

Guided Computer Tutorials

Learning
Adobe
Photoshop CC
Module 2

By Greg Bowden

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Learning Adobe Photoshop CC

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Photoshop Project 2

Repairing Images and Moving Content

As you have seen with removing backgrounds or selecting parts of images, Photoshop provides numerous tools to carry out steps. The same applies to repairing sections of images and quickly moving content. The PATCH TOOL and two HEALING BRUSH TOOLS can be used to repair blemishes in images, and the CONTENT AWARE MOVE TOOL can be used to quickly move part of an image to another section of the same image.

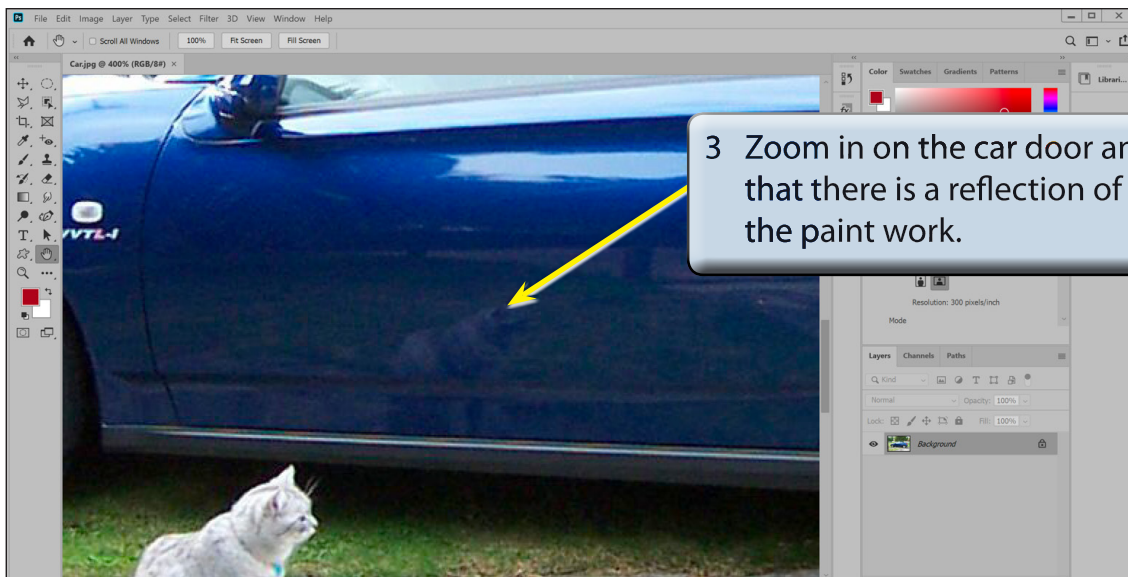
The Patch Tool

The PATCH TOOL allows you to replace areas of an image with pixels from another area. The PATCH TOOL tries to match the texture, lighting and shading of the sampled area with the area to be patched.

A Loading the Image

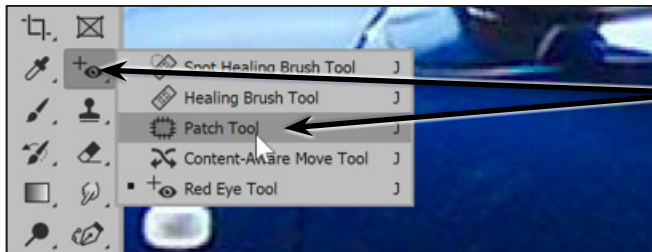
- 1 Load Photoshop or close the current files and click on the OPEN button in the WELCOME screen or select OPEN from the FILE menu.
- 2 Access the PScC SUPPORT FILES, open the CHAPTER 14 folder and open the file:

Car

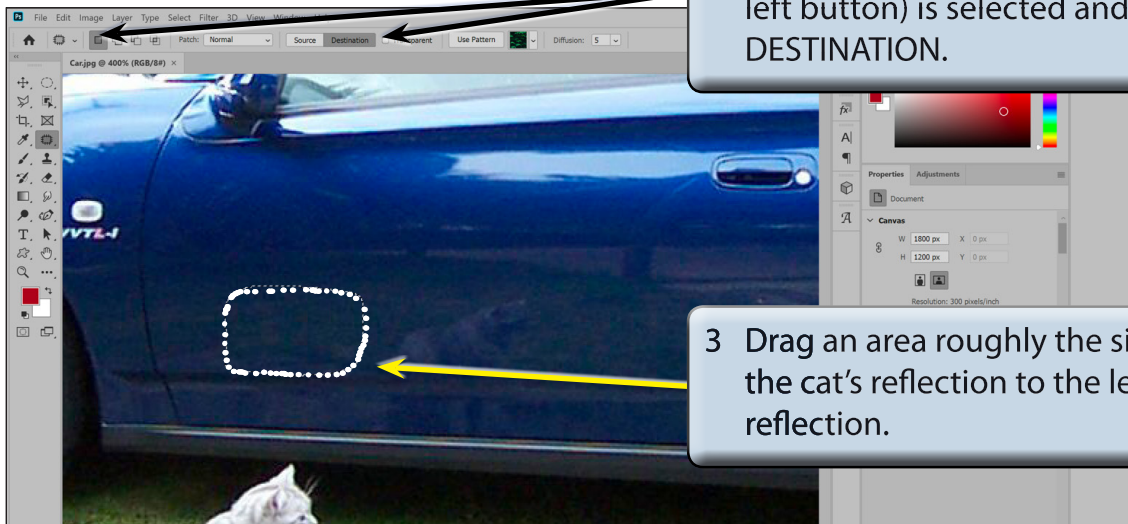


- 4 Let's remove the reflection from the paint work.

B Using the Patch Tool

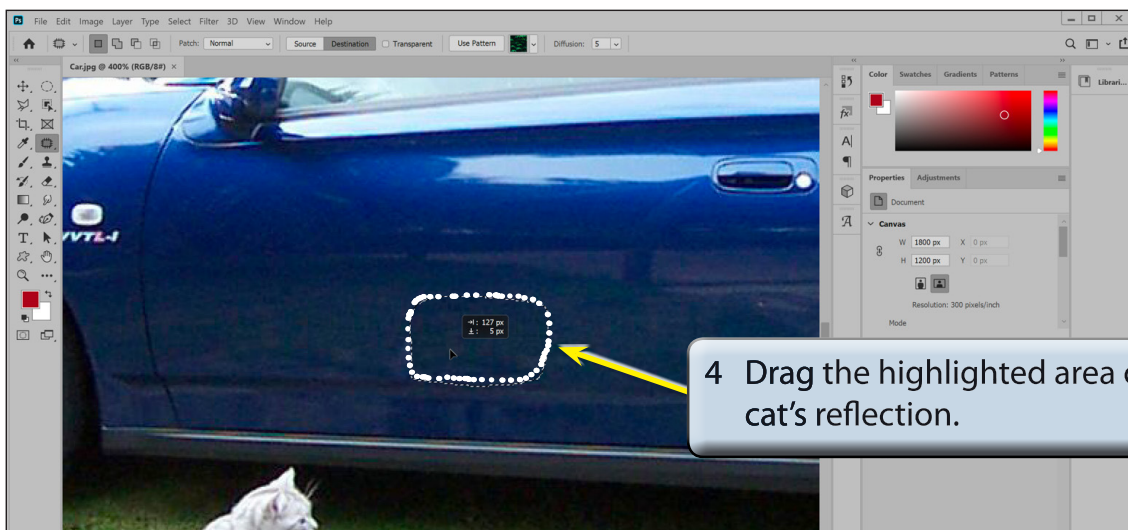


1 Click and hold on the tool below the FRAME TOOL in the TOOLS panel and select the PATCH TOOL.

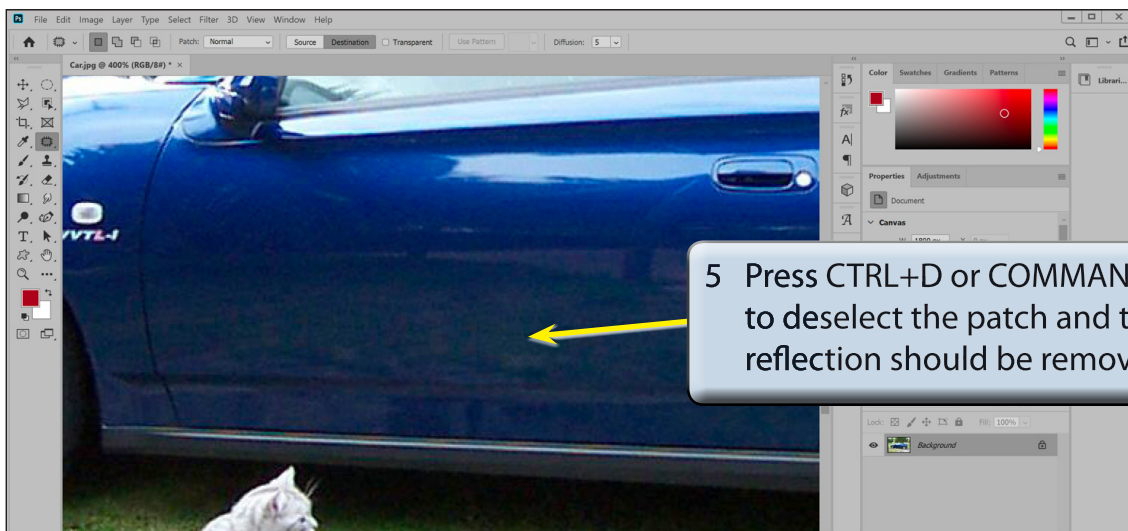


2 In the OPTIONS BAR ensure that the NEW SELECTION button (the left button) is selected and click on DESTINATION.

3 Drag an area roughly the size of the cat's reflection to the left of the reflection.



4 Drag the highlighted area over the cat's reflection.



- NOTE:**
- i You can patch over any sections that are not fully removed.
 - ii The PATCH TOOL works best when used with small areas.

- 6 Use SAVE AS from the FILE menu to save the file in your STORAGE folder as a PHOTOSHOP file under the name:

Patch Tool

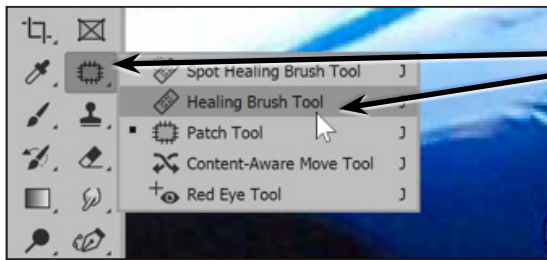
The Healing Brush Tools

There are two healing brush tools that can be used to repair sections of photos, the HEALING BRUSH TOOL and the SPOT HEALING BRUSH TOOL.

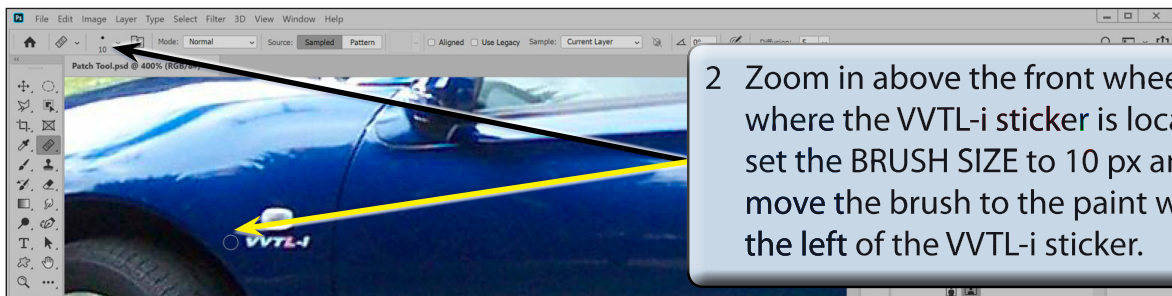
A The Healing Brush Tool

The HEALING BRUSH TOOL allows you select a sample area and apply those pixels to the problem area. It tries to match the texture, lighting, transparency and shading of the sampled area to blend the repaired area with the rest of the image.

Let's use the HEALING BRUSH TOOL to remove the VVTL-i sticker near the front of the care as it is starting to fade.

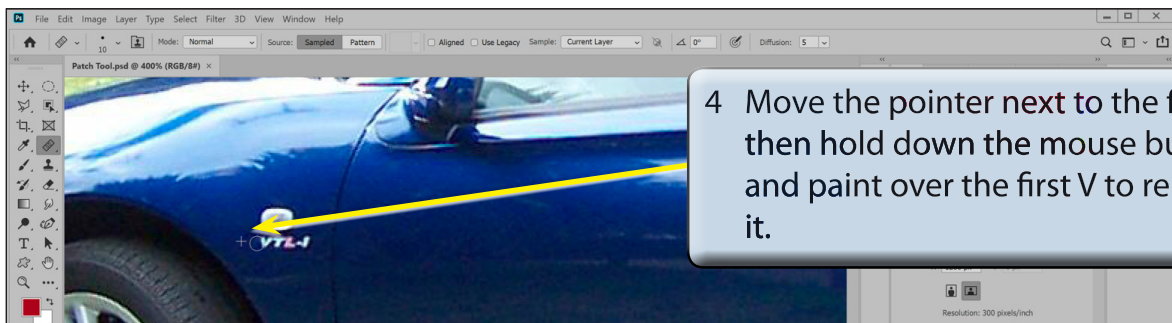


- 1 Click and hold on the PATCH TOOL and select the HEALING BRUSH TOOL.



- 2 Zoom in above the front wheel where the VVTL-i sticker is located, set the BRUSH SIZE to 10 px and move the brush to the paint work at the left of the VVTL-i sticker.

- 3 Hold down the ALT or OPTION key and click the mouse button to select that area of paint work then release the ALT or OPTION key.



- 4 Move the pointer next to the first V then hold down the mouse button and paint over the first V to remove it.

Removing Objects From Images

There are two more tools that Photoshop provides to remove objects from photos. These are the CLONE STAMP TOOL and the CONTENT AWARE FILL option.

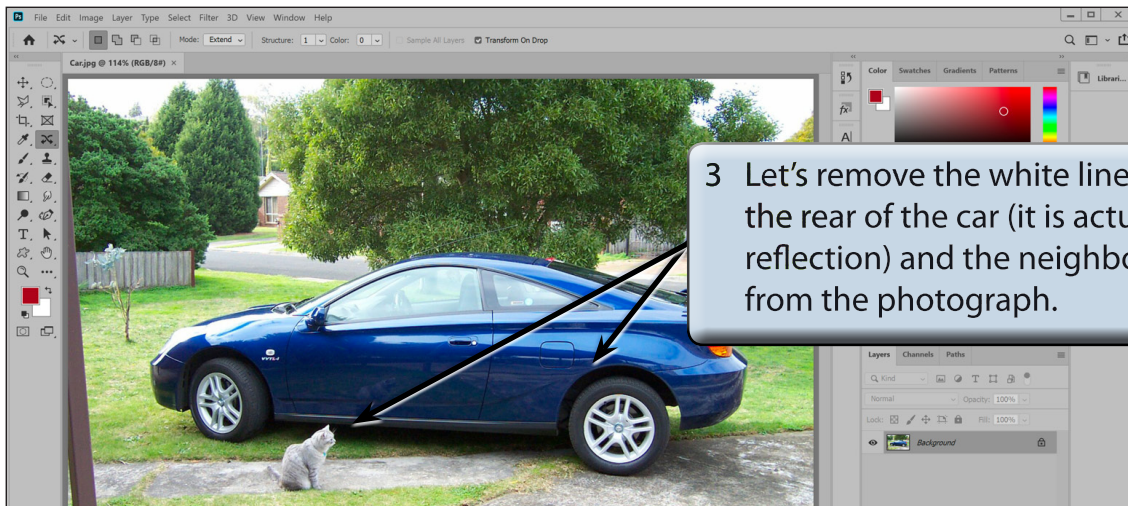
The Clone Stamp Tool

The CLONE STAMP TOOL is probably a little more accurate than the HEALING BRUSH or CONTENT AWARE MOVE TOOLS when removing objects from photos, but it does take a little more practice to master. To illustrate how to use the CLONE STAMP TOOL we will repair the same photograph of a car that you used in the last chapter.

A Loading the Image

- 1 Load Photoshop or close the current file then select OPEN from the WELCOME screen or FILE menu.
- 2 Access the PScC SUPPORT FILES, open the CHAPTER 15 folder and open the file:

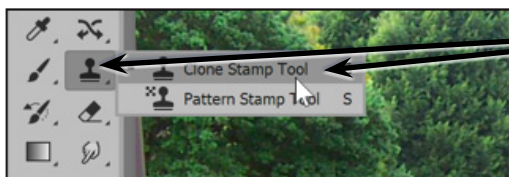
Car



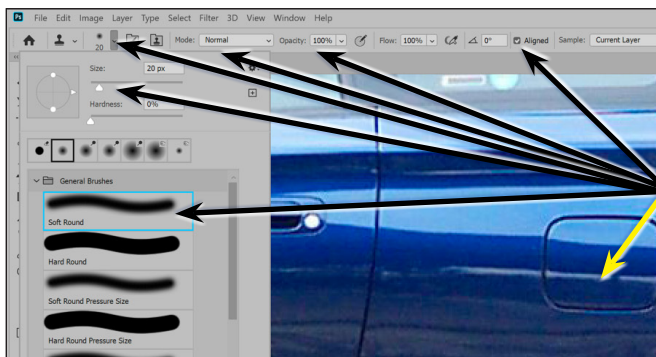
- 3 Let's remove the white line along the rear of the car (it is actually a reflection) and the neighbour's cat from the photograph.

B The Clone Stamp Settings

There are a number of settings that can be applied to the CLONE STAMP TOOL to make the cloning process more efficient.



- 1 Select the CLONE STAMP TOOL from the TOOLS panel.

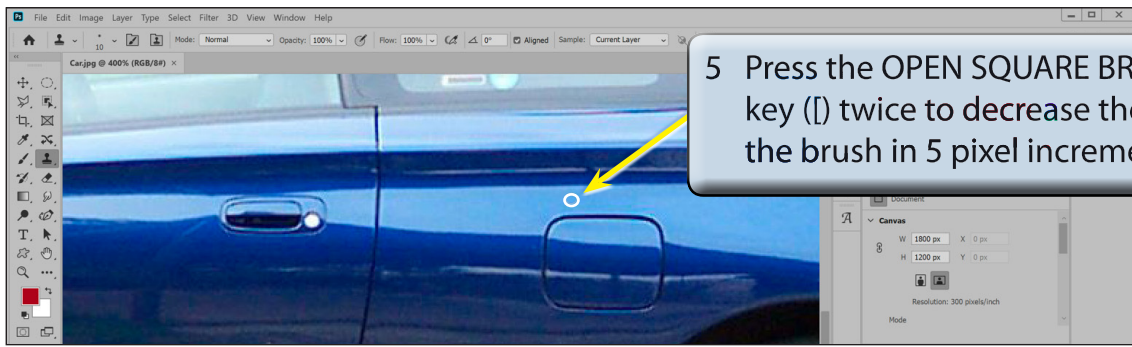


- 2 Set the ZOOM to 400% and scroll to the fuel tank cover near the rear of the car. In the OPTIONS BAR, click on the BRUSH PRESET PICKER arrow, select the first SOFT ROUND brush from the GENERAL BRUSHES folder, set the BRUSH SIZE to 20 pixels, leave the MODE as NORMAL, the OPACITY at 100% and ALIGNED should be ticked.

