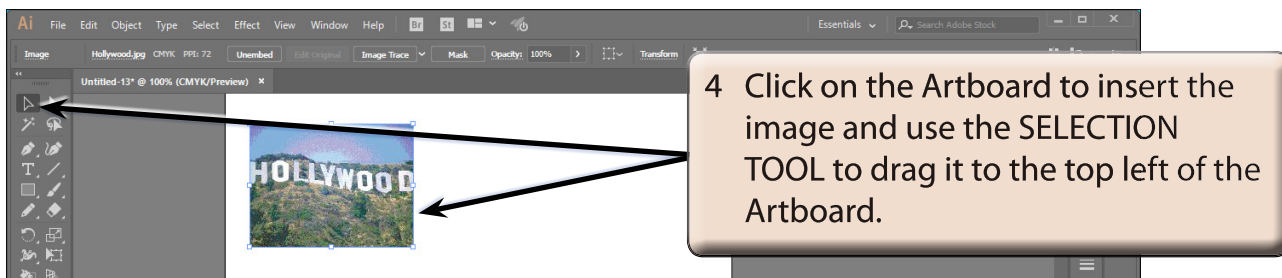
### A Importing the Image

An image has been prepared for you and it needs to be imported.

- 1 Display the FILE menu and select PLACE.
- 2 Access the ILLUSTRATOR CC SUPPORT FILES.



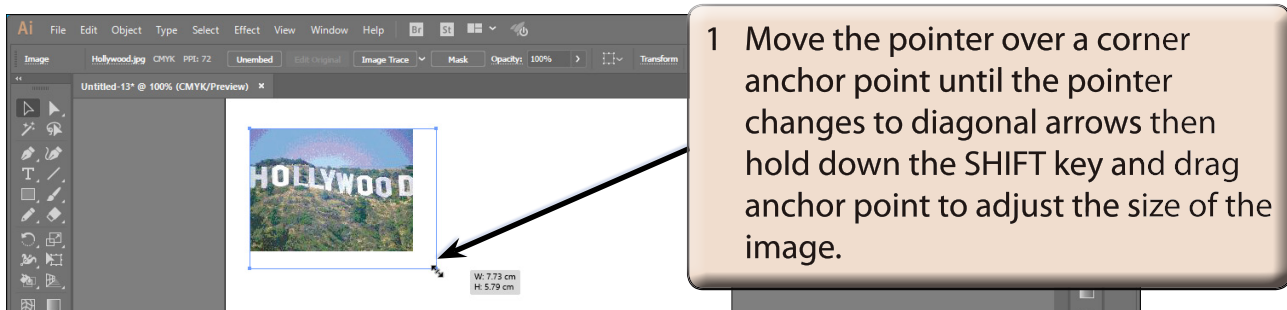
- 3 Open the CHAPTER 9 folder, select the HOLLYWOOD image, check that the LINK box is turned off and click on PLACE.



**NOTE:** If LINK is selected when PLACING images, the image is not part of the document, just a link to the original image is recorded.

## B Adjusting the Image

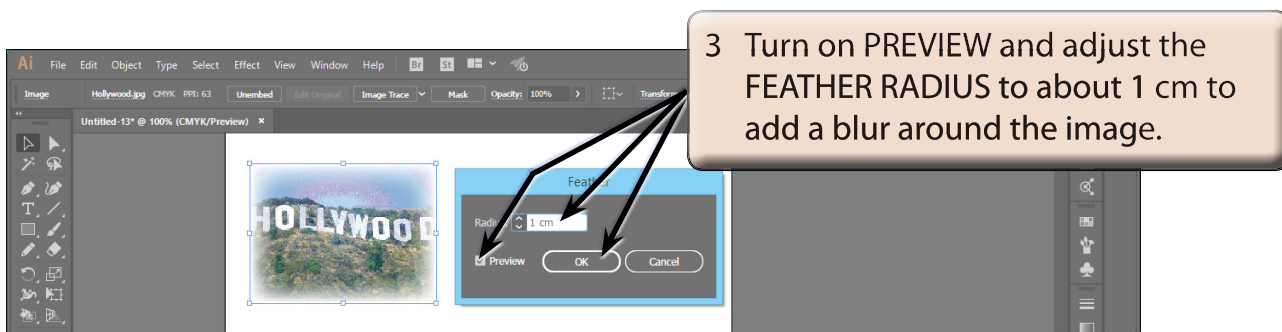
The image can be moved, resized, rotated or have effects applied to it just like any other object in Illustrator.



**NOTE:** The SHIFT key ensures that the proportions of the image are maintained in the resize.

- 2 Display the EFFECT menu, highlight STYLIZE in the top section of the menu and select FEATHER.