- 3 Click on the BRUSH PRESET PICKER arrow in the OPTIONS BAR to close the BRUSHES panel if it is still open.

NOTE: Some people prefer to clone with **OPACITY** (or colour strength) set to 50% and build the clone up gradually. We will use 100% here, but you might like to experiment with 50% once you are familiar with the cloning process.

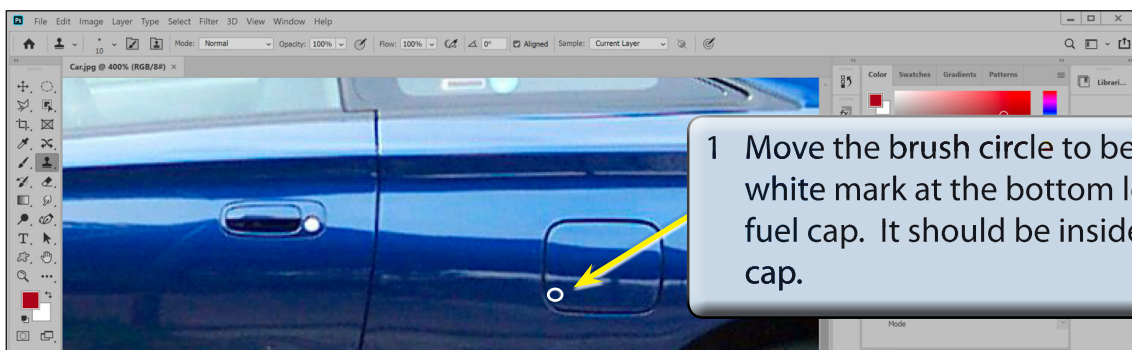
- 4 You can increase or decrease the BRUSH SIZE using keyboard shortcuts ([]).



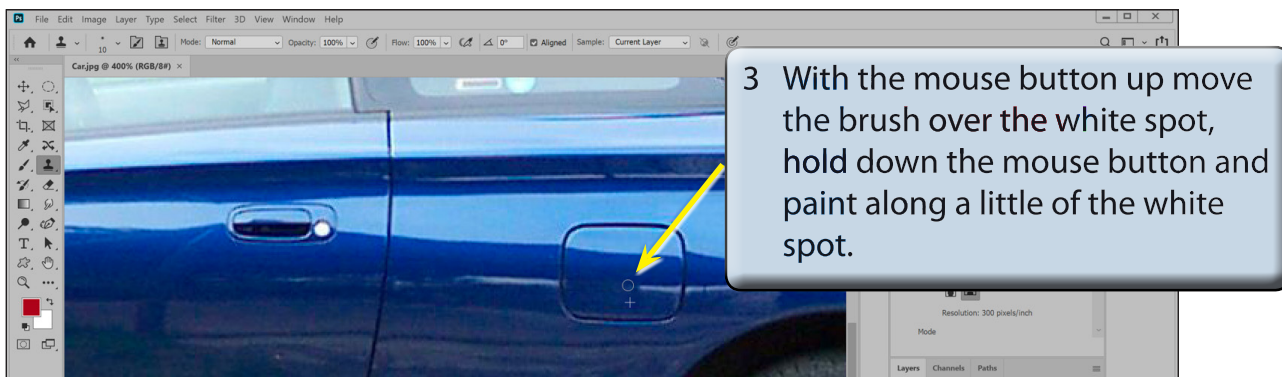
NOTE: You can use the CLOSE SQUARE BRACKET key (]) when you want to increase the size of the brush.

C Cloning

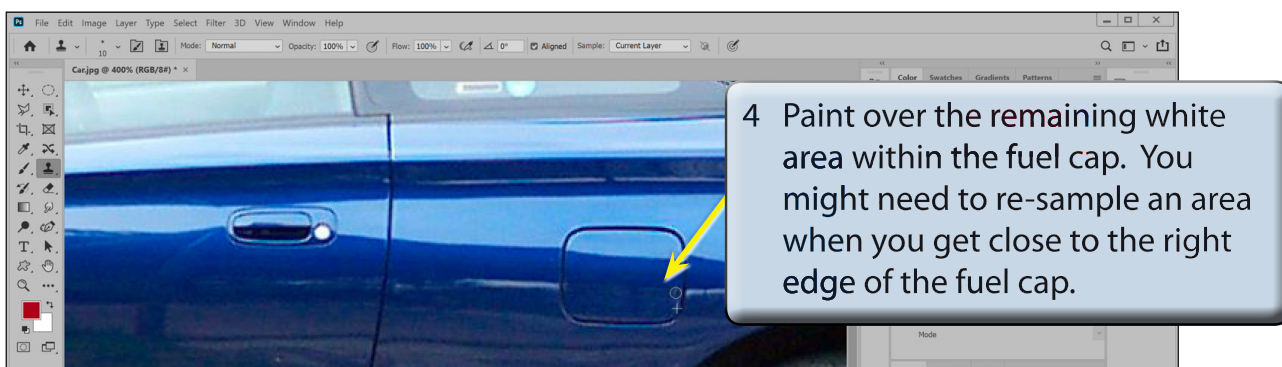
The cloning process involves selecting an area of an image that looks close to what the faulty area should look like, ALT or OPTION clicking to select the area, then painting over the problem area.



- 2 Hold down the ALT or OPTION key and click the mouse button to copy the sample area.



- NOTE:**
- i Notice that you have a circle brush shape and a cross-hair. The circle is the paint brush and the cross-hair is the sample area being copied.
 - ii As you paint along or up the problem area, the sampled area moves as well. This is what is meant by **ALIGNED**. If you wanted the sample area to remain from the original horizontal plane you would deselect **ALIGNED** in the **OPTIONS BAR**.
 - iii The **CLONED STAMP TOOL** was not designed to have lots of mouse clicks associated with it. The effect will not be realistic if you do this. You need to **ALT** or **OPTION** click once on a sample area and paint over the faulty part, then re-select a sample area when the cloning starts to look unrealistic.



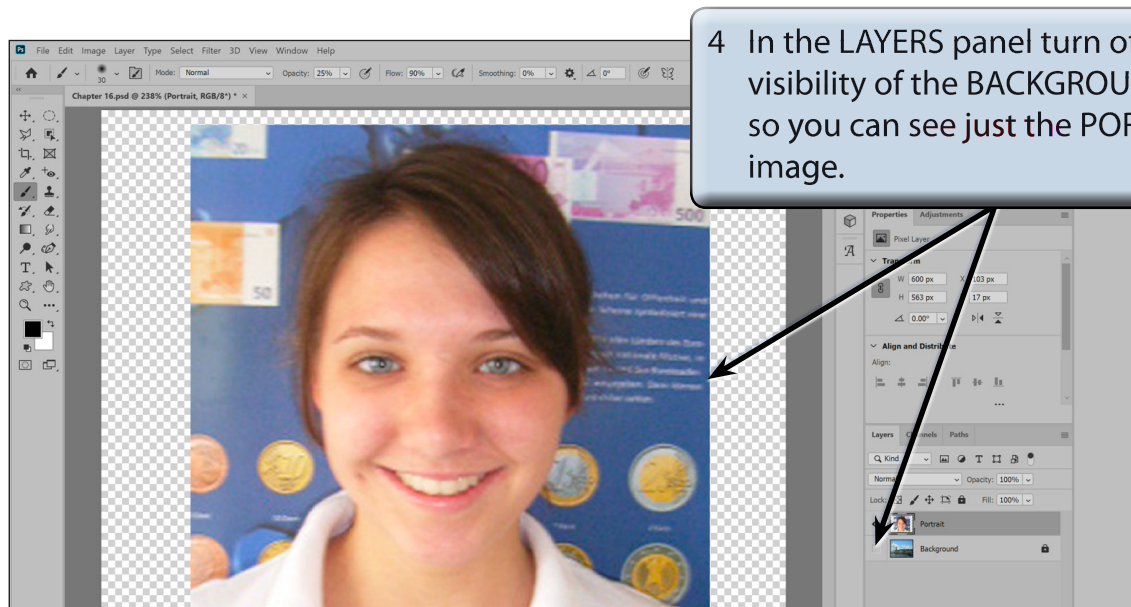
Refining Selections

Selecting part of a photo and inserting the selection into another document is one of the most common tasks that Photoshop is used for. It is important that the selection is highly accurate, but areas such as hair are always difficult to select. In Module 1 you selected an object in a photo and used the SELECT AND MASK dialogue box to refine the selection. In this chapter a picture of a girl will be removed from one background and placed on another using the tools from within the SELECT AND MASK dialogue box.

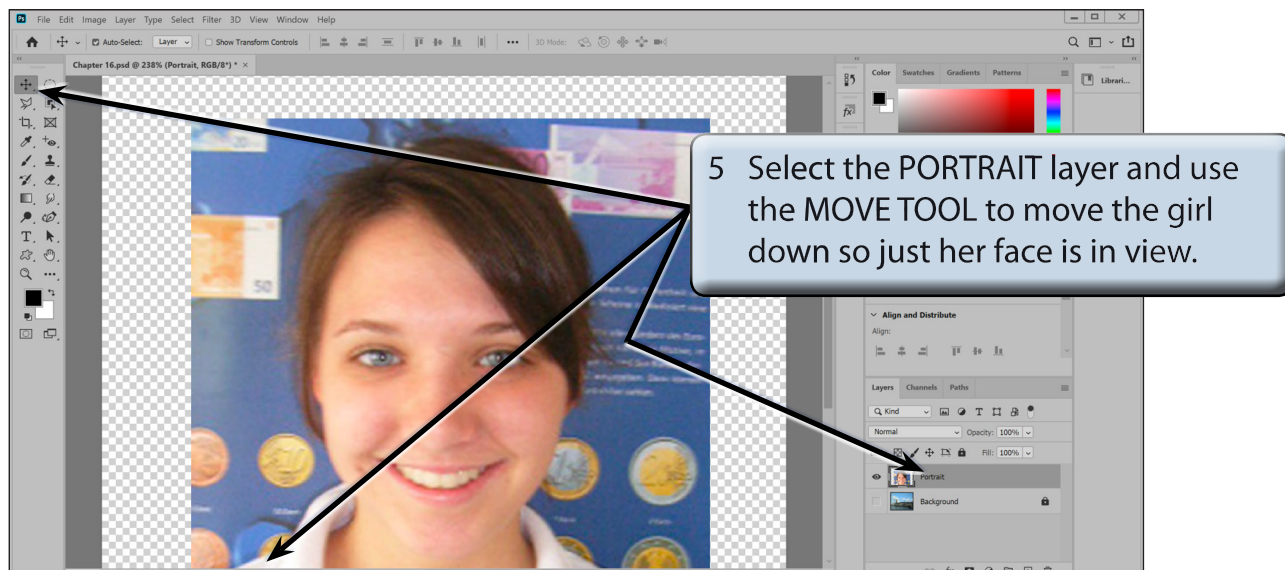
Loading the Sample Photo

A photo of a girl has been prepared for you and she will be placed onto a more interesting background.

- 1 Load Photoshop or close the current file and select OPEN from the WELCOME screen or FILE menu.
- 2 Access the PScC SUPPORT FILES, open the CHAPTER 16 folder and load the CHAPTER 16 file.
- 3 The photo of the girl is in one layer and the new background has been dragged into another layer.



- 4 In the LAYERS panel turn off the visibility of the BACKGROUND layer so you can see just the PORTRAIT image.



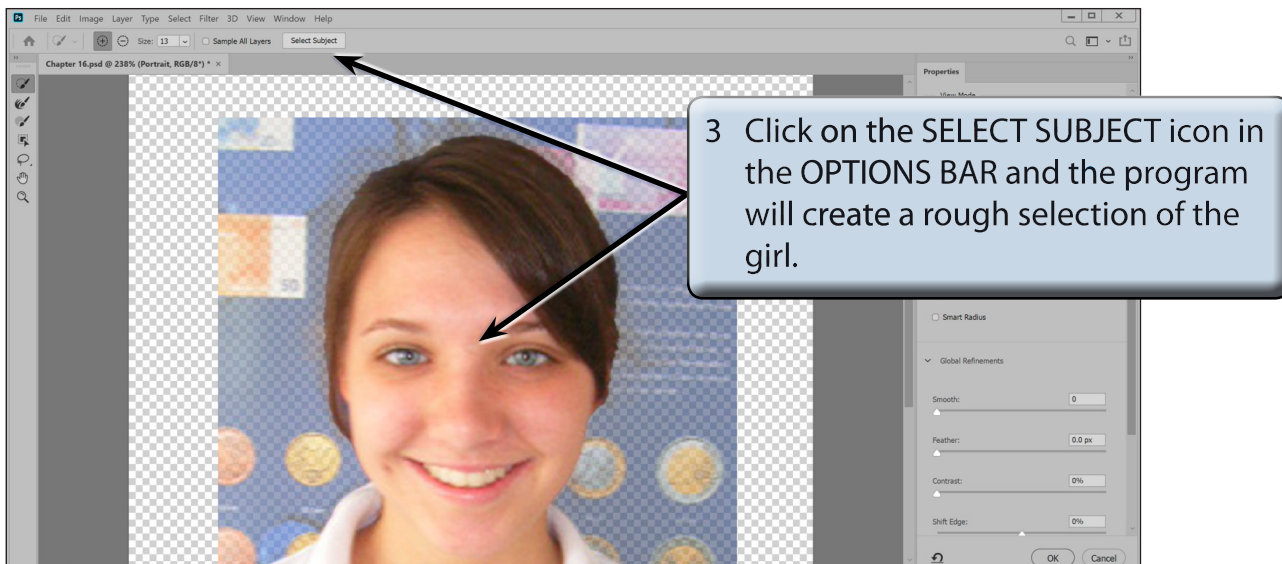
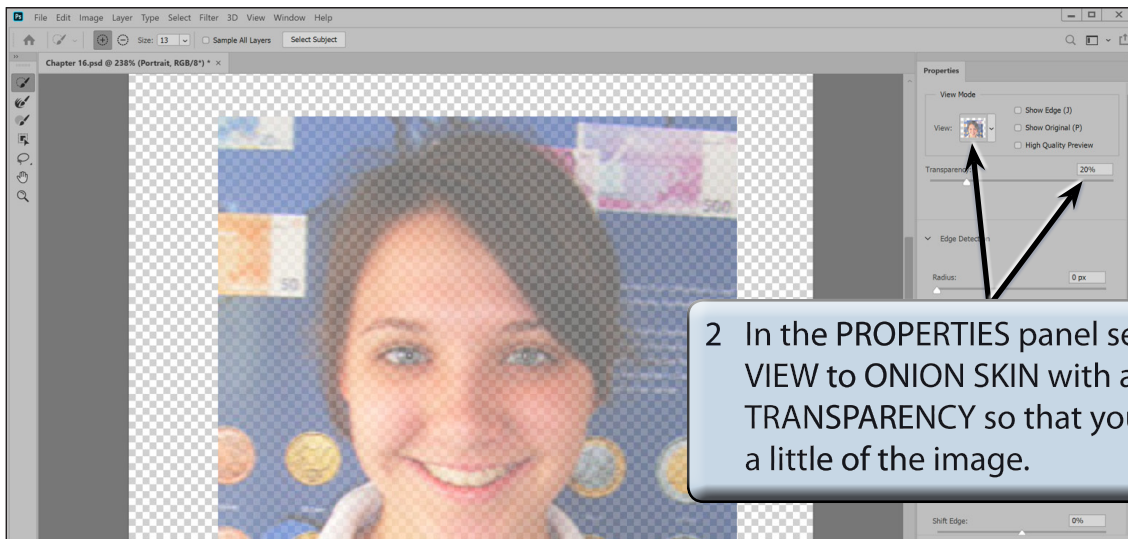
The Select and Mask Dialogue Box

In this case the selection of the girl will be made within the SELECT AND MASK dialogue box. You could use any of selection tools such as the OBJECT SELECTION TOOL or the QUICK SELECTION TOOL to select the girl first as you have done previously then open the SELECT AND MASK dialogue box and it is personal choice which method you wish to use.

A Selecting the Girl

- 1 Display the SELECT menu and choose SELECT AND MASK to open the SELECT AND MASK dialogue box.

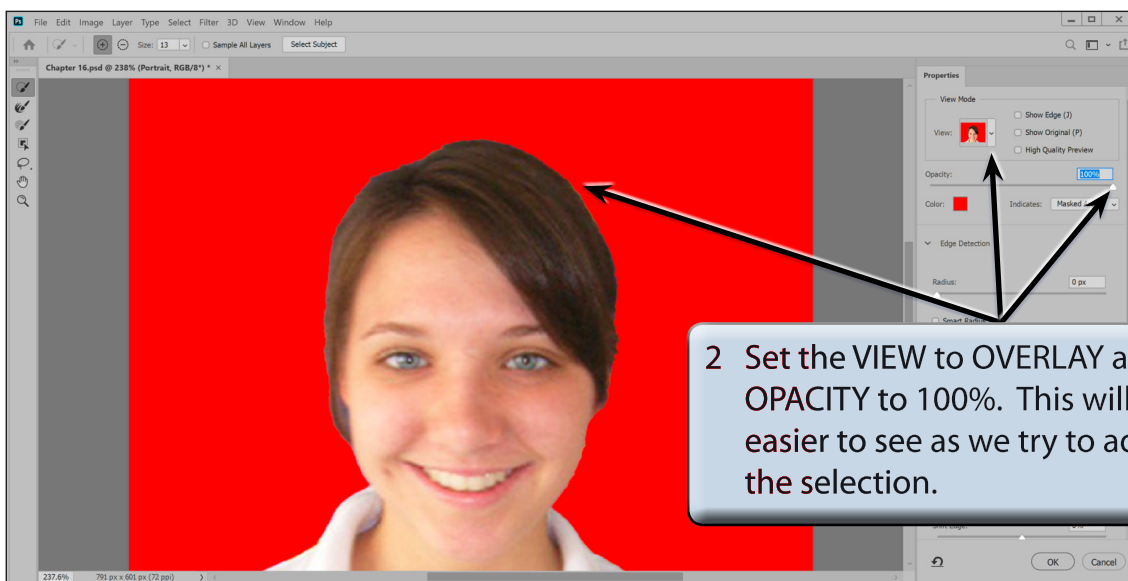
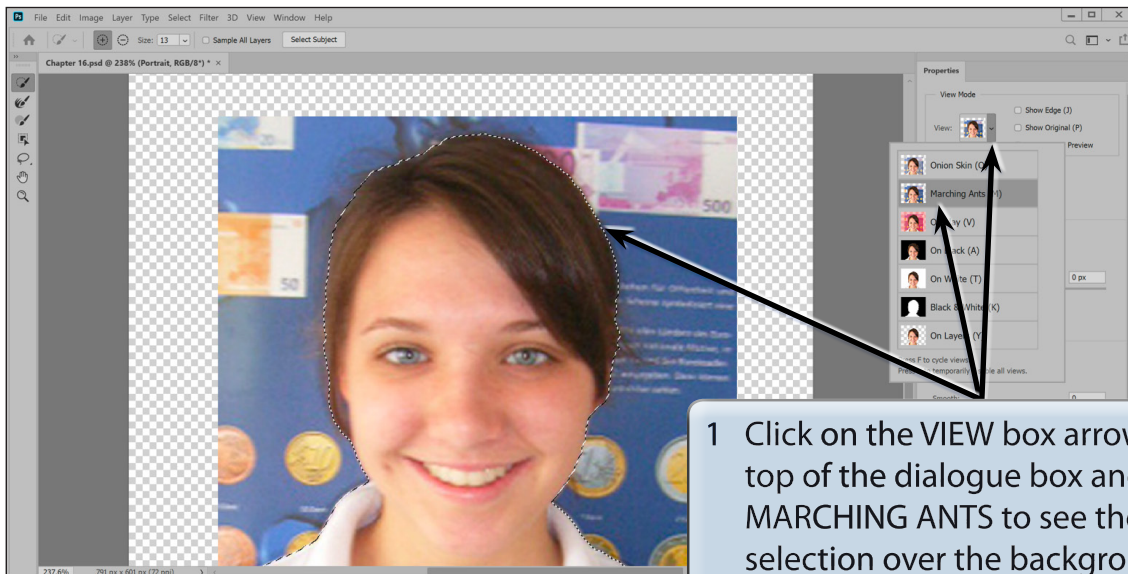
NOTE: If a selection tool is selected from the TOOLS panel, the SELECT AND MASK icon is displayed in the OPTIONS BAR and it can be used to open the SELECT AND MASK dialogue box.