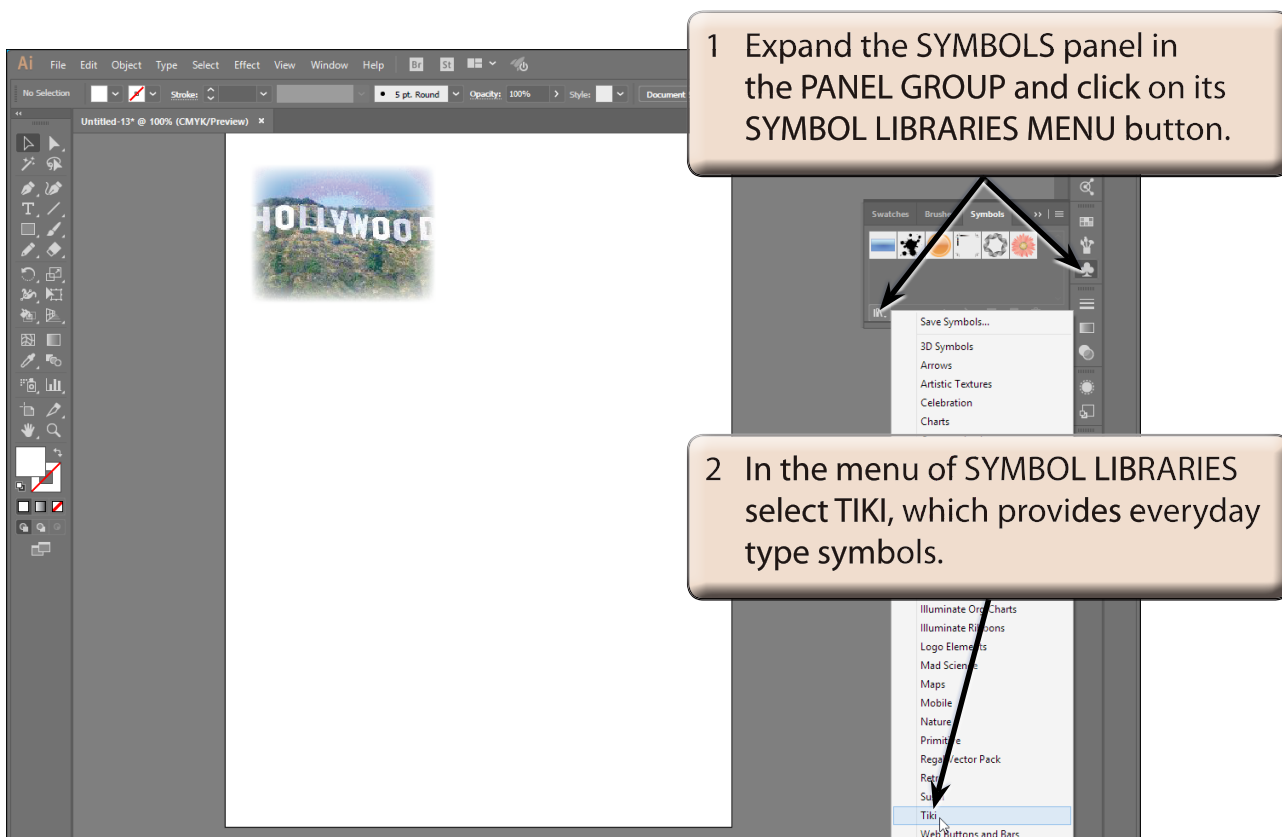


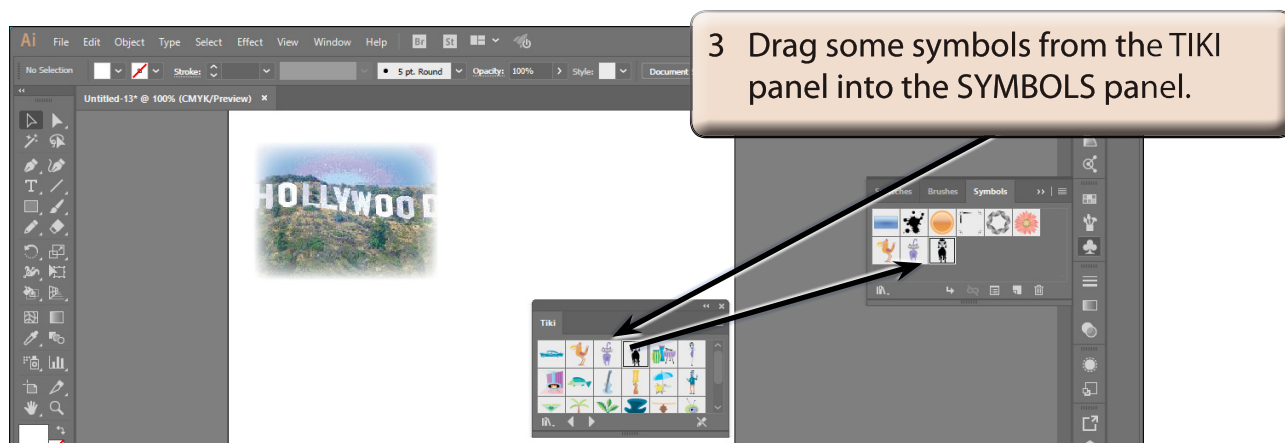
4 Select OK to complete the FEATHER effect.

## Using Symbols

Adobe Illustrator provides a wide range of pre-drawn images, called SYMBOLS, that can be used and manipulated within designs. These symbols are contained in the SYMBOLS panel.

### A The Symbols Library

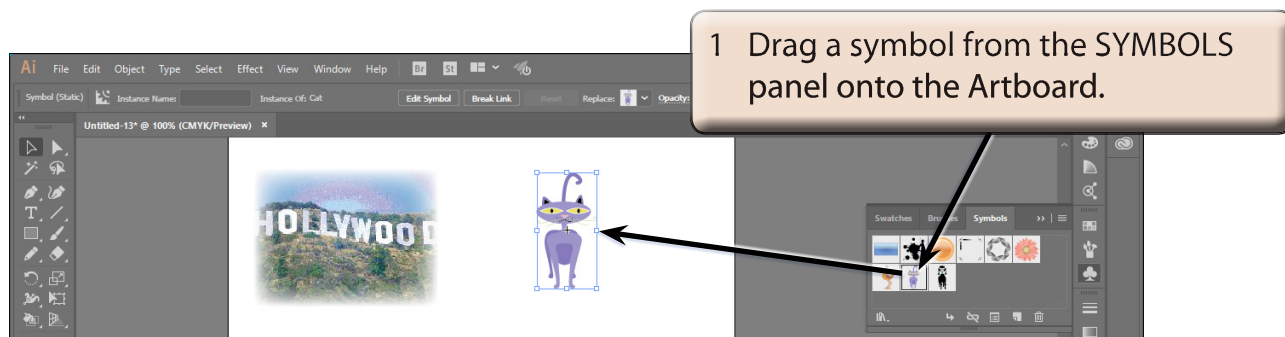




4 Close the TIKI panel by clicking on its CLOSE BOX.

**NOTE:** You can drag symbols directly onto the Artboard from SYMBOL LIBRARY panels. The SYMBOLS panel will store those symbols for the current document.

## B Adding Symbols to the Artboard



**NOTE:** You can also click on the PLACE SYMBOL INSTANCE button at the base of the SYMBOLS panel to insert a selected symbol on the Artboard.

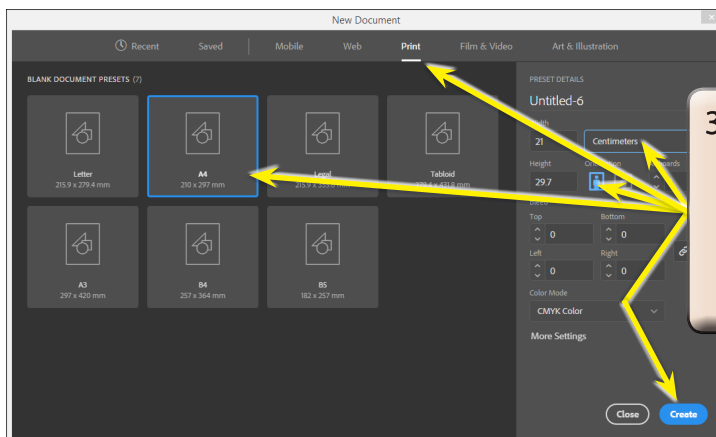
# Image Tracing

One of Adobe Illustrator's most powerful tools is the IMAGE TRACE tool. It allows you to draw a rough sketch on paper (or find a sketch), scan it, import the scan into Illustrator and convert it to a vector image using the IMAGE TRACE tool. The image then acts like it was created in Illustrator.

IMAGE TRACE can also be used to convert photos to artwork. This can be useful if you have a poor quality photo that you want to use in a document and displaying it as artwork can hide the deficiencies in the photo. Setting a photo to a vector image can also reduce the file size of the photo.

## Starting a New Document

- 1 Load Adobe Illustrator CC or close the current document.
- 2 Select NEW from the START screen or FILE menu to start a new document.



- 3 Select the PRINT category, set the SIZE to A4 (or the paper size your printer uses), the UNITS to CENTIMETRES, the ORIENTATION to PORTRAIT and select CREATE.

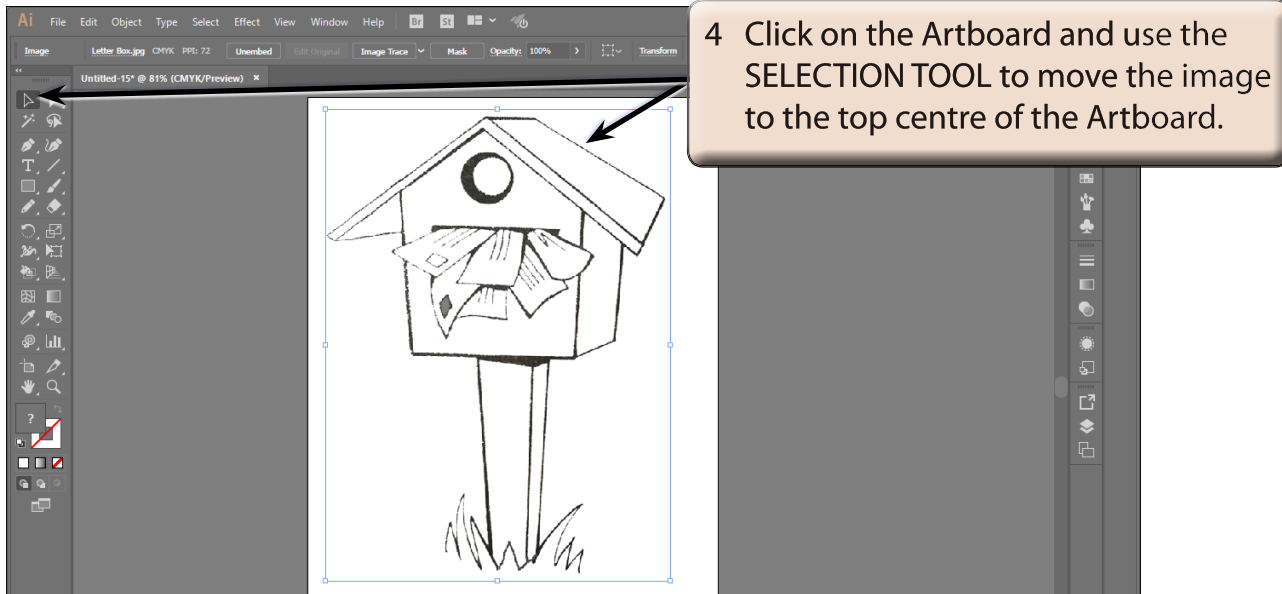
## Tracing a Scanned Sketch

A scan of a letter box overflowing with letters has been prepared for you. It needs to be traced and converted into artwork.

### A Importing the Scan

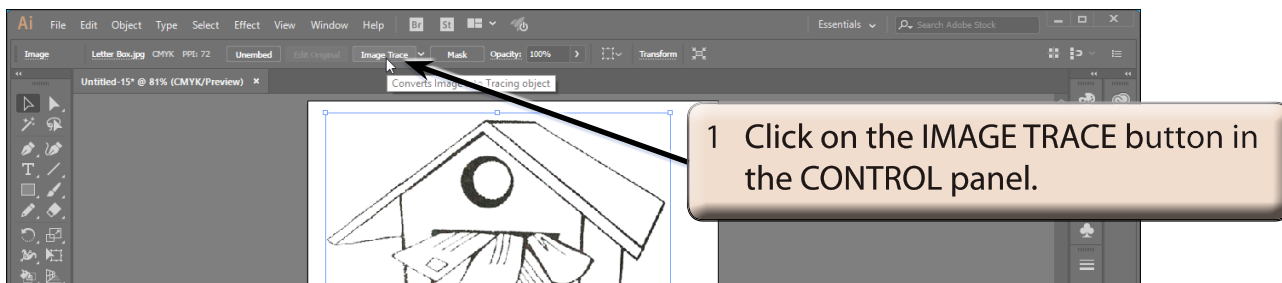
- 1 Display the FILE menu and select PLACE.
- 2 Access the ILLUSTRATOR CC SUPPORT FILES folder and open the CHAPTER 10 folder.

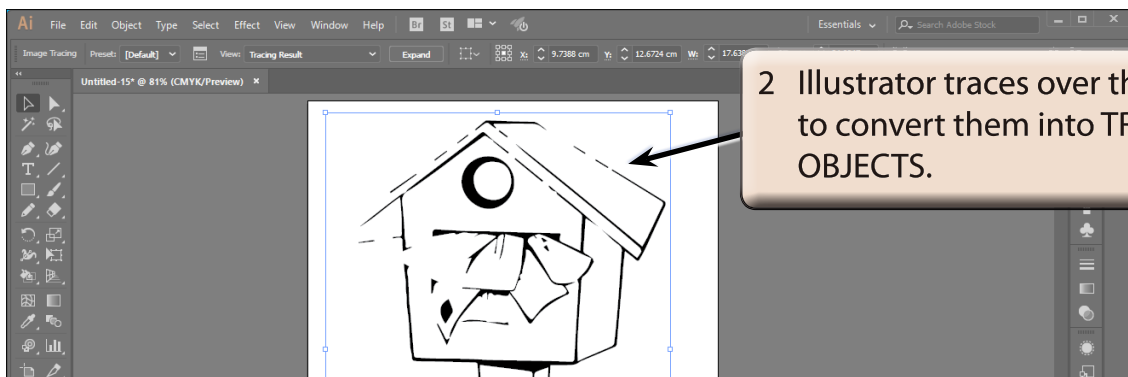
- 3 Select the LETTER BOX file, check that the LINK box is deselected and select PLACE.