NOTE: It may be difficult to see the selection, but the selection does not need to be accurate at this stage.

B Refining the Selection

The difficult to select areas such as the hair can be refined.



NOTE: The program does a fairly good job of selecting the subject over a detailed background, but some refinement is needed to improve the selection.

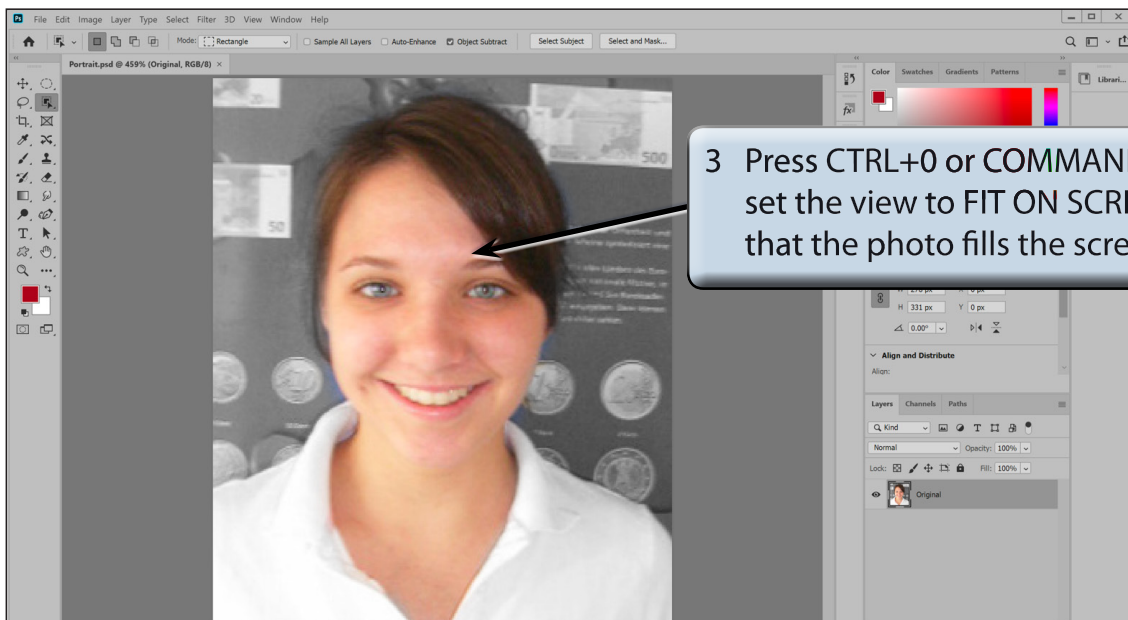
Advanced Layer Uses

Photoshop provides a number of tools to help improve the appearance of faces in photographs. Selecting skin tones and adjusting them can create satisfactory improvements to a photo, but when more accurate improvements are required, advanced layer uses can be applied. In this chapter layers will be used to improve the skin tone of a face, highlight facial features and change the eye colour.

Loading the Image

- 1 Load Photoshop or close the current file and select OPEN from the WELCOME screen or FILE menu.
- 2 Access the PScC SUPPORT FILES, open the CHAPTER 17 folder and open the file:

Portrait

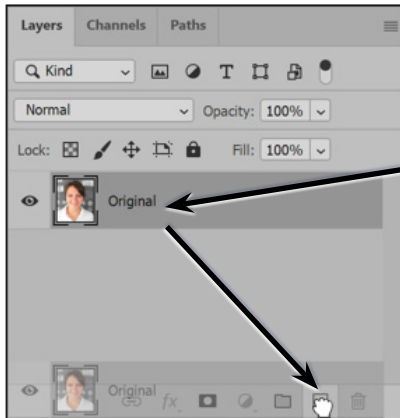


- 4 Look closely at the image. The camera has made the skin a little shiny and uneven in places. The background has been set to black and white so that it doesn't distract from the girl.
- 5 Use SAVE AS from the FILE menu to save the image in your STORAGE folder as a PHOTOSHOP file under the file name:

Enhanced Portrait

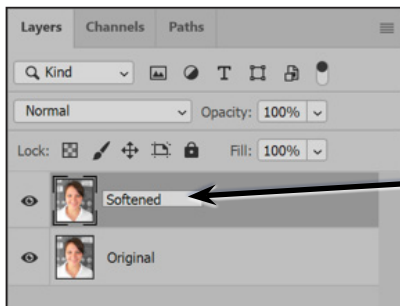
Duplicating the Layer

There are times when applying a mask is not the most suitable way to adjust a photo, particularly when the whole photo is to be adjusted. A duplicate of the layer containing the image can be created so that major changes can be made to the copy without affecting the original image.



- 1 Move the pointer over the ORIGINAL layer label in the LAYERS panel and drag the label over the CREATE A NEW LAYER icon at the bottom of the panel.

- 2 A copy of the layer should be produced.

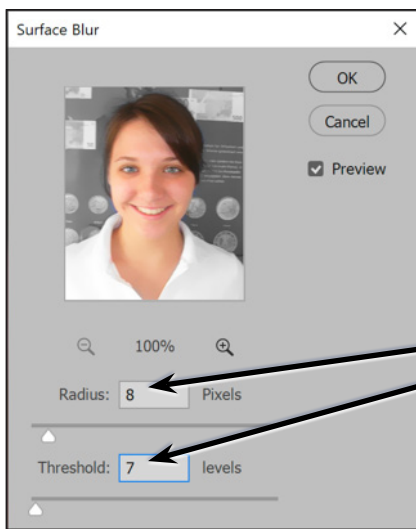


- 3 Change the name of the new layer to SOFTENED and press `<enter>` or `<return>`.

Blurring the Image

The duplicated layer will be blurred to give the skin a softer more even look. After this we will sharpen sections of the image such as the eyes, hair and teeth.

- 1 The SOFTENED layer should be selected.
- 2 Display the FILTER menu at the top of the screen, highlight BLUR and select SURFACE BLUR.



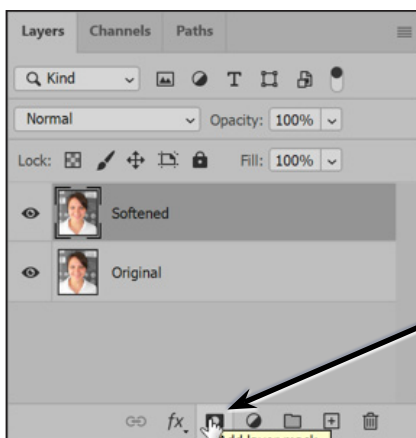
3 Set the RADIUS box to 8 pixels and the THRESHOLD to 7 levels.

NOTE: The PREVIEW frame can be used to scroll around the picture. With the mouse depressed the original image is displayed. When you release the mouse button the effect of the blur is shown.

4 Select OK and the tone of the skin should look softer and more even.

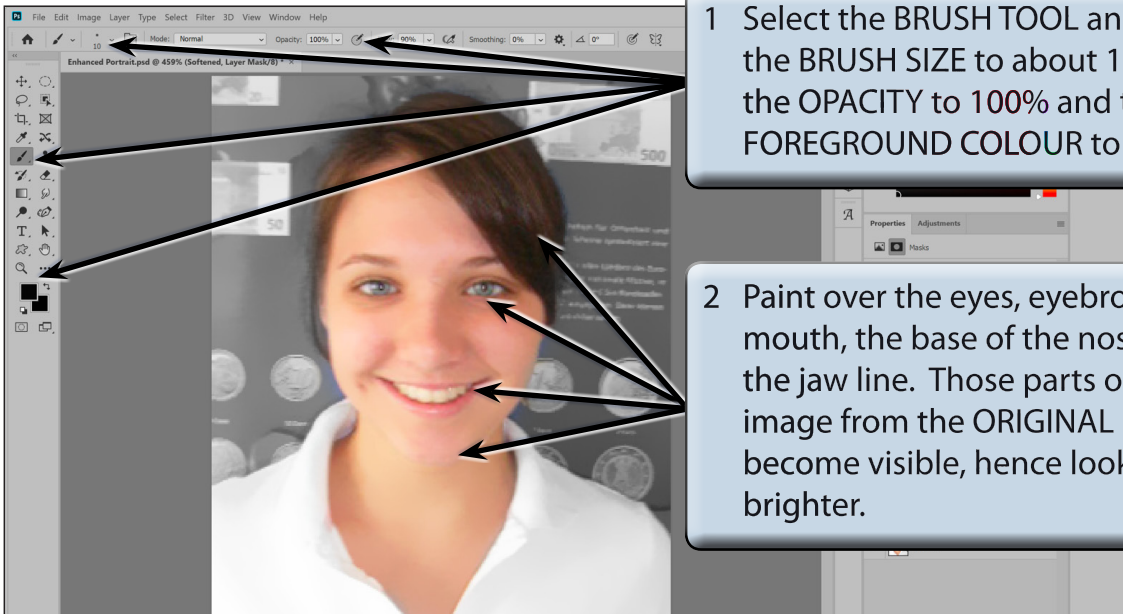
Adding a Mask to the Layer

Parts of the face such as the eyes don't need to be blurred so a mask can now be added to the duplicate layer. By doing this we can paint on the mask to display the original eyes, but leave the skin blurred.



Click on the ADD LAYER MASK icon at the base of the LAYERS panel to add a mask to the SOFTENED layer.

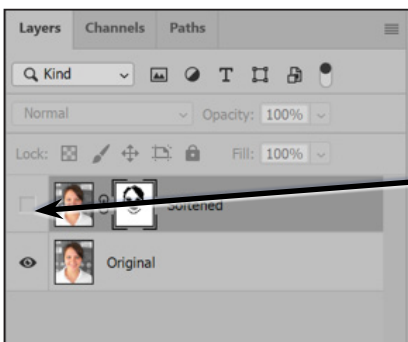
Sharpening the Important Features

A screenshot of the Adobe Photoshop interface. The main canvas shows a portrait of a woman. Two callout boxes with arrows point to specific parts of the interface. Callout 1 points to the Brush Tool in the toolbar and the Brush Settings panel, indicating the selection of the brush tool and its configuration. Callout 2 points to the eyes, eyebrows, hair, mouth, the base of the nose, and the jaw line on the portrait, indicating the areas to be sharpened.

1 Select the BRUSH TOOL and set the BRUSH SIZE to about 10 px, the OPACITY to 100% and the FOREGROUND COLOUR to BLACK.

2 Paint over the eyes, eyebrows, hair, mouth, the base of the nose and the jaw line. Those parts of the image from the ORIGINAL layer will become visible, hence look a little brighter.

- NOTE:**
- i By blurring the image we have set the skin tones to look more consistent and then sharpened the important parts of the image. The effect will be subtle.
 - ii When using masks, white hides the layer below, black shows the layer below. So if you want to ease any of the black selection, set the FOREGROUND COLOUR to WHITE and paint over the required areas.

A screenshot of the Photoshop Layers panel. It shows two layers: 'Softened' and 'Original'. The 'Softened' layer is currently selected and its visibility is turned off, indicated by a greyed-out layer thumbnail and a crossed-out eye icon. The 'Original' layer is below it and its visibility is turned on, indicated by a visible layer thumbnail and an open eye icon. A callout box with an arrow points to the 'Softened' layer's visibility icon.

3 Turn off the view of the SOFTENED layer to see the original image then turn the view back on.

Applying Filters

Photoshop provides a range of filters can be applied to selections within photos or to entire photos to enhance the visual effect or perform common editing effects. These tasks would be very time consuming if they were to be done manually. In this chapter you will use Blur Filters, Noise Filters, Sharpen Filters, Render Filters, Camera Shake Reduction Filters and Partial Blur Filters.

Loading the Sample Photo

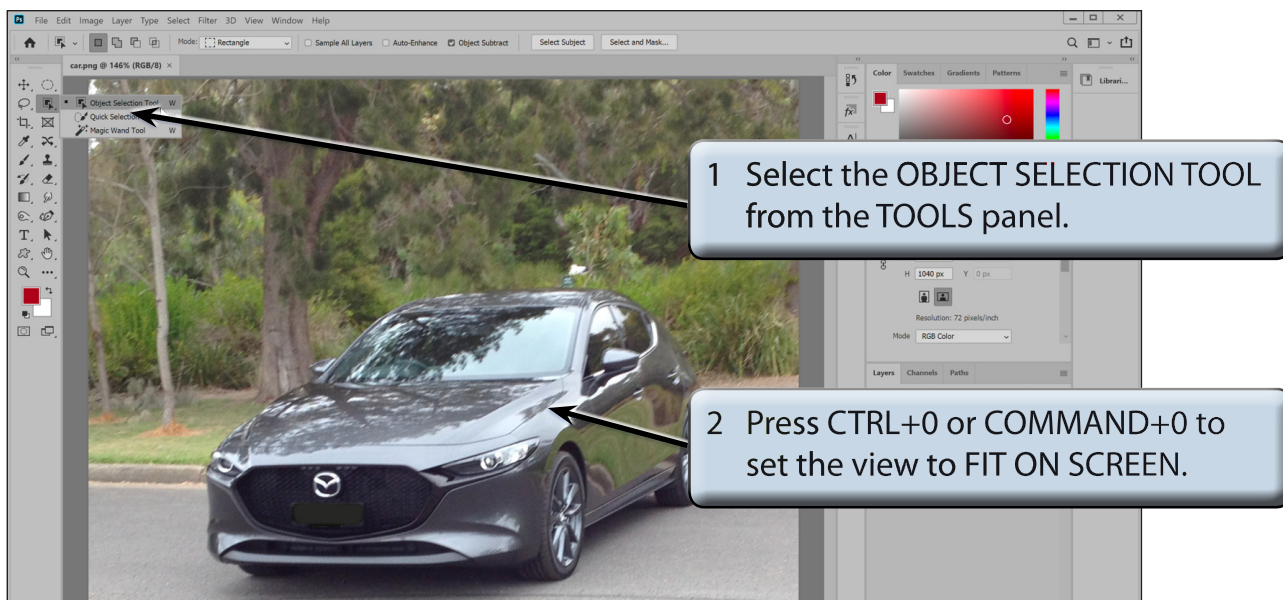
Another photo of a car will be used for filters on a selected area.

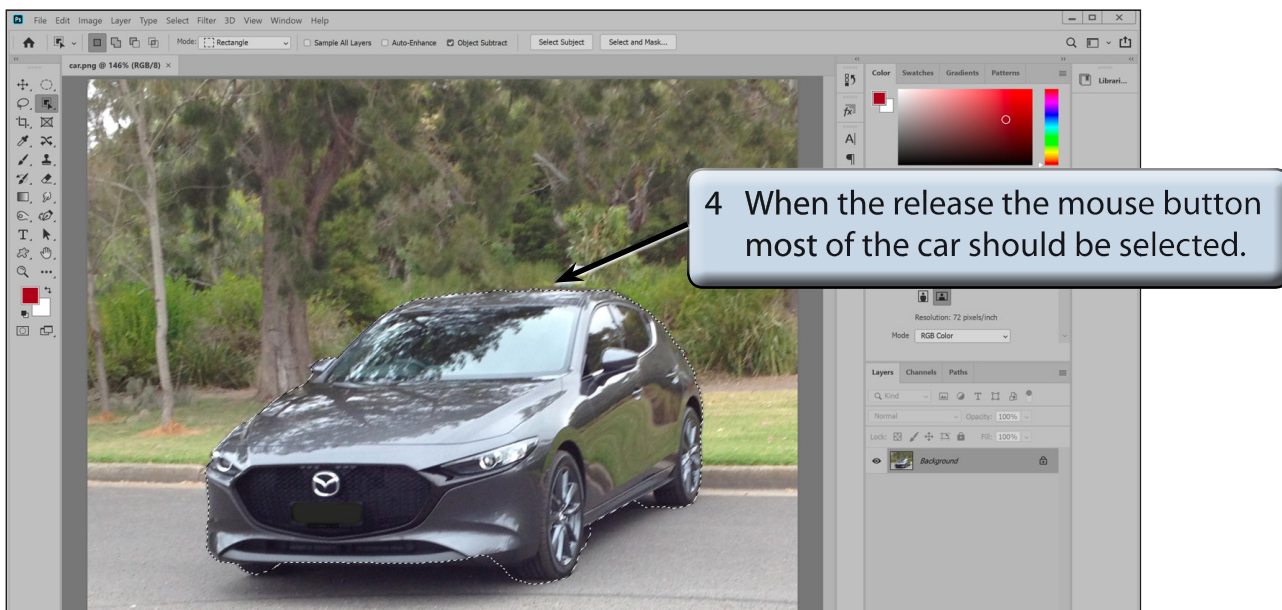
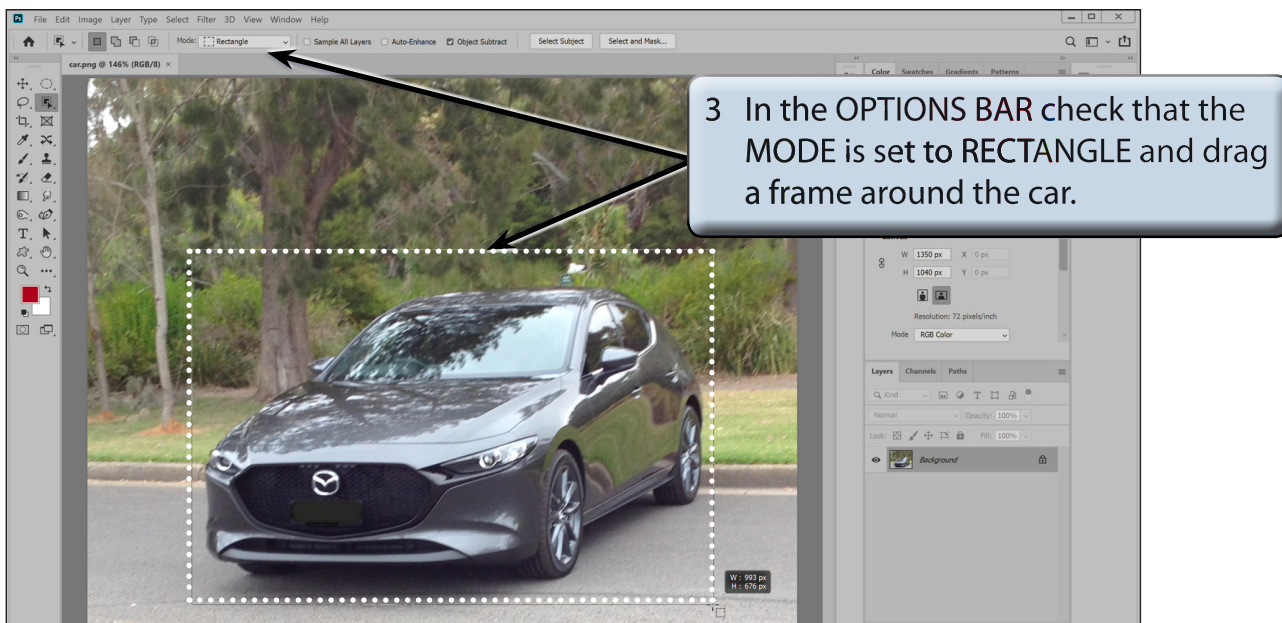
- 1 Load Photoshop or close the current file.
- 2 Select OPEN from the WELCOME screen or FILE menu.
- 3 Access the PScC SUPPORT FILES, open the CHAPTER 18 folder and load the CAR file.