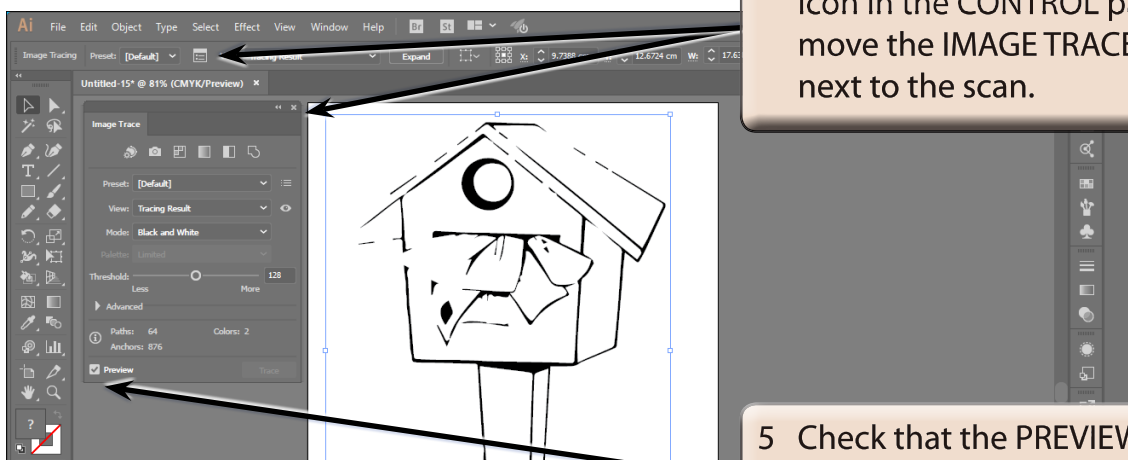
**NOTE:** The image has been increased in size so that you will be able to see its sections more clearly. It will be reduced in size once its sections have been coloured in.

## B Tracing the Scan





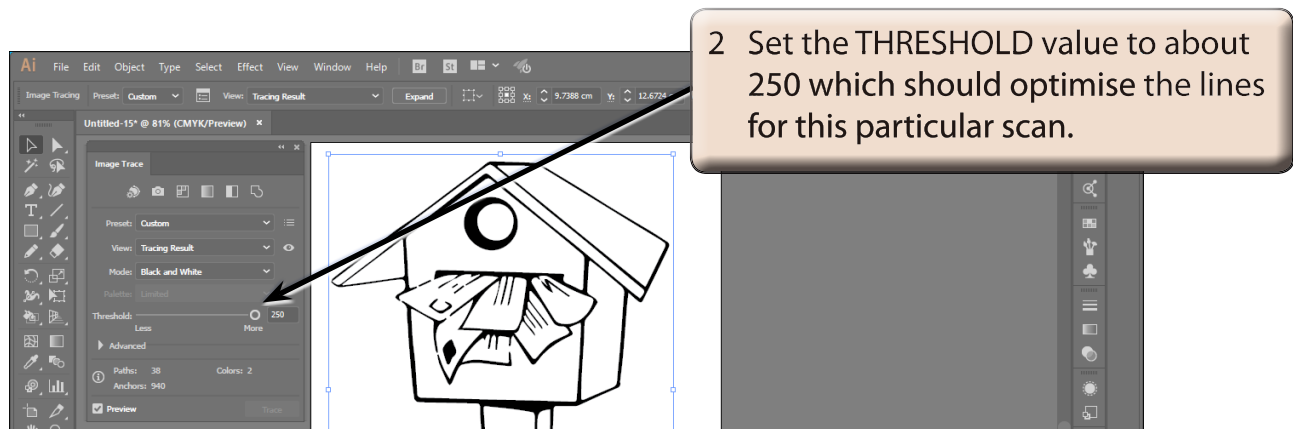
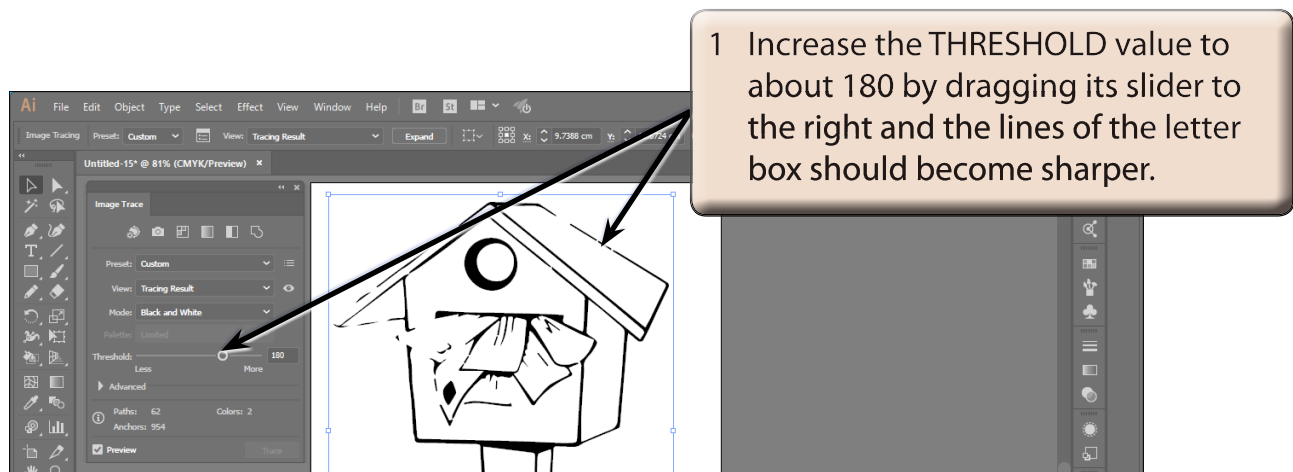
3 The trace needs some help.



- NOTE:**
- i There are tracing presets in the **CONTROL** panel that can be applied to **TRACING OBJECTS** and these will be looked at a little later once you are familiar with the adjustment process.
  - ii The default image trace setting is **BLACK AND WHITE** which is suitable for this sketch.

## C Adjusting the Threshold

There are numerous options that can be adjusted in the IMAGE TRACE panel, but the main one for a scanned sketch is the THRESHOLD.



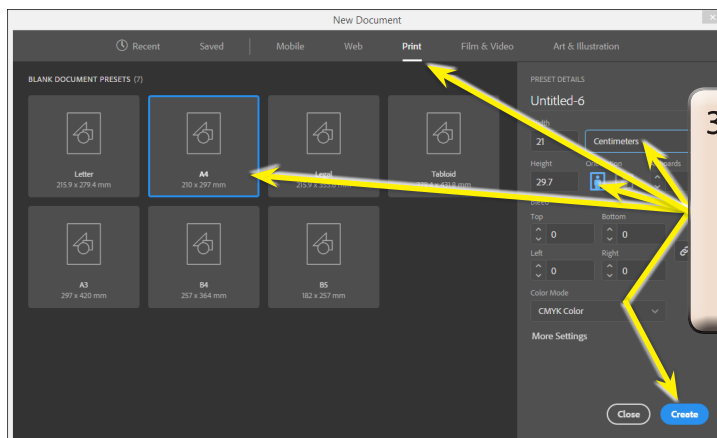
**NOTE:** The THRESHOLD controls how much black and white is displayed in the image.