Selecting the Background

Blurring Filters will be applied to the background, so it will need to be selected. To do this the car is first selected then removed from the selection.

A Selecting the Car

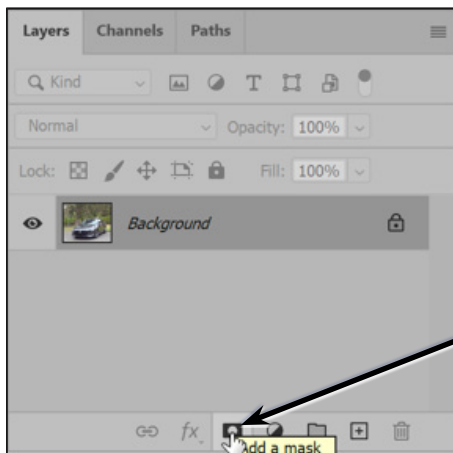




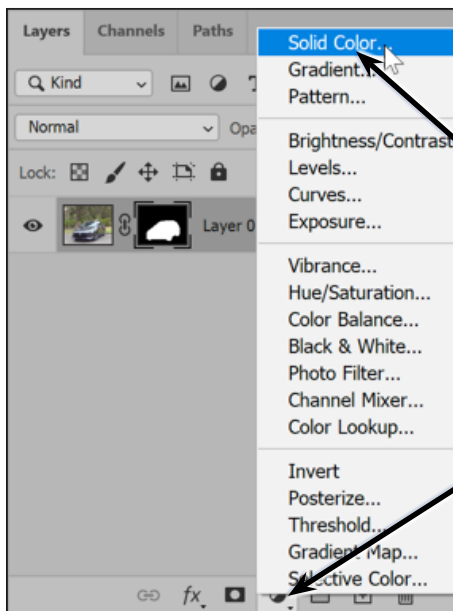
- NOTE:**
- i The MODE could have been set to LASSO and a lasso dragged around the car to produce a similar selection.
 - ii You can also select SUBJECT from the SELECT menu and the program will select the car.

B Refining the Selection

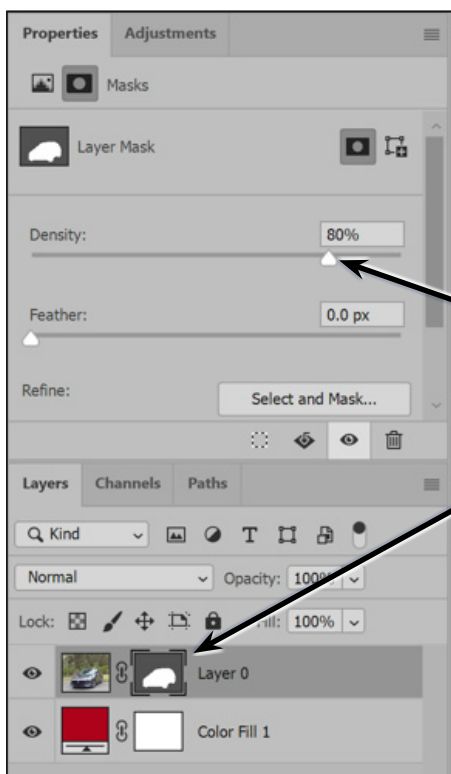
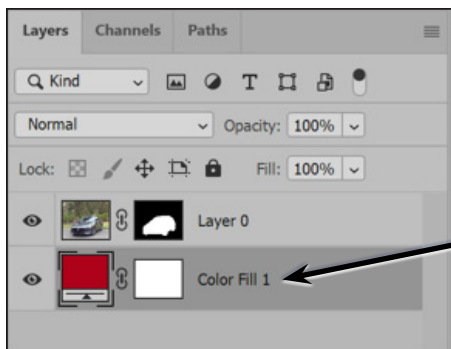
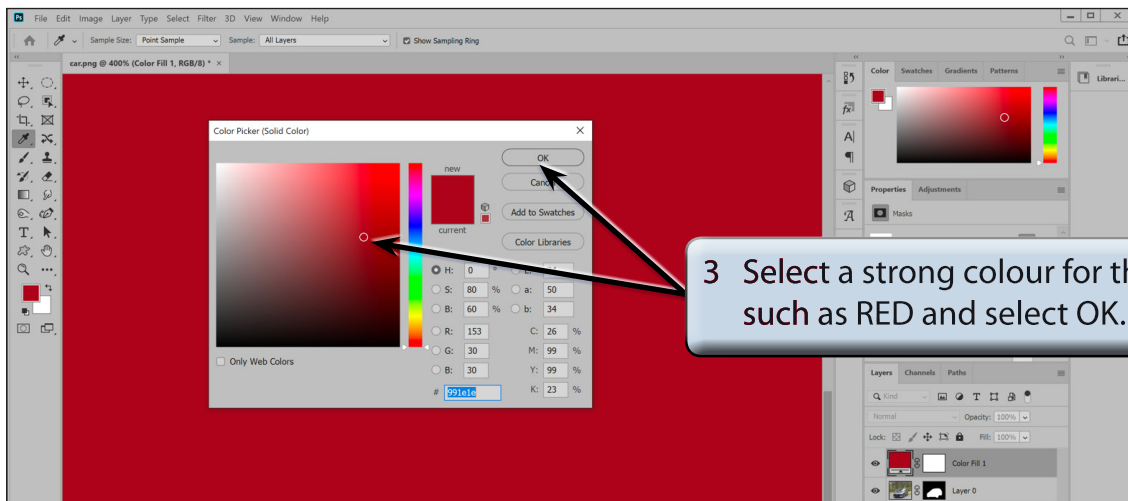
The program does a reasonable job of selecting the car, it does have problems near the tyres and the rear of the car as the colour difference is not great at those areas. The SELECT AND MASK option could be used to try to automatically repair the issues, but better results can be obtained using a LAYER MASK and the BRUSH TOOL.



1 In the LAYERS panel click on the ADD A MASK icon at the base of the panel to add a mask to the BACKGROUND layer.

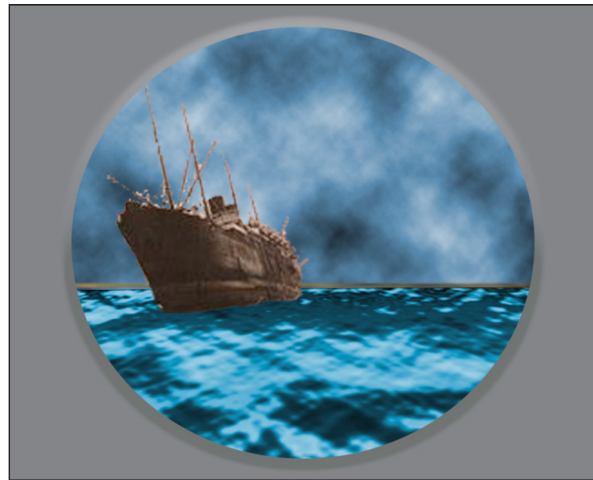


2 Click on the CREATE A NEW FILL OR ADJUSTMENT LAYER icon at the base of the LAYERS panel and select SOLID COLOUR.



Applying Artistic Filters

You can use the filters that Photoshop provides to create artistic sketches. To illustrate this the following sketch of a shipwreck viewed through the port hole of another ship will be created. There are more applications of Photoshop like this in Module 3.



Starting a New Document

- 1 Load Photoshop or close the current files and select CREATE NEW from the WELCOME screen or select NEW from the FILE menu.

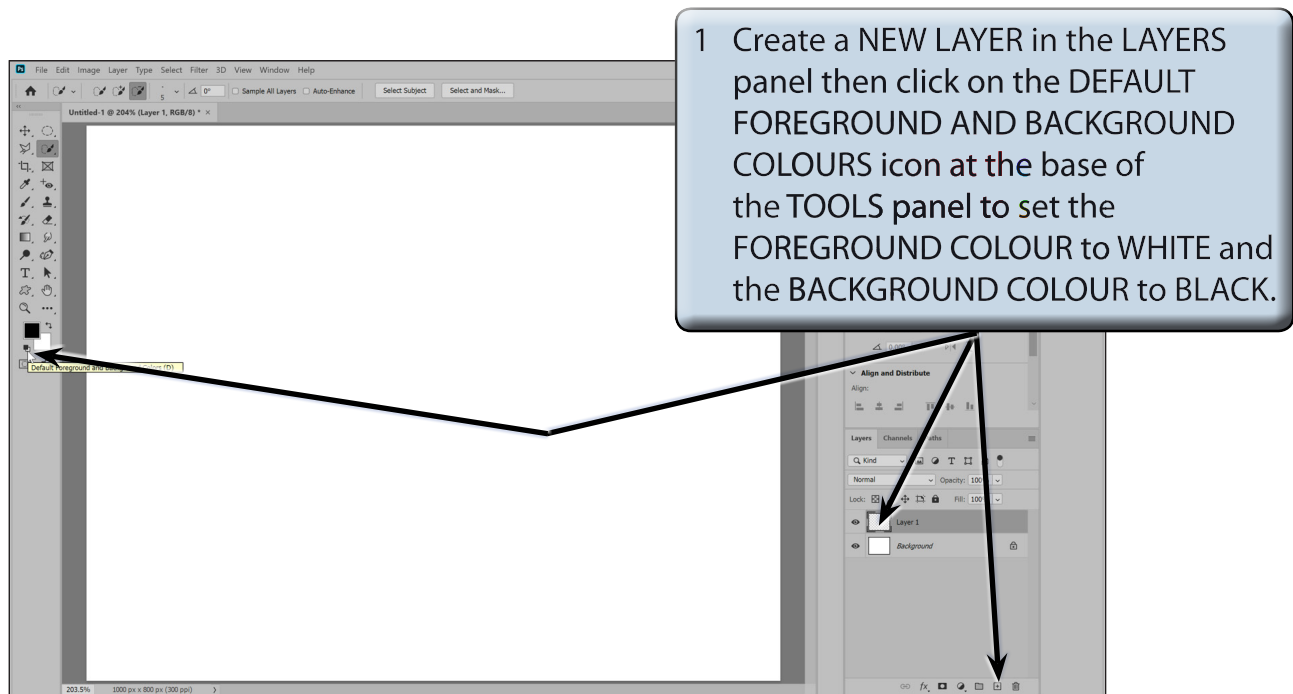
The screenshot shows the 'New Document' dialog box in Photoshop. The 'Photo' category is selected, and the 'Default Photoshop Size' preset is highlighted. The 'Preset Details' panel on the right shows the following settings: Width: 1000, Height: 800, Resolution: 300, Color Mode: RGB Color, Background Contents: White, and Pixel Aspect Ratio: Square Pixels. The 'Create' button is at the bottom right. Annotations with arrows point to the 'Photo' category, the 'Default Photoshop Size' preset, the 'Width' field, the 'Height' field, the 'Background Contents' dropdown, and the 'Create' button.

- 2 Click on PHOTO category and select the first (default) PRESET.
- 3 Set the WIDTH to 1000 pixels, the HEIGHT to 800 pixels, the BACKGROUND CONTENTS to WHITE and select CREATE.

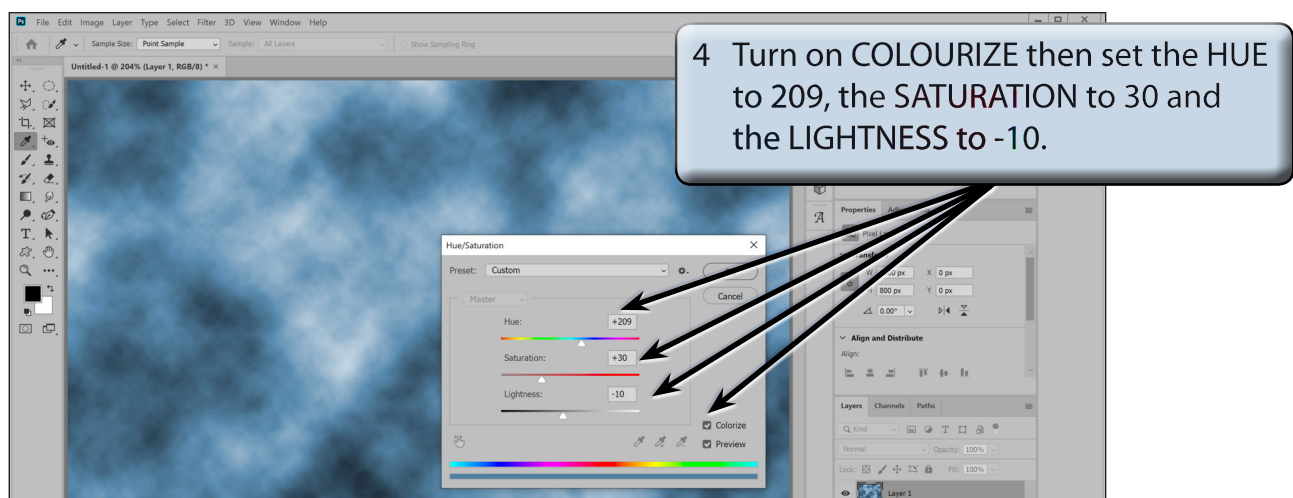
- 4 Set the view to FIT ON SCREEN.

Setting the Background

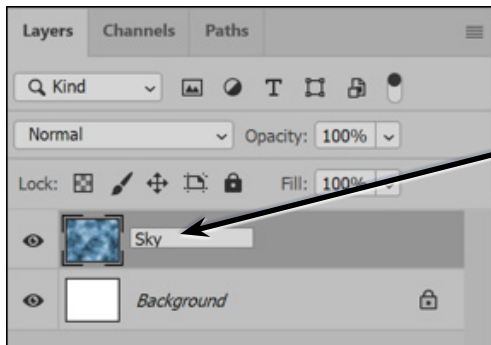
The CLOUDS filter will be used to create the sky for the sketch.



- 2 Display the FILTER menu, highlight RENDER and select CLOUDS to fill the layer with black and white clouds.
- 3 The clouds can be coloured to make them look more natural. Display the IMAGE menu, highlight ADJUSTMENTS and select HUE/SATURATION.



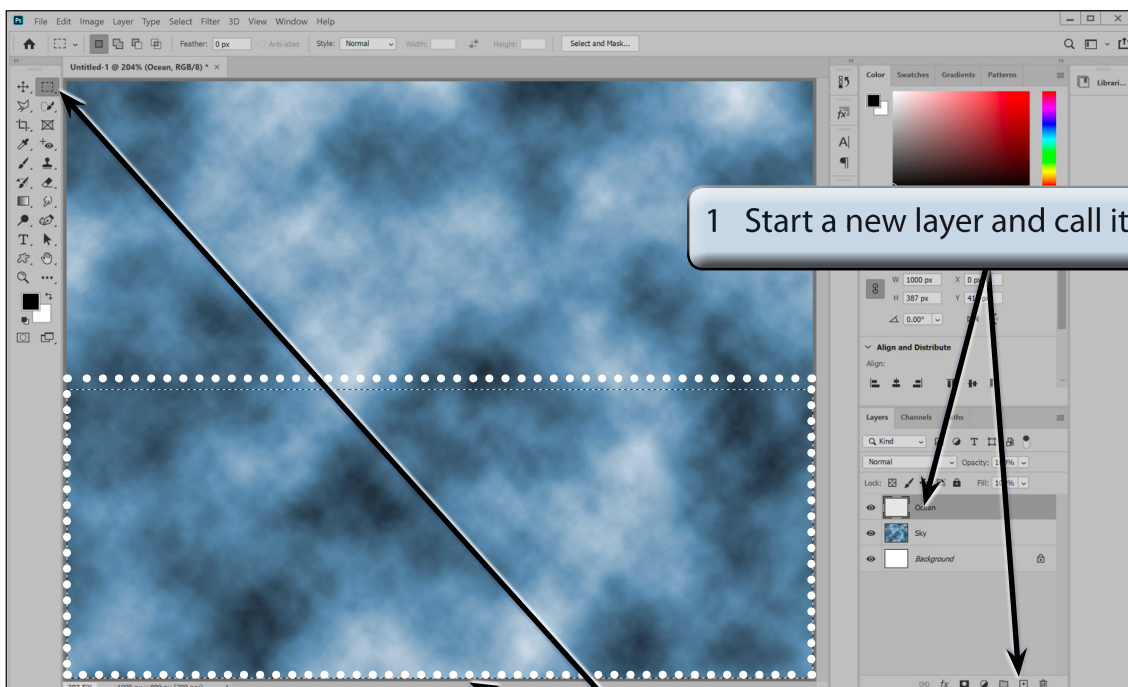
- 5 Select OK to colourise the clouds.