# Distorting Shapes

Shapes such as drawings, images, symbols and text can be distorted to create unique and distinctive designs.

## Starting a New Document

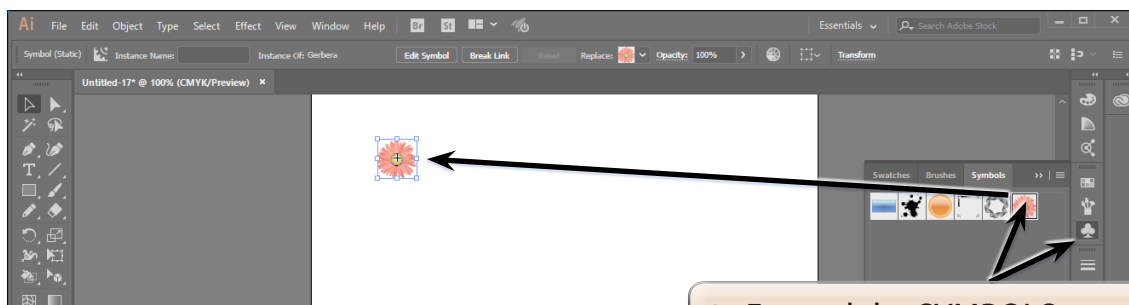
- 1 Load Adobe Illustrator CC or close the current document.
- 2 Select NEW from the START screen or FILE menu to start a new document.



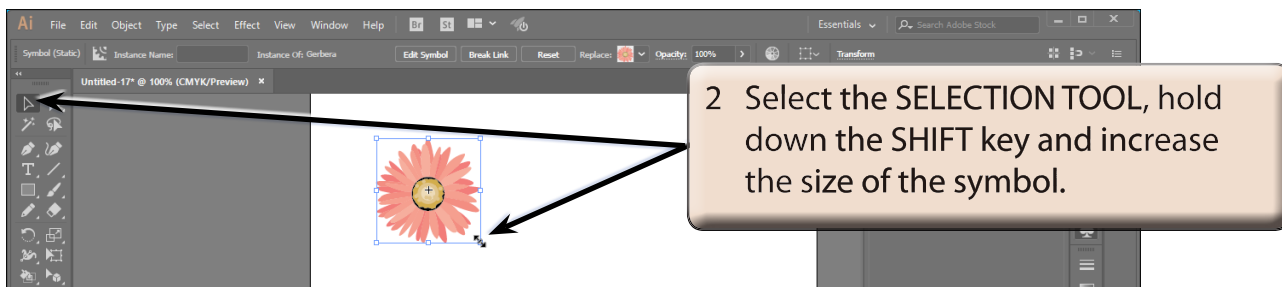
- 3 Select the PRINT category, set the SIZE to A4 (or the paper size your printer uses), the UNITS to CENTIMETRES, the ORIENTATION to PORTRAIT and select CREATE.

## Inserting a Symbol

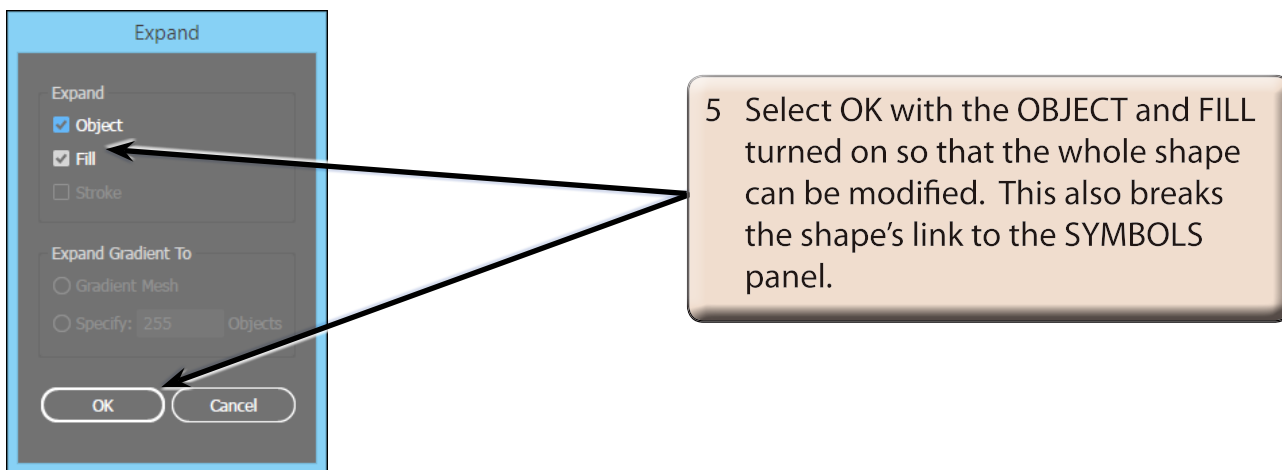
A symbol will be used as the image.



- 1 Expand the SYMBOLS panel in the PANEL GROUP and drag the GERBERA symbol on to the Artboard.

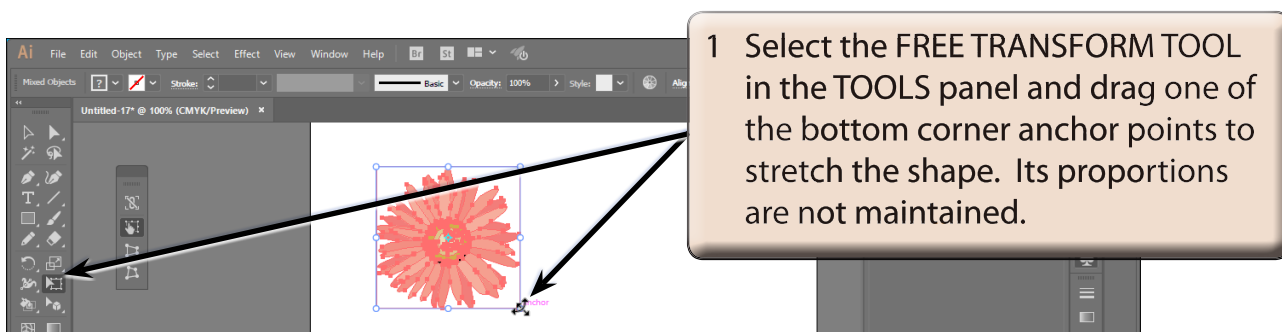


- 3 The symbol needs to be expanded so that its individual parts can be modified.
- 4 Display the OBJECT menu and select EXPAND.



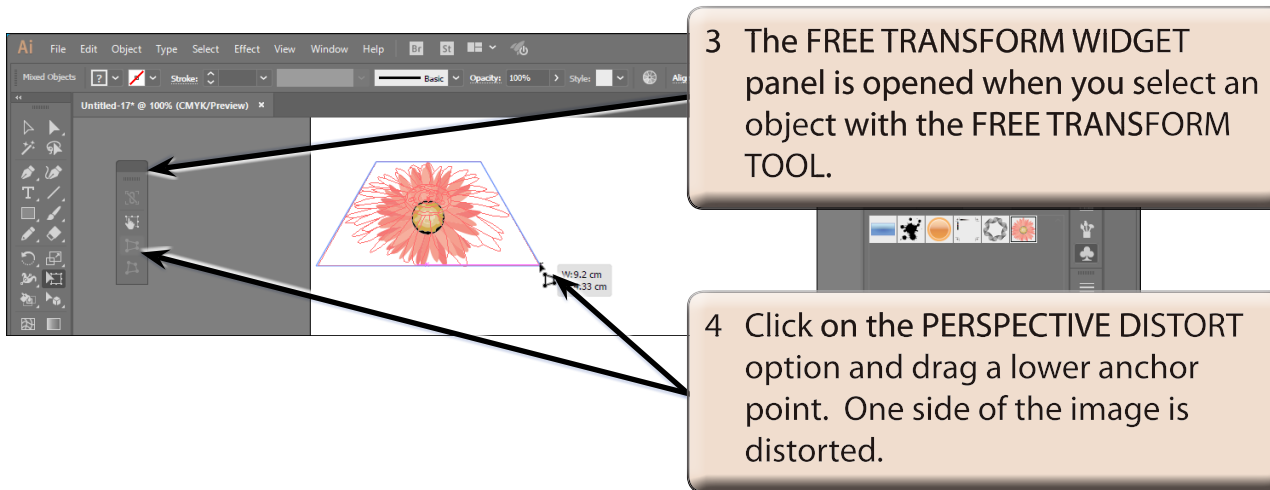
## Distorting Using the Free Transform Tool

A simple way to distort shapes is to use the FREE TRANSFORM TOOL.

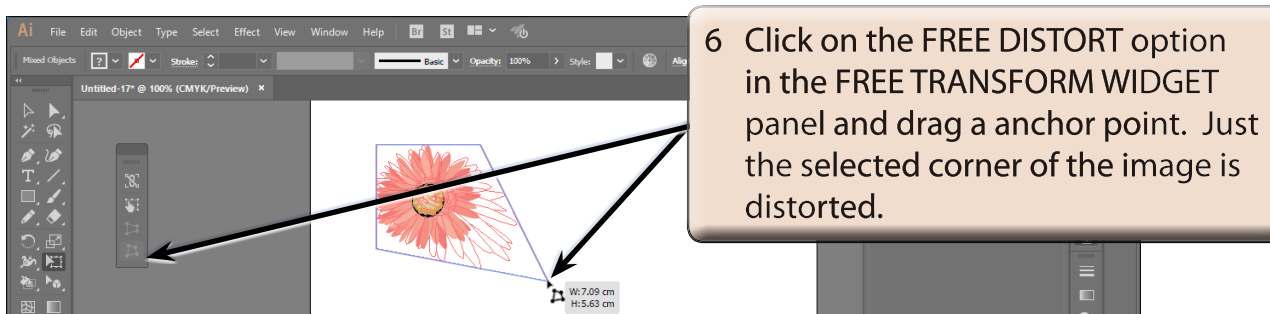




2 Press CTRL+Z or COMMAND+Z to undo that change.

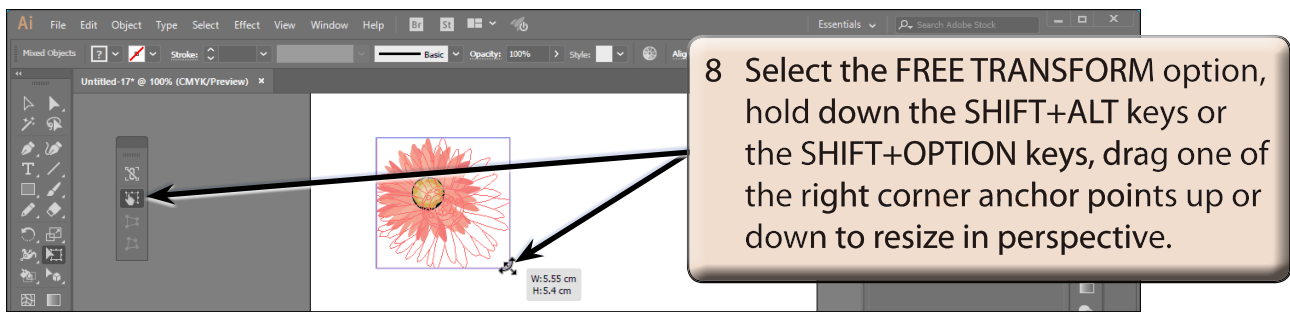


5 Press CTRL+Z or COMMAND+Z to undo that change.



- NOTE:**
- i The top icon in the FREE TRANSFORM WIDGET panel is the **CONSTRAIN TOOL**. It can be selected with the **FREE TRANSFORM TOOL** or the **FREE DISTORT TOOL** to maintain the proportions of the resize. It is the same as holding down the **SHIFT** key when resizing an object.
  - ii The **FREE TRANSFORM TOOL** can be used to resize any object.