- 6 Rename the layer: Sky

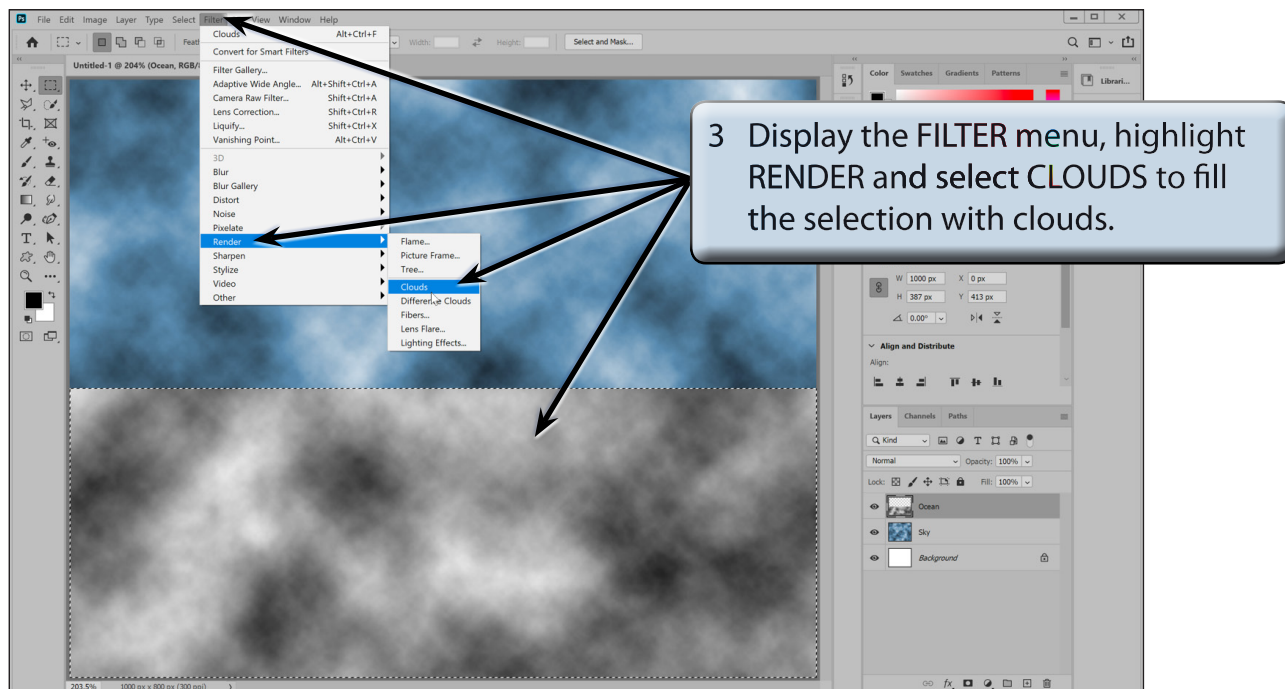
Creating the Ocean

The ocean can be created by combining the CLOUDS and BAS RELIEF filters.

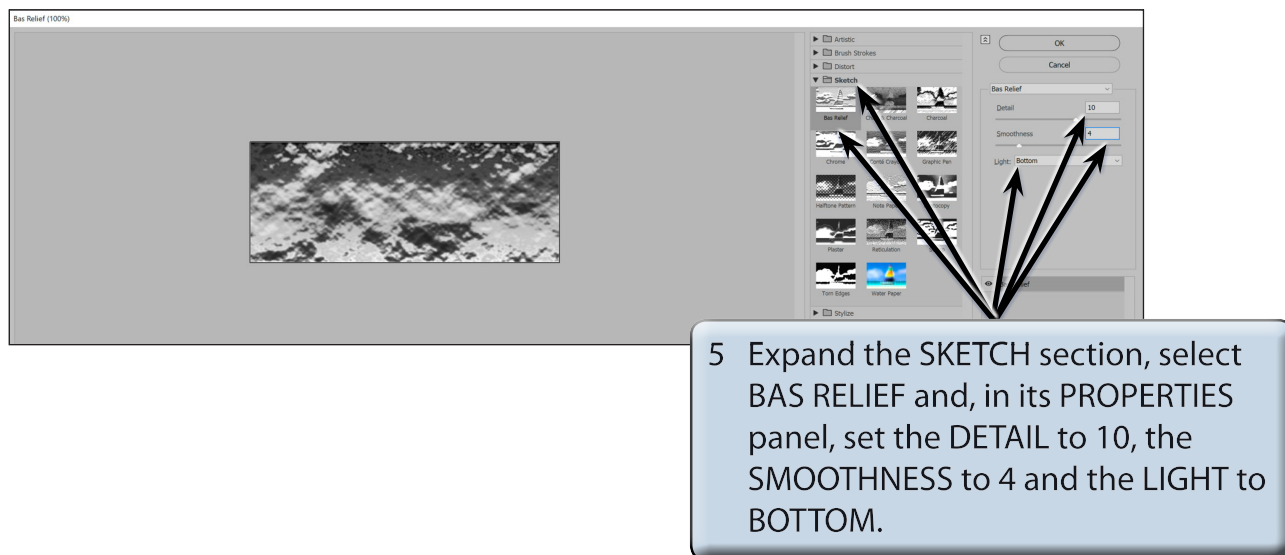


- 1 Start a new layer and call it: Ocean

- 2 Select the RECTANGULAR MARQUEE TOOL and drag a frame around the bottom half of the sky.



4 Display the FILTER menu again and select FILTER GALLERY.



6 Select OK to set the filter.

7 The colour of the ocean needs to be adjusted. Display the IMAGE menu, highlight ADJUSTMENTS and select HUE/SATURATION.

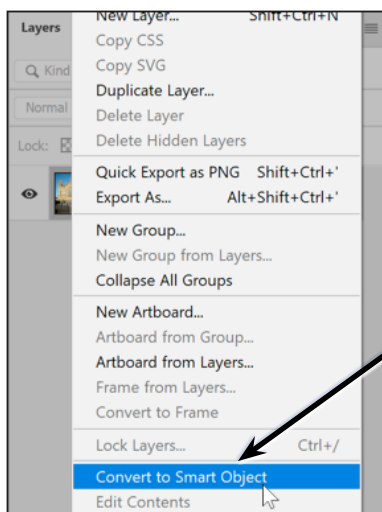
The Camera Raw Filter

Many digital cameras provide a RAW file type that removes any compression or colour limitations from the photo. So CAMERA RAW is a minimally processed format. This allows for greater accuracy in the image and easier editing without destructing the original image.

Adobe Photoshop CC provides a CAMERA RAW FILTER that allows images not taken in the camera raw format to use the greater artistic control and flexibility of the RAW format. To illustrate this, a JPG image will be adjusted using the CAMERA RAW FILTER.

Opening the Camera Raw Filter

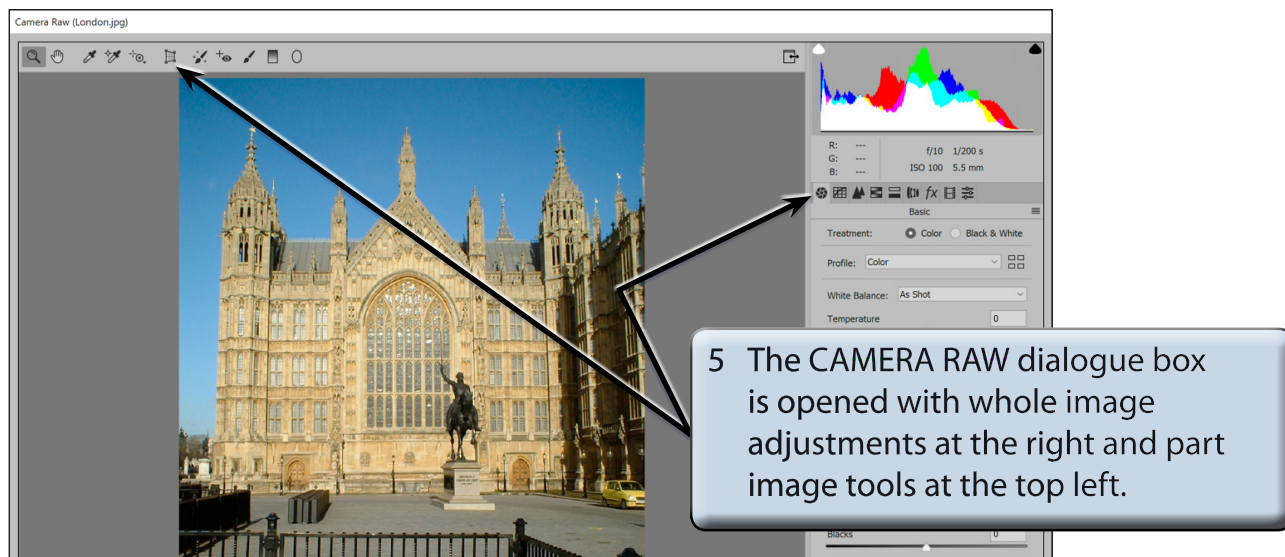
- 1 Load Photoshop or close the current files then click on the OPEN icon in the WELCOME screen or display the FILE menu and select OPEN.
- 2 Access the CHAPTER 20 folder of the PScC SUPPORT FILES and open the LONDON image.



- 3 In the LAYERS panel click on its menu icon and select CONVERT TO SMART OBJECT.

NOTE: Converting a layer to a SMART OBJECT means that any changes that you make to the photo will be non-destructive. You can also use the FILTER menu - CONVERT TO SMART FILTER to set the layer to a smart object.

- 4 Display the FILTER menu and select CAMERA RAW FILTER.

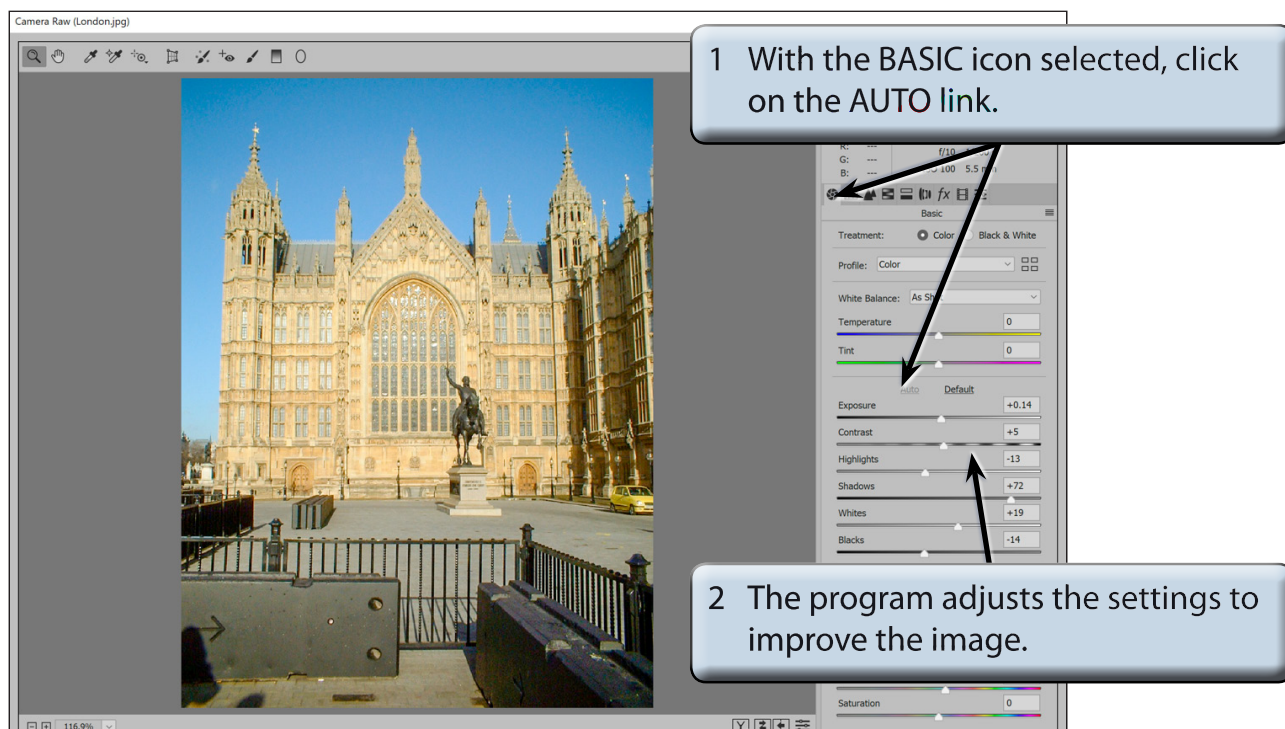


Adjusting the Whole Image

The tools across the top of the PROPERTIES panel at the right of the screen and the options below them can be used to adjust the whole image.

A The Auto Adjustment

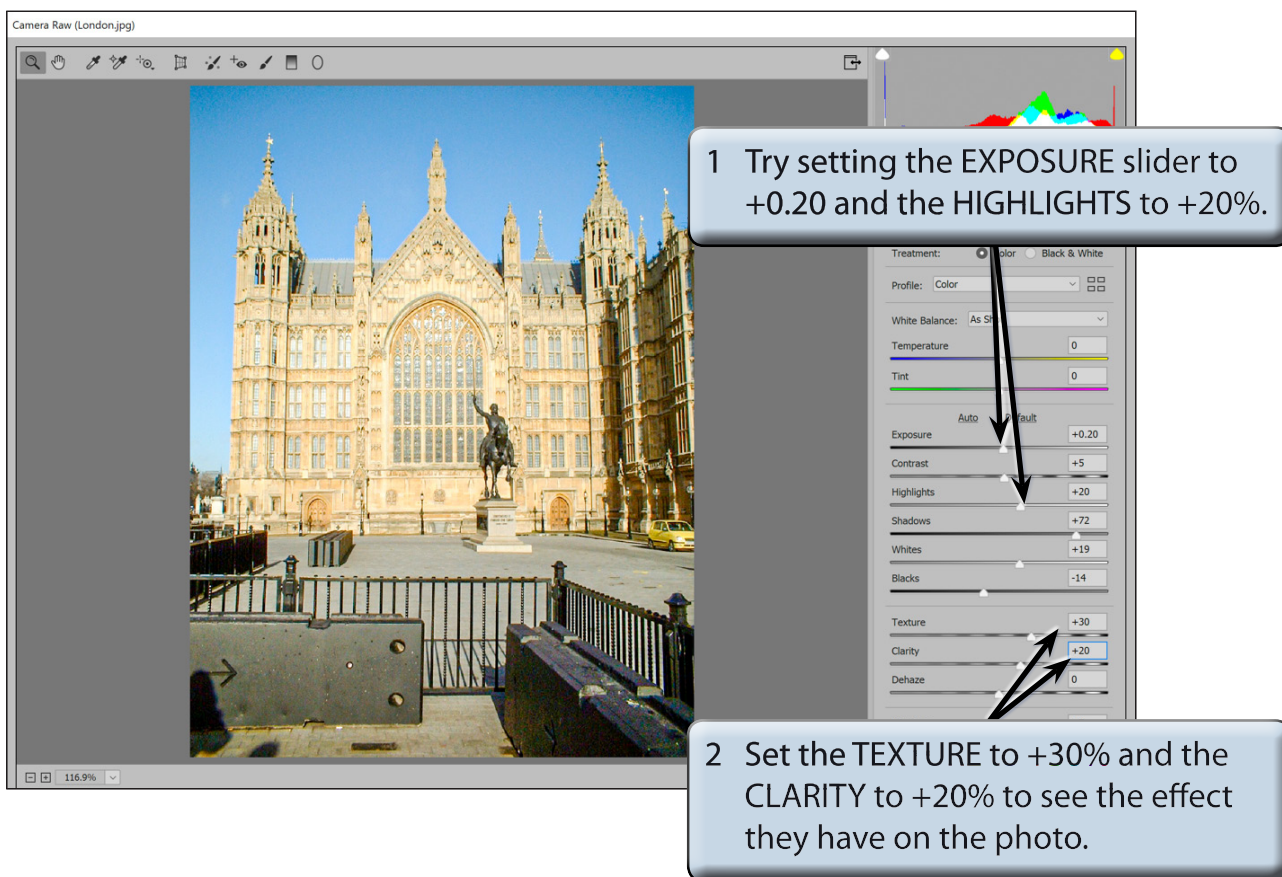
There is an AUTO setting where the program automatically adjusts the image.



NOTE: The DEFAULT link can be used to return to the original settings when required.

B Manual Adjustments

The AUTO setting has done a good job of adjusting the image, but often you want to add some manual adjustments.



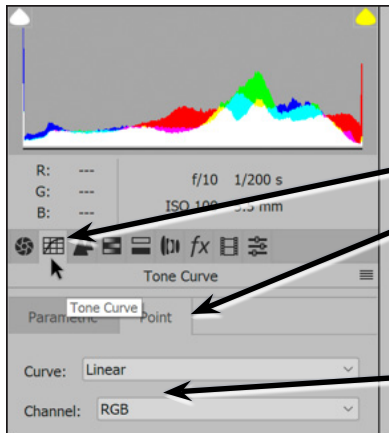
1 Try setting the EXPOSURE slider to +0.20 and the HIGHLIGHTS to +20%.

2 Set the TEXTURE to +30% and the CLARITY to +20% to see the effect they have on the photo.

- 3 Try some of the other adjustments and select DEFAULT if the changes are not satisfactory.

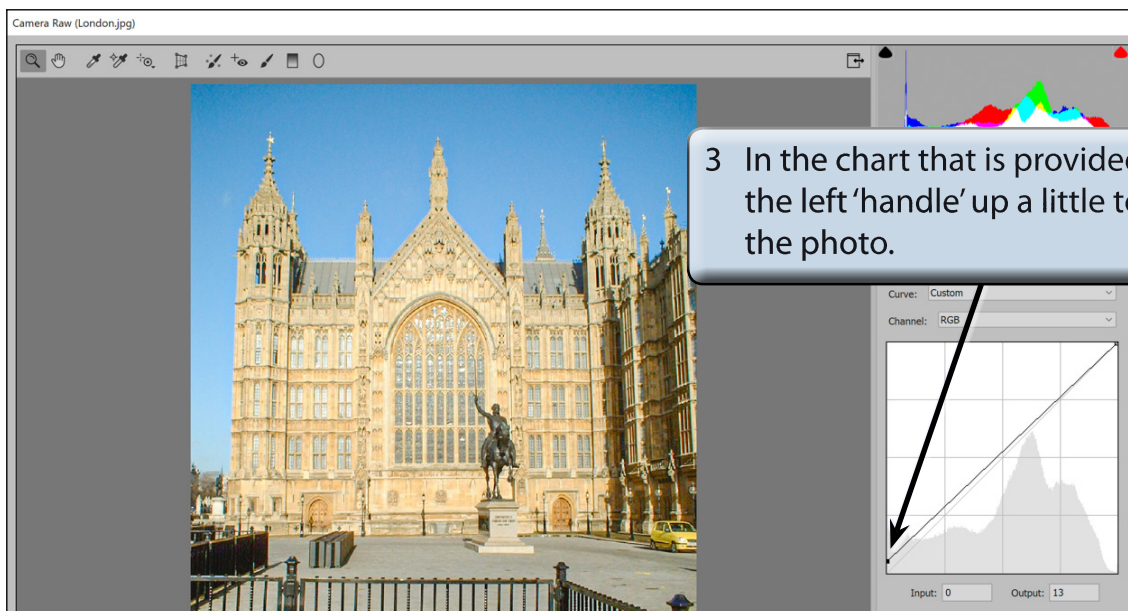
C The Tonal Cure

The TONAL CURVE feature can be used to fine tune the adjustments.



1 Click on the TONAL CURVE icon at the top of the PROPERTIES pane and select the POINT tab.

2 The CURVE box should be set to LINEAR and the CHANNEL box set to RGB.



3 In the chart that is provided move the left 'handle' up a little to lighten the photo.

Working With Perspective

Photos are 2-dimensional images usually of 3-dimensional objects or scenes. When a photo is taken with a camera there is often some perspective errors due to horizontal or vertical camera tilt. Photoshop provides a range of tools that try to repair these errors whilst retaining the perspective of the image.

Straightening an Image

When you simply want to straighten an image, the RULER TOOL can be used. The RULER TOOL measures the angle of tilt in a photo.

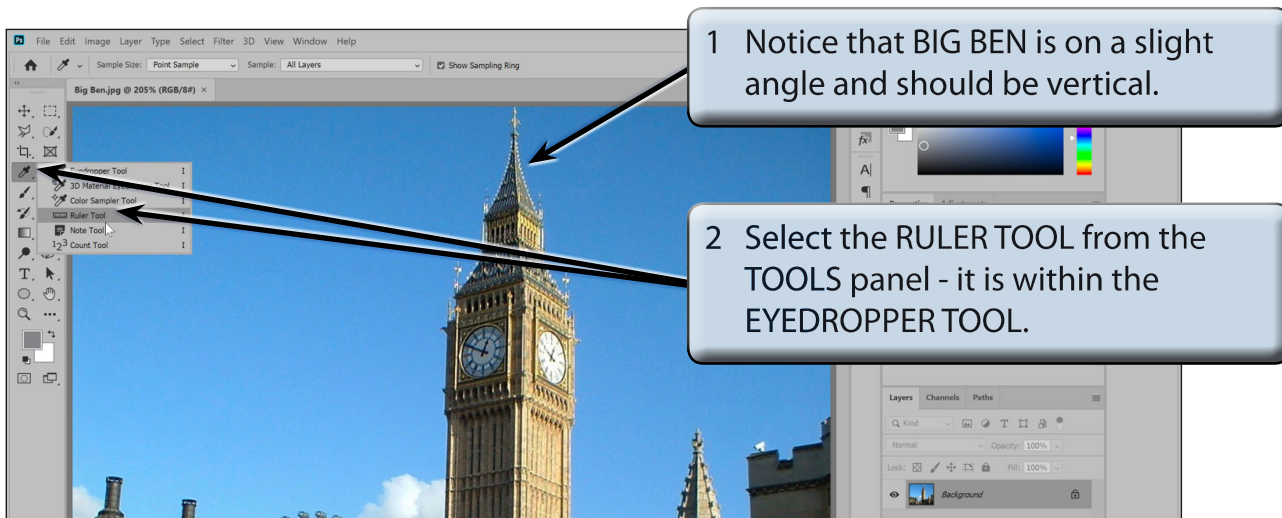
A Loading the Sample Photo

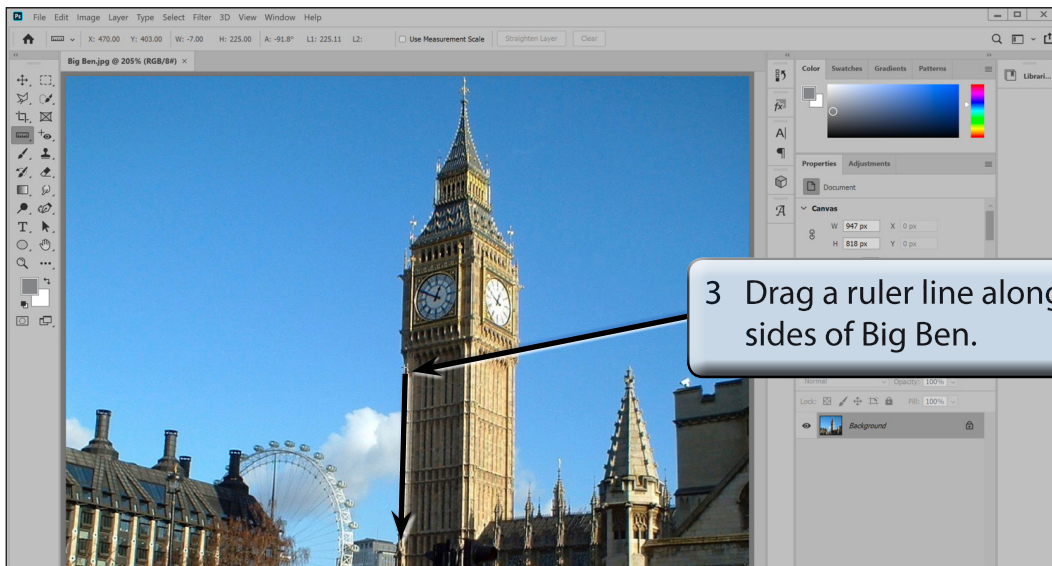
- 1 Load Photoshop or close the current file and select OPEN from the WELCOME screen or FILE menu.
- 2 Access the PScC SUPPORT FILES, open the CHAPTER 21 folder and open the file:

Big Ben

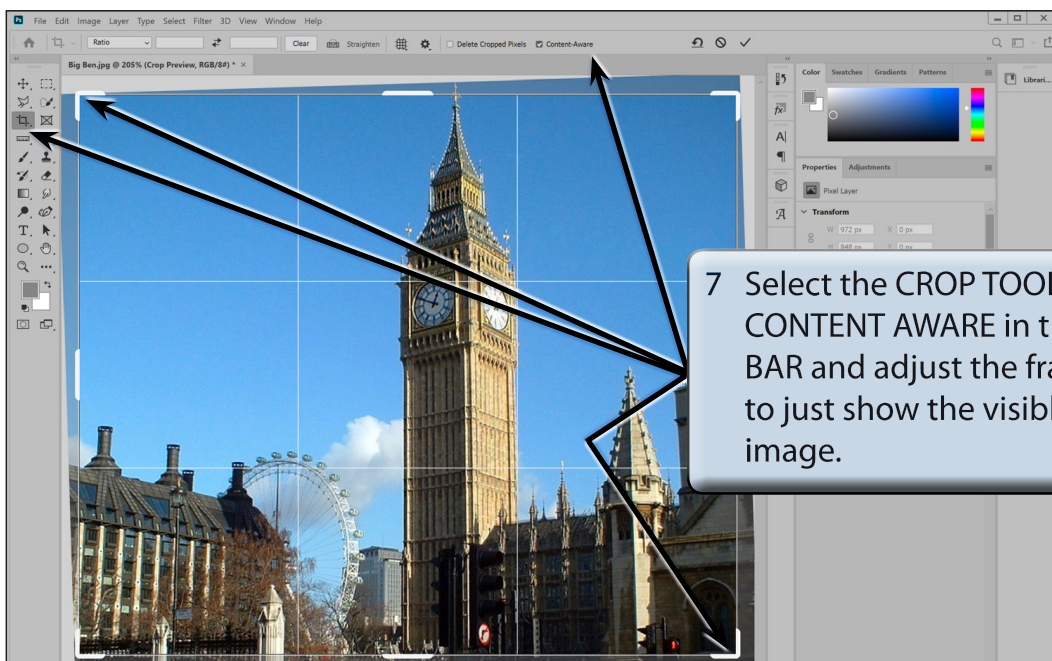
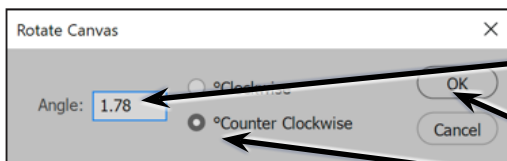
- 3 Press CTRL+0 or COMMAND+0 to set the view to FIT ON SCREEN.

B Applying the Ruler Tool





4 Display the IMAGE menu, highlight IMAGE ROTATION and select ARBITRARY.



NOTE: You can use the handles to adjust the crop frame so that just parts of the image are selected.

- 8 Double click inside the crop frame to complete the crop, then select the MOVE TOOL.
- 9 Save the image in your STORAGE folder if you wish to.

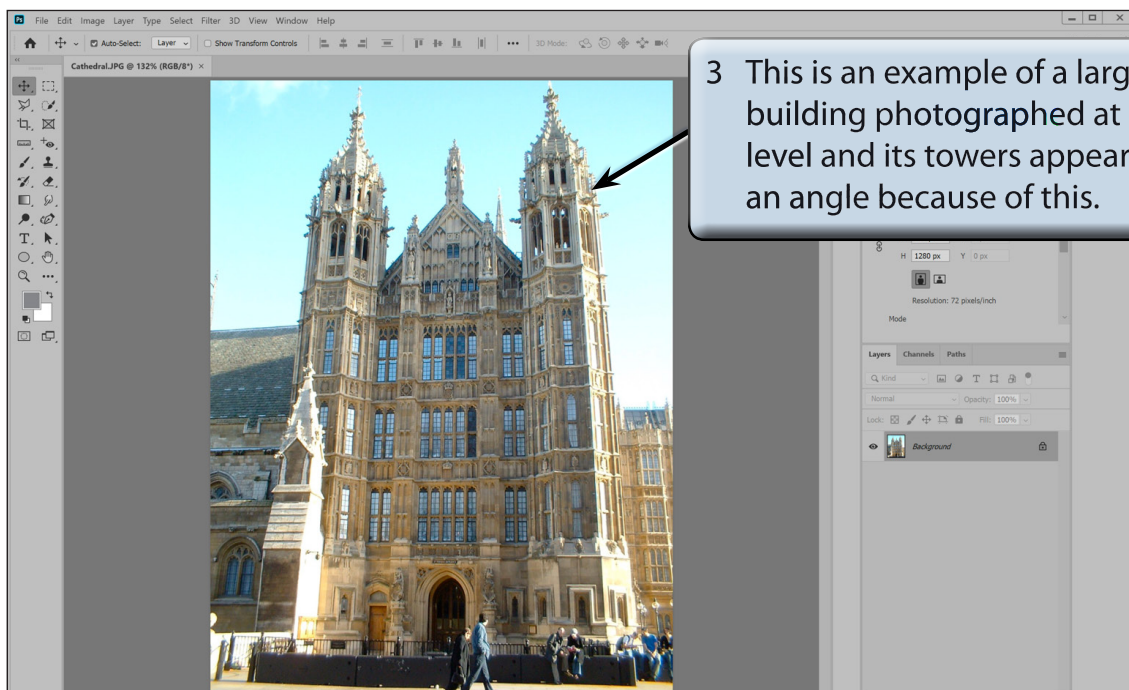
Lens Correction

The LENS CORRECTION filter can be used to minimize distortions created by incorrect camera angles. You can also create some interesting effects with this filter.

A Loading the Sample Photo

- 1 Close the Big Ben file and select OPEN from the WELCOME screen or FILE menu.
- 2 Access the PScC SUPPORT FILES, open the CHAPTER 21 folder and open the file:

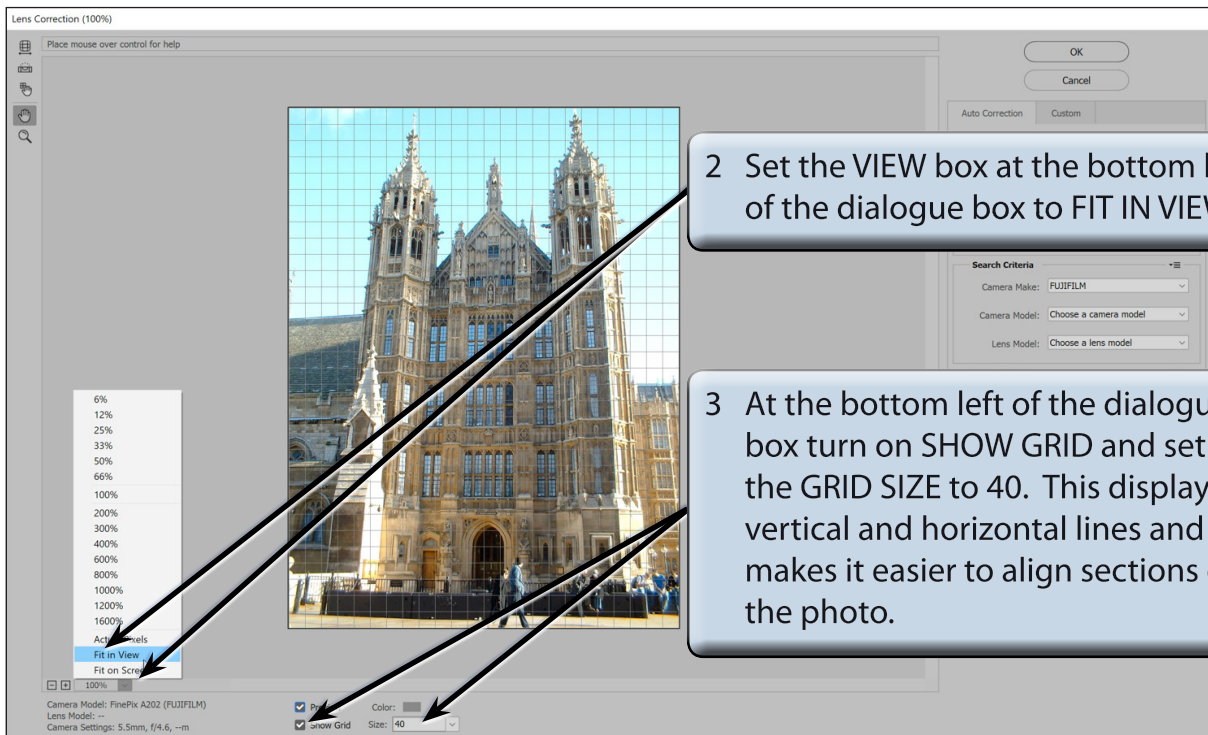
Cathedral



- 4 The LENS CORRECTION filter can be used to reduce this effect.

B Applying the Lens Correction Filter

- 1 Display the FILTER menu and select LENS CORRECTION to open the LENS CORRECTION dialogue box.



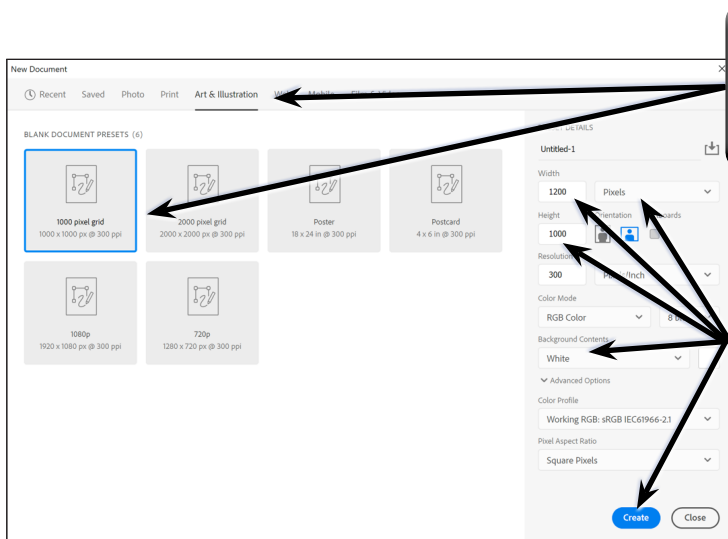
NOTE: The LENS CORRECTION tools are at the right of the dialogue box in two separate tabs

Artistic Brushes

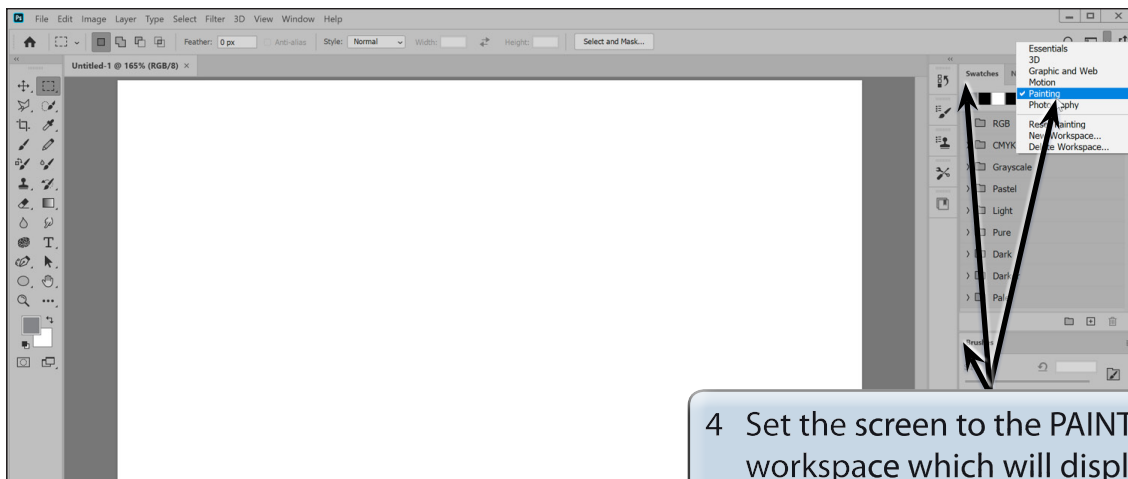
Photoshop CC provides extensive artistic brushes that can be used to create artwork from scratch or convert photos to artwork. In this chapter some of the different brush types and brush settings will be demonstrated.

Starting a New Document

- 1 Load Photoshop or close the current files then click on the CREATE NEW button in the WELCOME screen or display the FILE menu and select NEW.



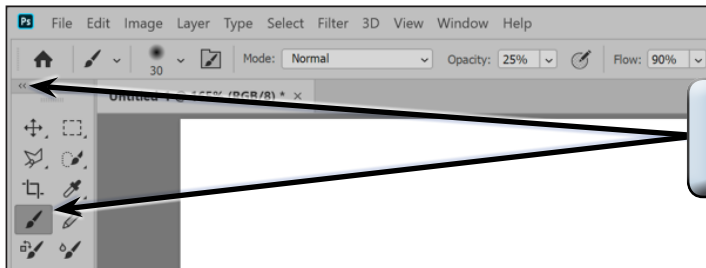
- 2 Click on ART & ILLUSTRATION category and select the first (default) PRESET.
- 3 Set the WIDTH to 1200 pixels, the HEIGHT to 1000 pixels, the BACKGROUND CONTENTS to WHITE and select CREATE.



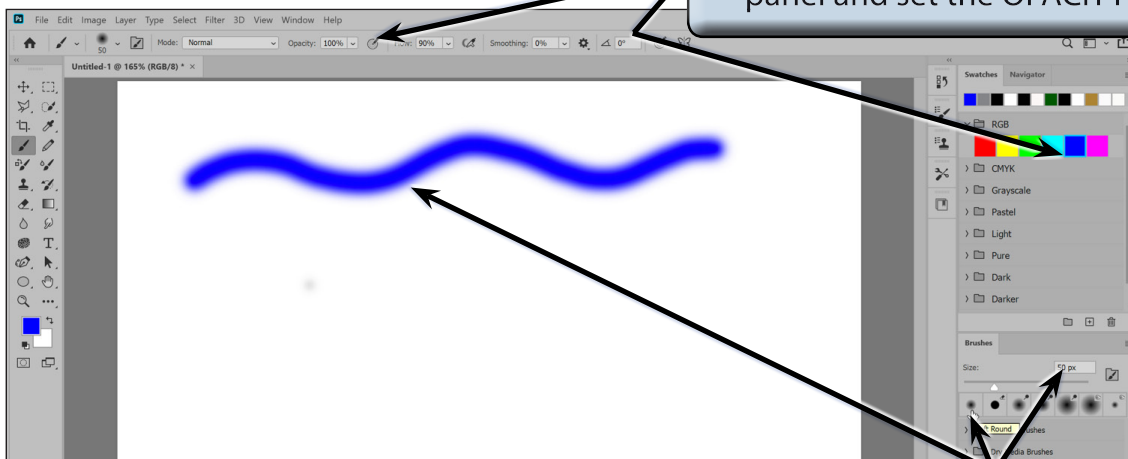
- 4 Set the screen to the PAINTING workspace which will display the SWATCHES and BRUSHES panels in the PANEL GROUP.