7 Press CTRL+Z or COMMAND+Z to undo that change.



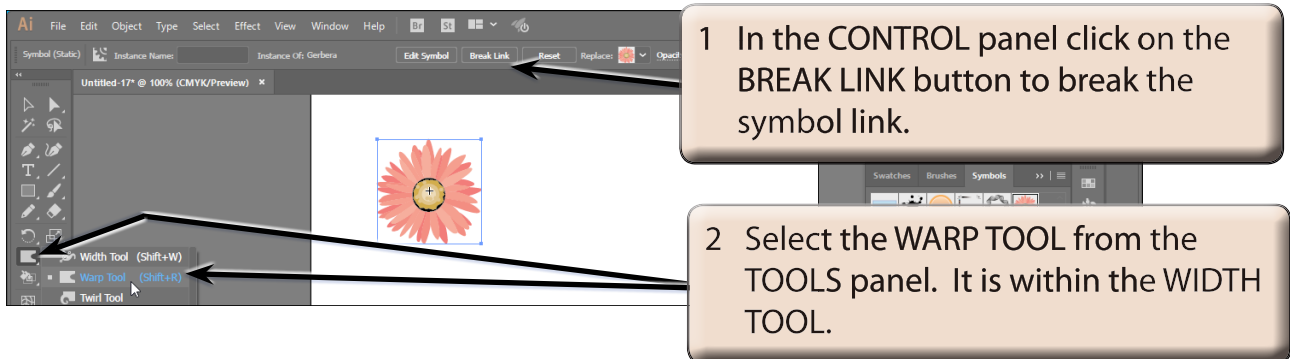
9 Press CTRL+Z or COMMAND+Z to undo that change.

## Distorting Using the Liquify Tools

The LIQUIFY tools allow for more detailed distortions. These include warping, twirling, compressing, bloating and adjusting edges.

### A The Warp Tool

The WARP TOOL allows you to push or stretch part of a shape. To use the tool on a symbol, the link to the symbol needs to be broken.



**NOTE:** The pointer is changed to a brush. Changing the brush size is a little different with the LIQUIFY tools compared to other brush tools. You need to hold down the ALT or OPTION key and drag diagonally UP or DOWN to adjust the brush size. You can also hold down the SHIFT key as well to keep the brush circular.

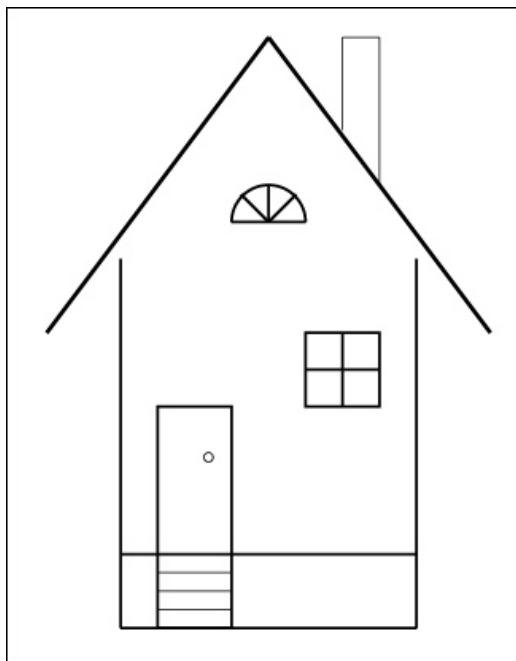
## Using Layers

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Layers are a very important part of any drawing program, particular when larger projects are undertaken. They are screen overlays that different objects can be placed into. Think of them as sheets of transparent paper stacked on top of each other.

Layers allow you to keep groups of objects separate in the one drawing. For example, if you were creating a house plan, the walls of the house can be placed in one layer, the fixtures and fittings in another layer, the measurements in a third layer and the text in a fourth layer. You can hide all but the layer you wish to work in and then display or print any combination of them.

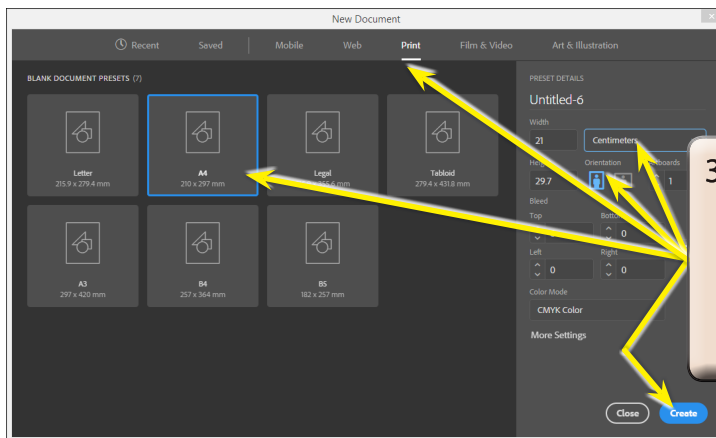
To illustrate the use of layers, the following simple sketch of a house will be created with a layer for the outside of the building, another layer for the door and two separate layers for windows.



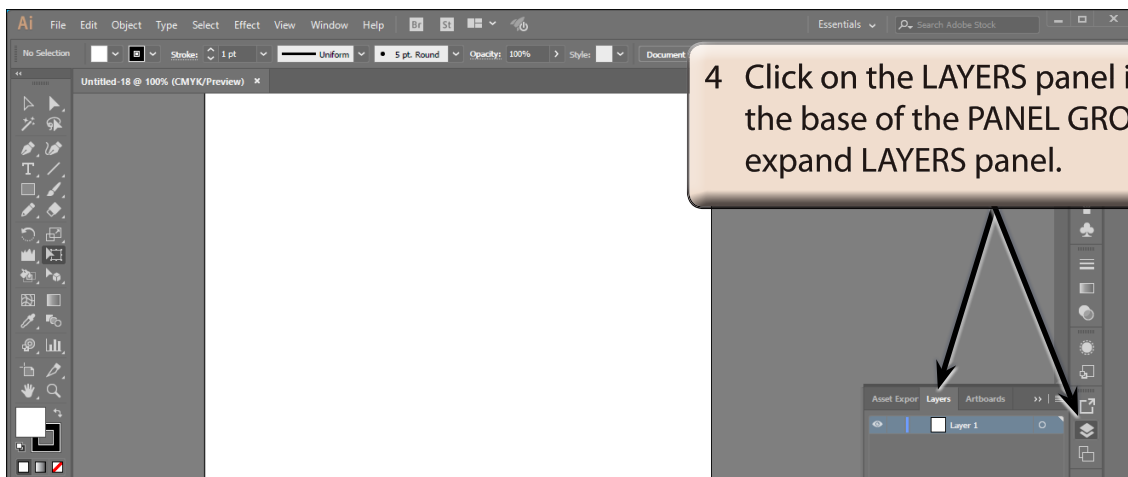
## The Layers Panel

When you start a new Illustrator document LAYER 1 is opened and all objects are placed in that layer until you create a new layer. These layers are stored in the LAYERS panel which is in the PANEL GROUP at the right of the screen.

- 1 Load Adobe Illustrator CC or close the current document.
- 2 Select NEW from the START screen or FILE menu to start a new document.