Using Brushes

The use of the BRUSH TOOL will be briefly revised.



1 Set the TOOLS panel to 2 columns and select the BRUSH TOOL.

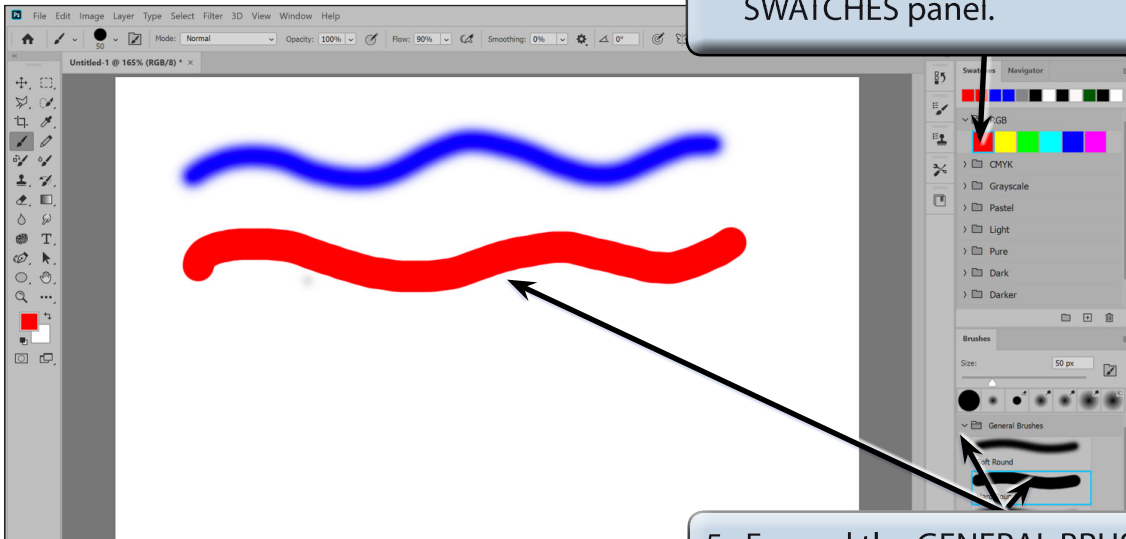


2 Select a colour from the SWATCHES panel and set the OPACITY to 100%.

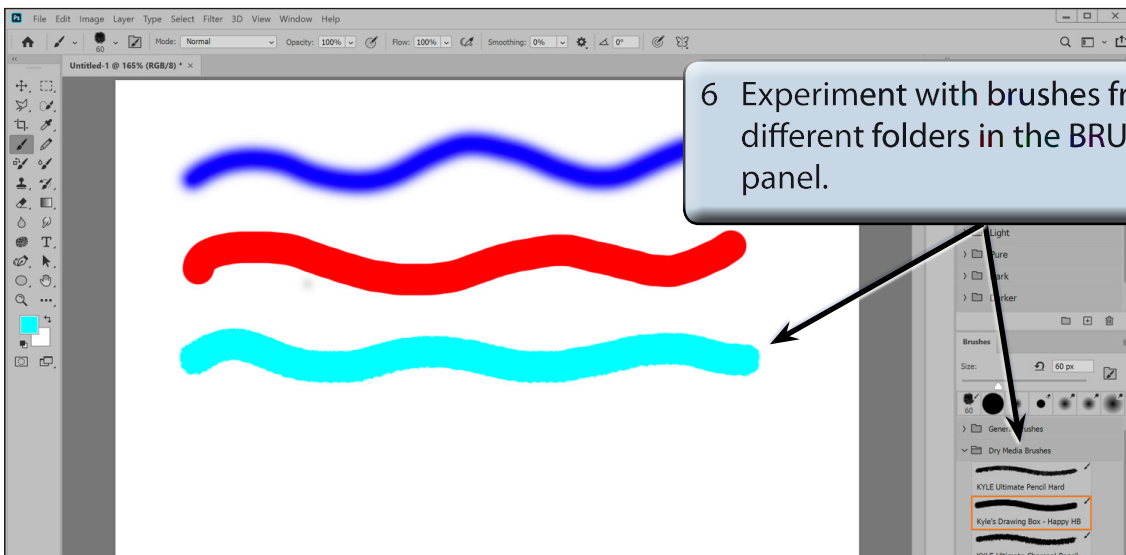
3 Select the first brush in the BRUSHES panel, drag the SIZE slider to about 50 px and draw a line on the canvas.

NOTE: The brushes at the top of the BRUSHES panel are the recently used brushes. All the brushes are contained in folders below the recently used bar.

4 Select a different colour in the SWATCHES panel.



5 Expand the GENERAL BRUSHES folder in the BRUSHES panel, select the second brush and draw a line below the first.

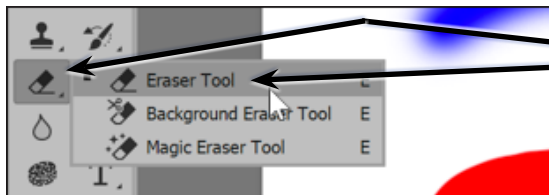


6 Experiment with brushes from the different folders in the BRUSHES panel.

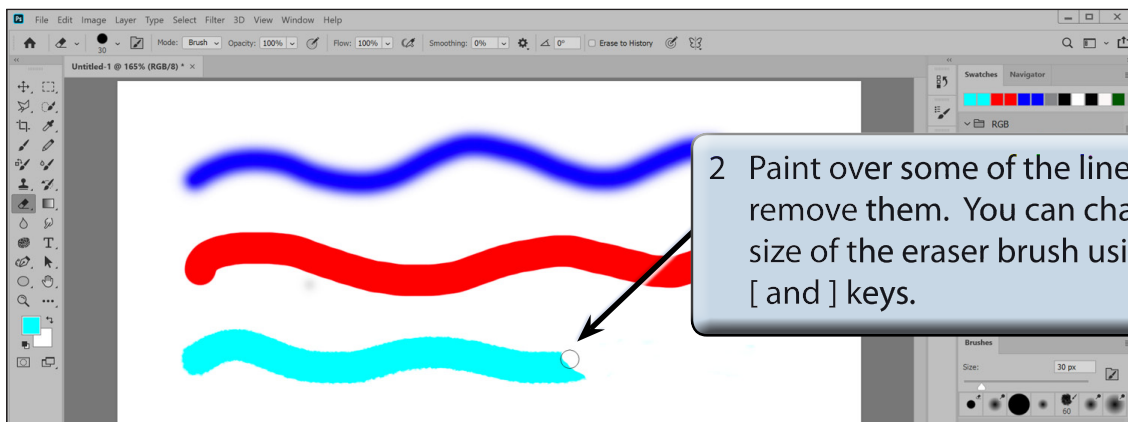
NOTE: The SMOOTHING option from the OPTIONS BAR can be adjusted to provide more smoothing if a brush stroke is too 'jittery'.

Erasing Brush Strokes

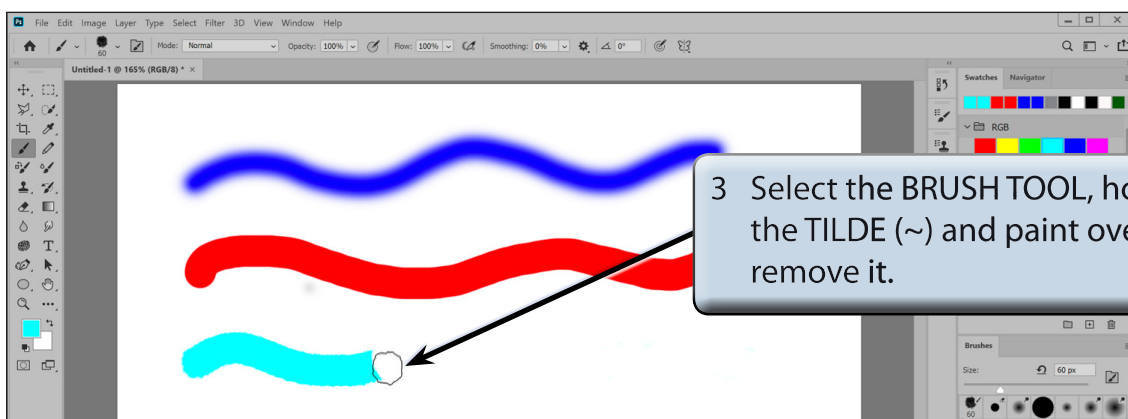
Brush strokes can be erased using the ERASER TOOL or by holding down the TILDE key (~), which is the key below the ESC key.



1 Select the ERASER TOOL in the TOOLS panel.



2 Paint over some of the lines to remove them. You can change the size of the eraser brush using the [and] keys.



3 Select the BRUSH TOOL, hold down the TILDE (~) and paint over a line to remove it.

NOTE: If you make a mistake when creating brush strokes, either select **UNDO** (CTRL+Z to COMMAND+Z), hold down the TILDE key (~) and paint over the error or select the **ERASER TOOL** and paint over the error.

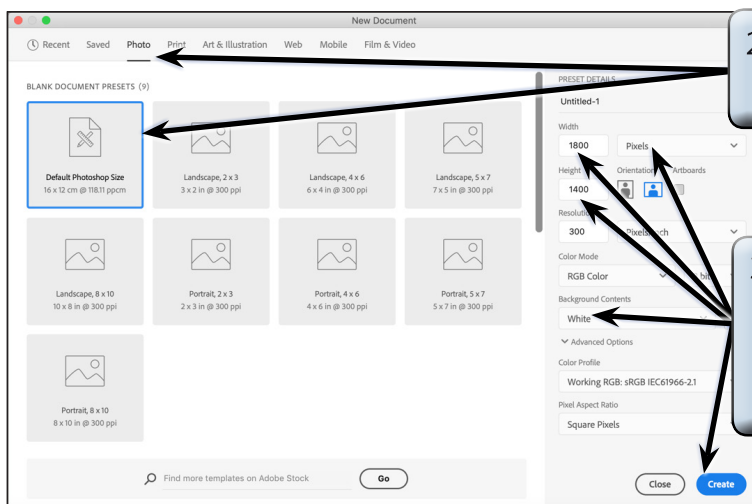
Creating 3D Shapes

Photoshop provides extensive tools to create and edit 3D shapes. This chapter will introduce a few of those tools. Some of the tools require up to date computer equipment.

To use the full 3D tools a GRAPHICS PROCESSOR needs to be enabled (this can be checked by displaying the EDIT or PHOTOSHOP menus, highlighting PREFERENCES and selecting PERFORMANCE). If the 3D options are grey in the 3D menu or you are unable to turn the GRAPHICS PROCESSOR on, you will need to skip to Chapter 24.

Starting a New Document

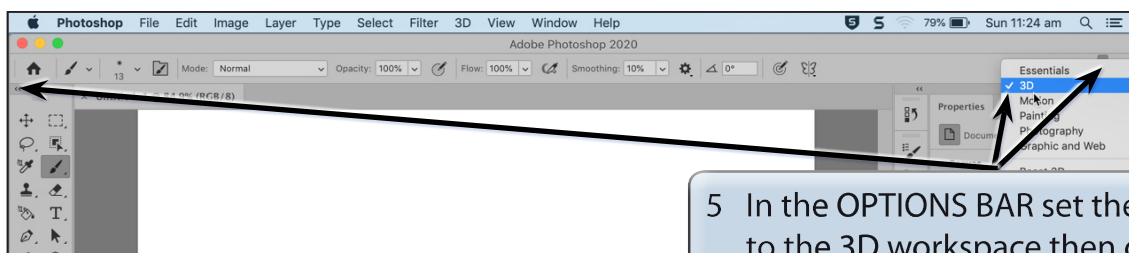
- 1 Load Photoshop or close the current file and select CREATE NEW from the WELCOME screen or select NEW from the FILE menu.



- 2 Click on PHOTO category and select the first (default) PRESET.

- 3 Set the WIDTH to 1800 pixels, the HEIGHT to 1400 pixels, the BACKGROUND CONTENTS to WHITE and select CREATE.

- 4 Set the view to FIT ON SCREEN.

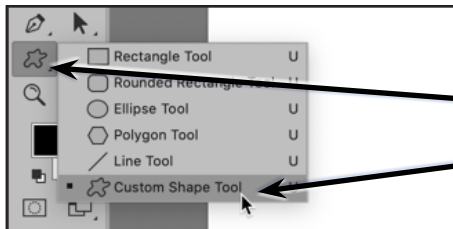


- 5 In the OPTIONS BAR set the screen to the 3D workspace then check that the TOOLS panel is set to 2 columns. The TOOLS panel changes to show the tools related to 3D objects.

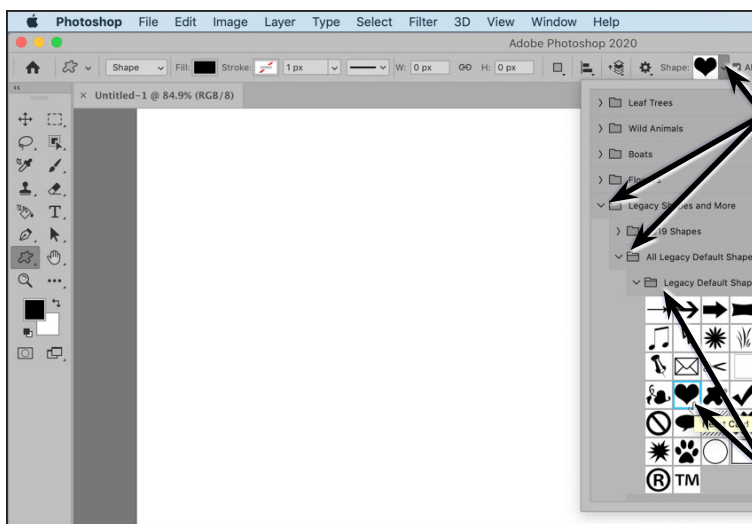
Creating Shapes From Layers

A Selecting the Shape

You can draw your own shapes to be converted into 3D shapes using the various PEN TOOLS or you can use some of the CUSTOM SHAPES that Photoshop provides.

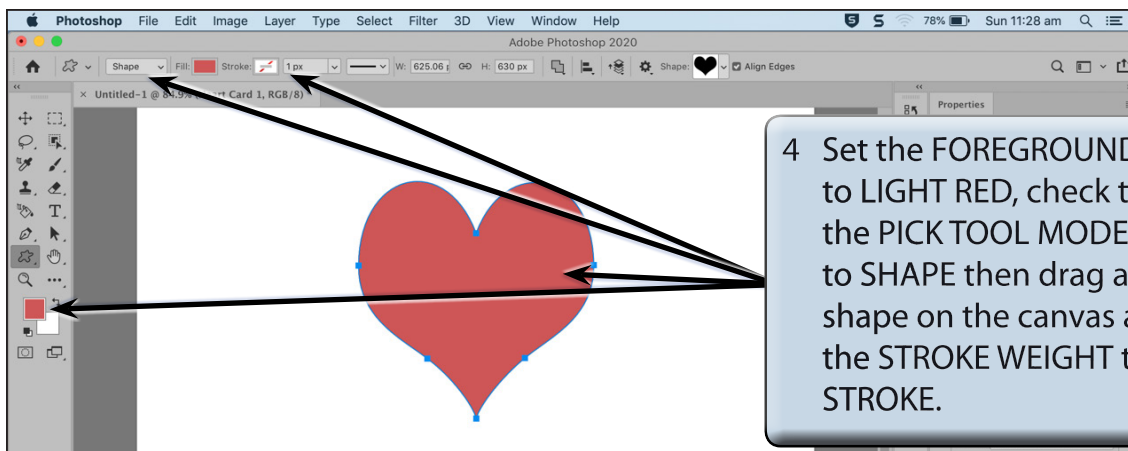


- 1 Select the CUSTOM SHAPE TOOL from within the SHAPES TOOL in the TOOLS panel.



- 2 In the OPTIONS BAR click on the CUSTOM SHAPE PICKER arrow and expand the LEGACY SHAPES AND MORE folder followed by the ALL LEGACY DEFAULT SHAPES folder.

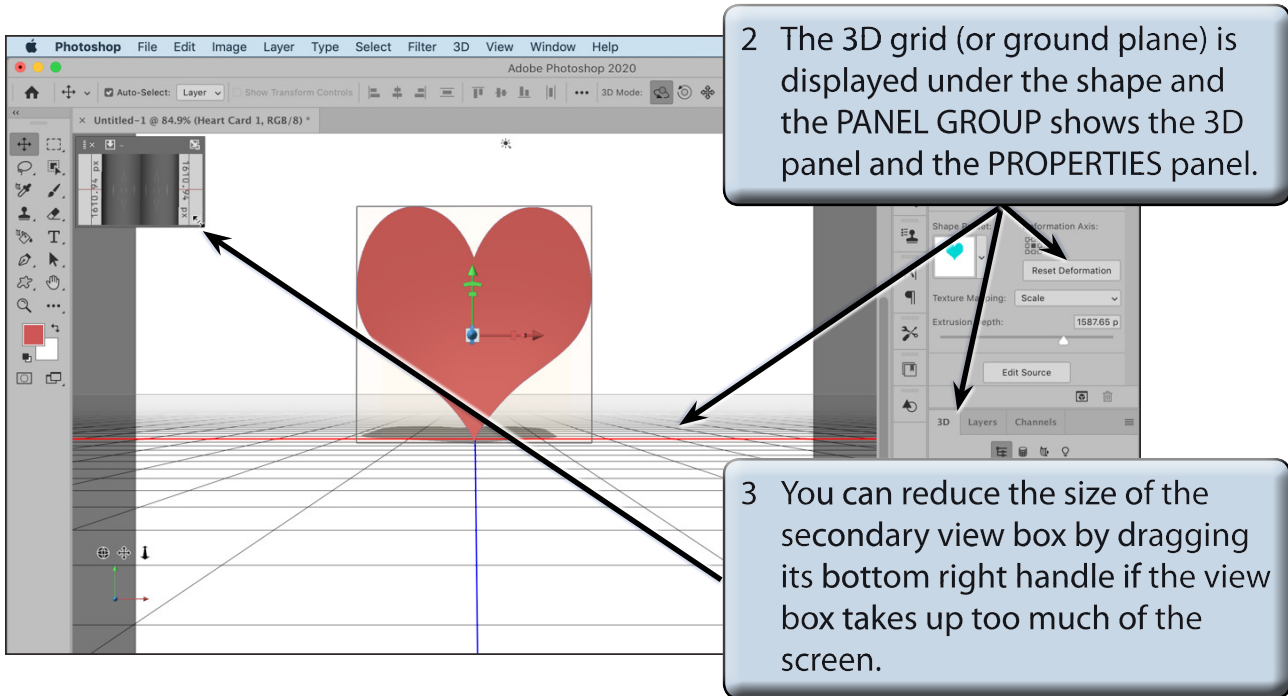
- 3 Expand the LEGACY DEFAULT SHAPES folder and select the HEART CARD shape.