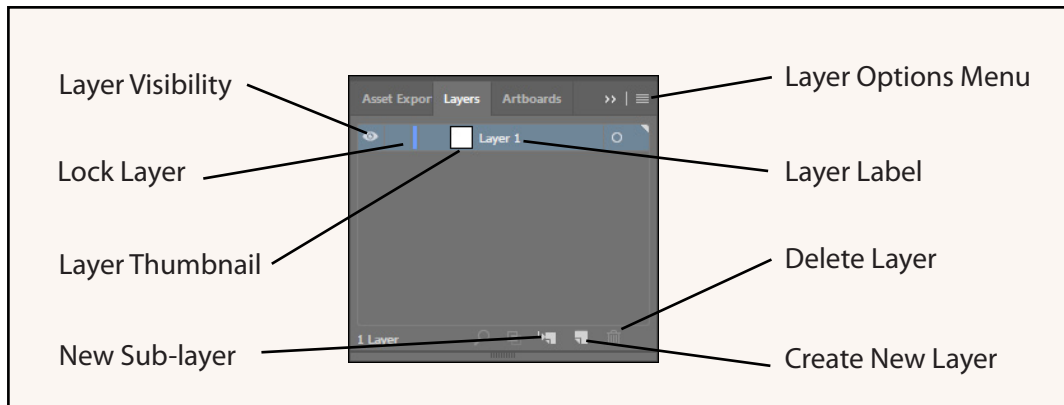
- 3 Select the PRINT category, set the SIZE to A4 (or the paper size your printer uses), the UNITS to CENTIMETRES, the ORIENTATION to PORTRAIT and select CREATE.



- 4 Click on the LAYERS panel icon at the base of the PANEL GROUP to expand LAYERS panel.

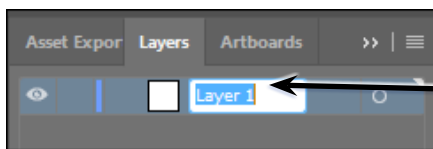
**NOTE:** If the LAYERS panel is not in the PANEL GROUP, it can be opened from the WINDOW menu and its label dragged into the PANEL GROUP to 'dock' it.

5 The following diagram labels the sections of the LAYERS panel.

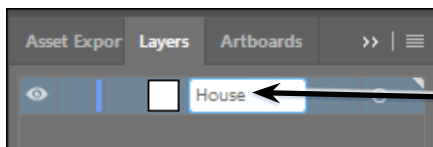


## Naming Layers

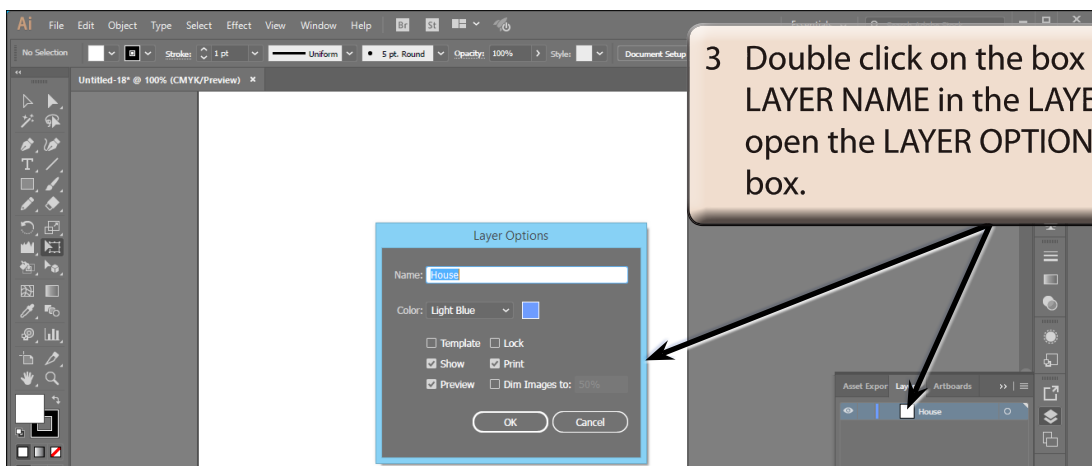
Layers should be named so that you know what content is contained within them.



1 Double click on the LAYER 1 label in the LAYERS panel to highlight the label.



2 Enter the layer name:  
House  
and press <enter> or <return>.



3 Double click on the box next to the LAYER NAME in the LAYERS panel to open the LAYER OPTIONS dialogue box.

- 4 You can change the highlight colour for the layer and adjust the layer settings in the LAYER OPTIONS dialogue box. The default selection colour for the first layer is blue.
- 5 Select CANCEL to close the LAYER OPTIONS dialogue box.

**NOTE:** The LAYER OPTIONS dialogue box can also be opened by clicking on the LAYER OPTIONS MENU button at the top right of the LAYERS panel and selecting OPTIONS FOR HOUSE (LAYER 1).

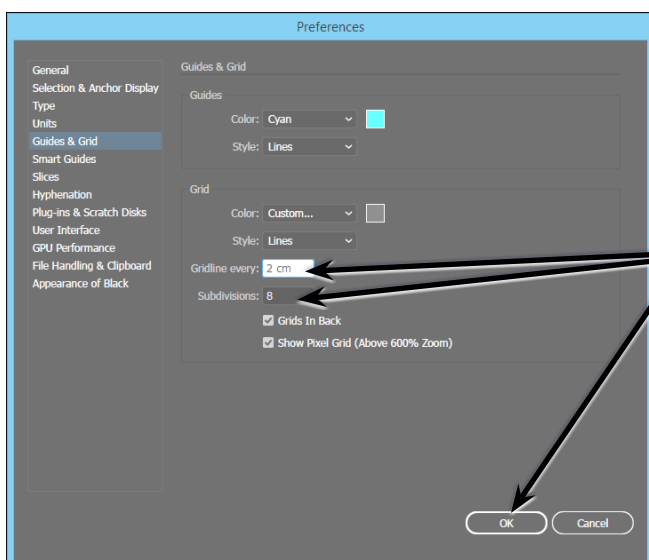
## Drawing the House Outline

The first layer will contain the outline of the house which will include the roof and chimney.

### A Turning on the Rulers and Grid

To make the drawing of the house more accurate the Rulers and Grid will be turned on.

- 1 Use the VIEW menu to turn on SHOW RULERS, SHOW GRID and SNAP TO GRID.
- 2 The grid needs to match the Ruler units. Display the EDIT menu on the Windows system or the ILLUSTRATOR menu on the Macintosh system, highlight PREFERENCES and select GUIDES & GRID.



- 3 Set the GRIDLINES EVERY box to 2 cm, leave the SUBDIVISIONS as 8 and select OK.