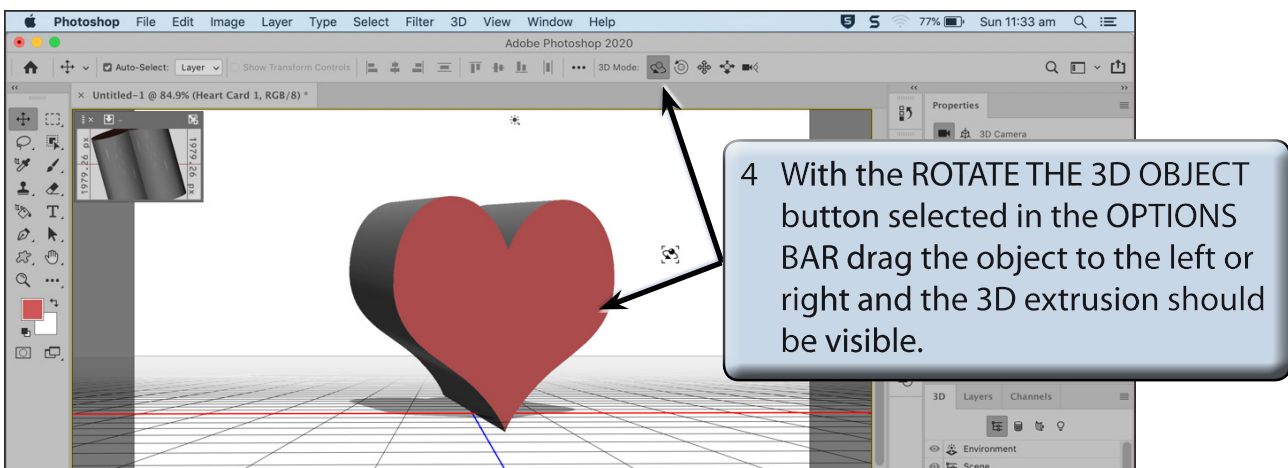
- 4 Set the FOREGROUND colour to LIGHT RED, check that the PICK TOOL MODE is set to SHAPE then drag a heart shape on the canvas and set the STROKE WEIGHT to NO STROKE.

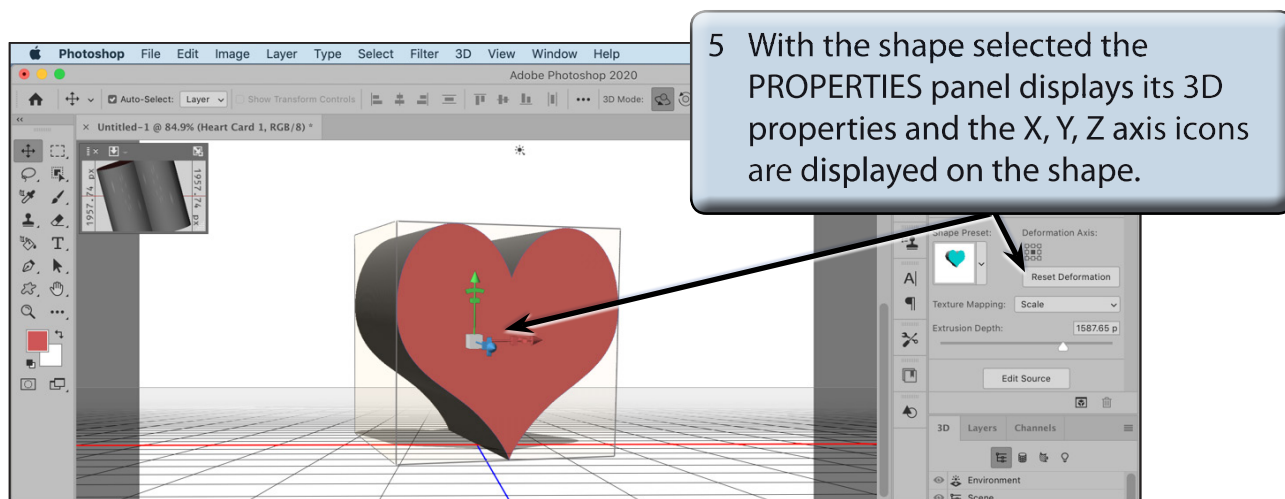
B Converting the Layer to a 3D Shape

- 1 Display the 3D menu and select NEW 3D EXTRUSION FROM SELECTED LAYER.



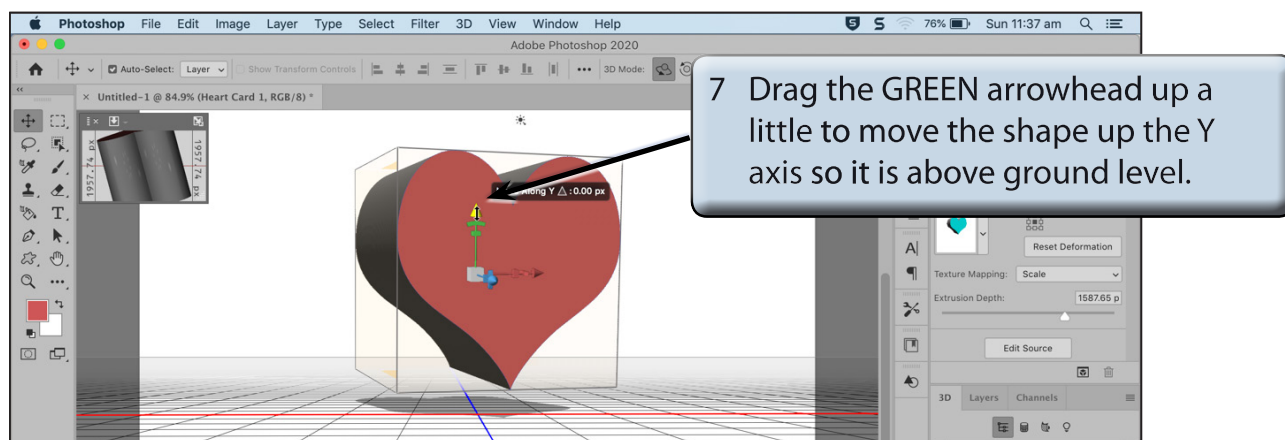
NOTE: The 3D panel and the PROPERTIES panel work with one another. You select a section in the 3D panel and apply its properties from the PROPERTIES panel.





6 The X, Y and Z axis lines have 3 icons each to **MOVE**, **ROTATE** and **SCALE** the shape on the selected axis.

- The X axis controls horizontal movements.
- The Y axis controls vertical movements.
- The Z axis controls depth (in or out) movements.



Creating Animations

Animations can be created within Photoshop. For example, you can create time lapse photography, YouTube videos, QuickTime movies and animated logos. The animating process involves setting the changes in separate layers then turning layers on or off in frames that can be inserted in the TIMELINE panel.

Time Lapse Photography

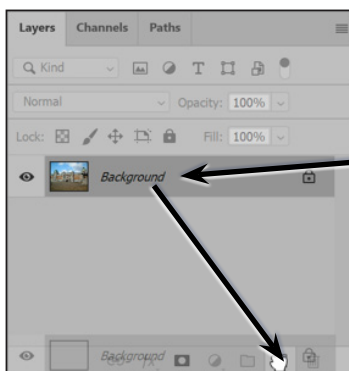
A popular photographic effect is to take photos of the same place at different times of the day to show the changes in activity and light that have occurred. For example, photos of a city can be taken at intervals through the day which capture the daytime activities, rush hour and the lights coming on at sunset.

A Loading the Sample Photo

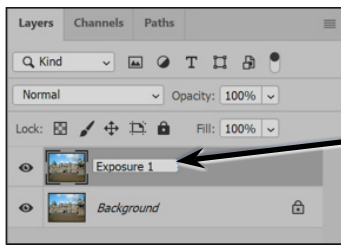
A sample photo has been prepared for you. The exposure of the photo will be altered to simulate the sun going down.

- 1 Load Photoshop or close the current files and select OPEN from the WELCOME screen or FILE menu.
- 2 Access the PScC SUPPORT FILES, open the CHAPTER 24 folder and open the file:
Time Lapse
- 3 Set the workspace to ESSENTIALS.
- 4 We could open multiple copies of the photo taken at different times and drag each into the one file, but altering the exposure will be adequate to demonstrate the animation process.

B Creating the Layers

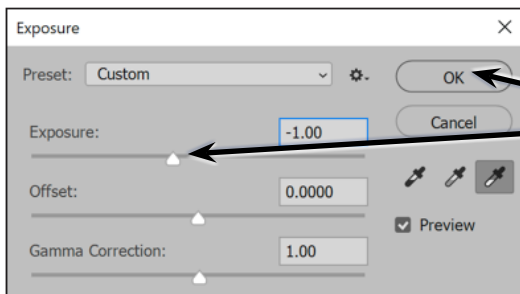


- 1 In the LAYERS panel drag the BACKGROUND layer over the CREATE A NEW LAYER icon to duplicate the layer.

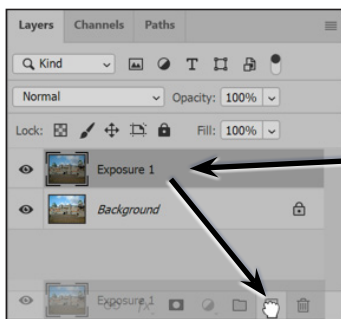


2 Rename the new layer:
Exposure 1
and press <enter> or <return>.

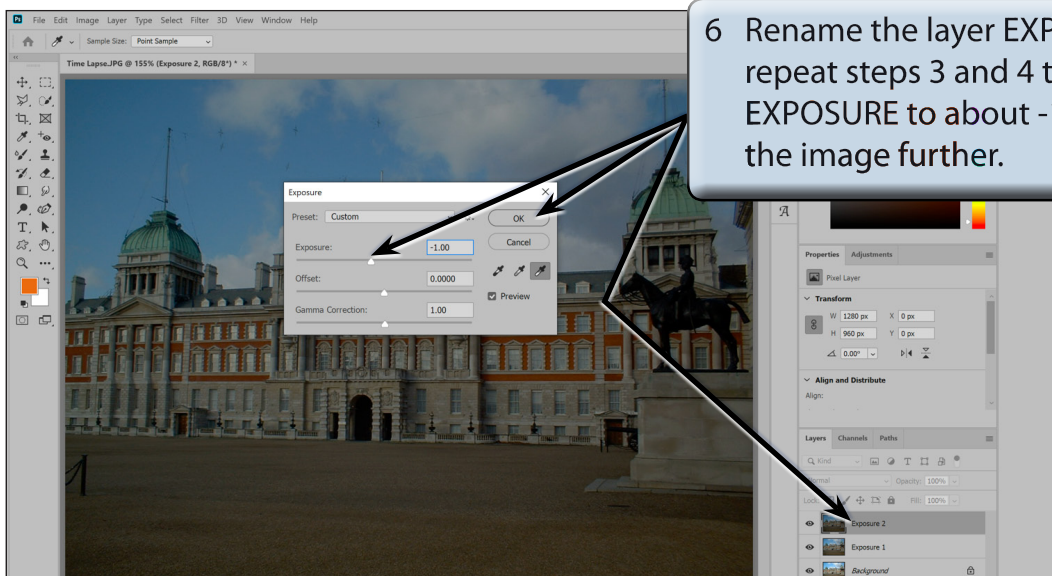
3 Display the IMAGE menu, highlight ADJUSTMENTS and select EXPOSURE.



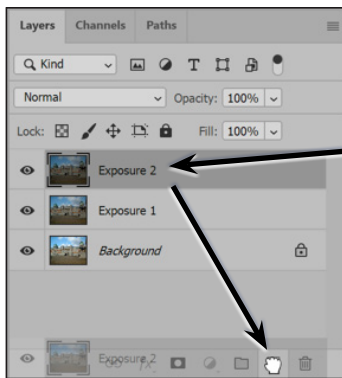
4 Reduce the EXPOSURE to about -1.0 and select OK to darken the image.



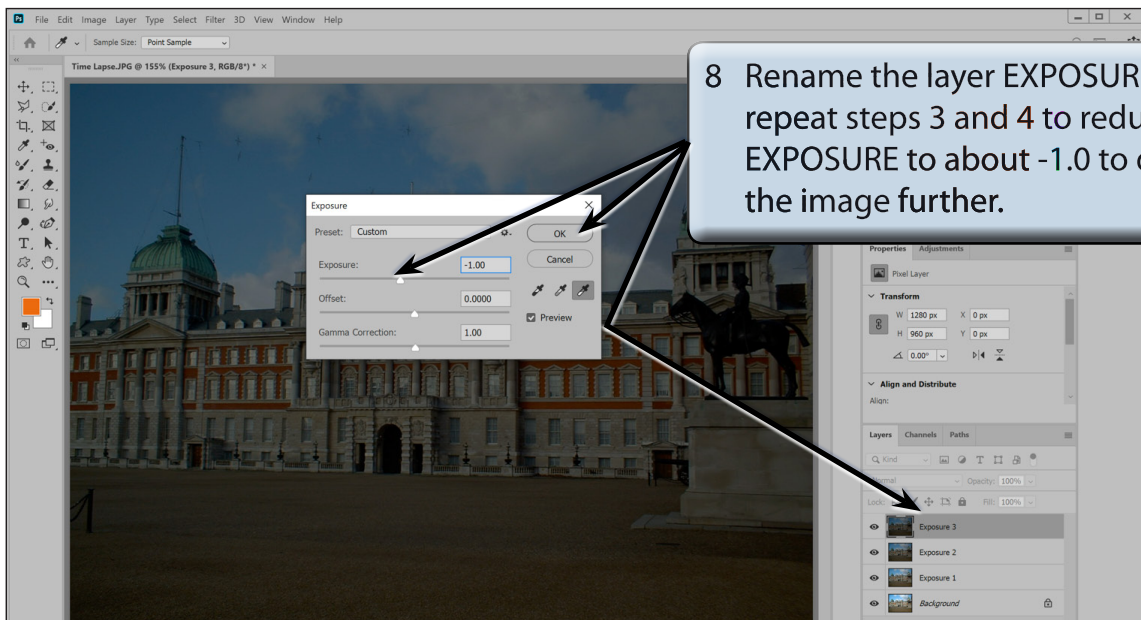
5 Drag the EXPOSURE 1 layer over the CREATE A NEW LAYER icon to duplicate the layer.



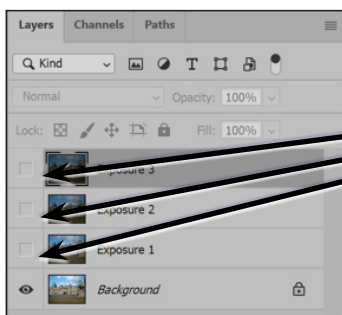
6 Rename the layer EXPOSURE 2 and repeat steps 3 and 4 to reduce the EXPOSURE to about -1.0 to darken the image further.



7 Drag the EXPOSURE 2 layer over the CREATE A NEW LAYER icon to duplicate the layer.



8 Rename the layer EXPOSURE 3 and repeat steps 3 and 4 to reduce the EXPOSURE to about -1.0 to darken the image further.



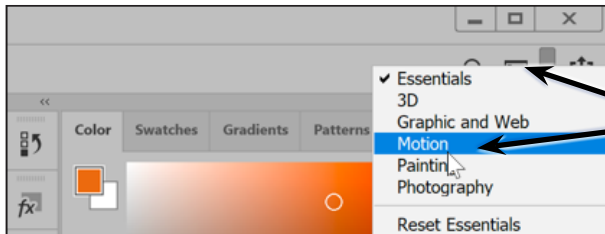
9 Turn off the visibility of the three EXPOSURE layers in the LAYERS panel.

10 Use SAVE AS from the FILE menu to save the file in your STORAGE folder as a PHOTOSHOP file under the file name:

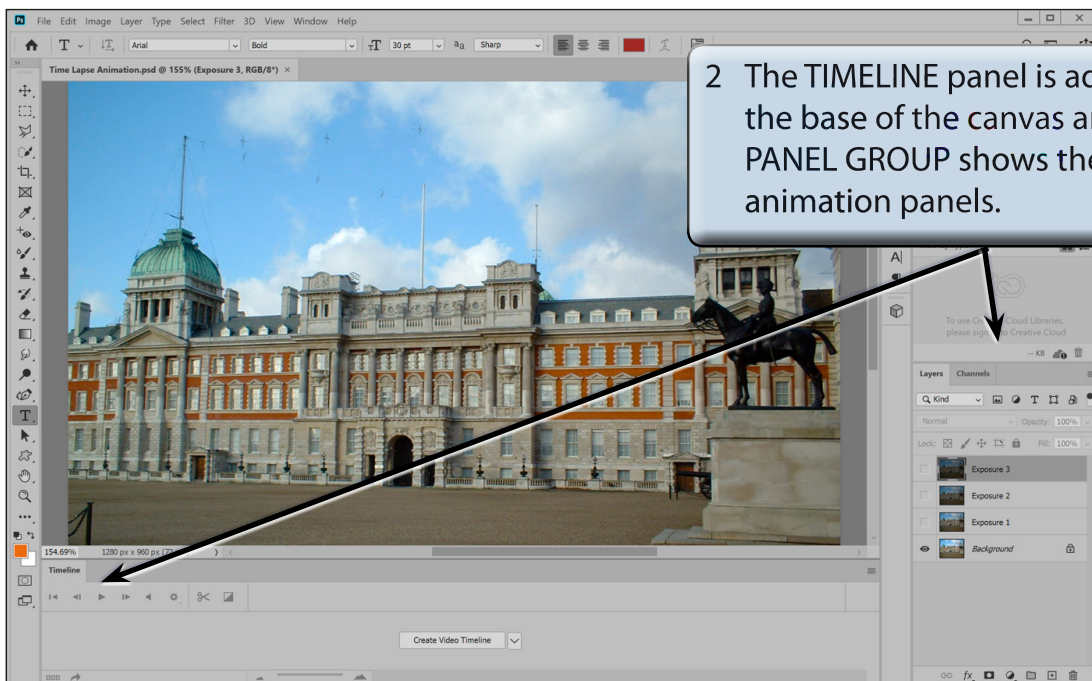
Time Lapse Animation

C Opening the Motion Workspace

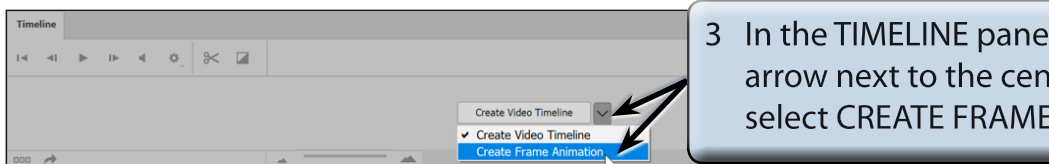
Frames are used to create the animation. These are inserted in the TIMELINE panel which can be quickly added to the screen using the MOTION workspace.



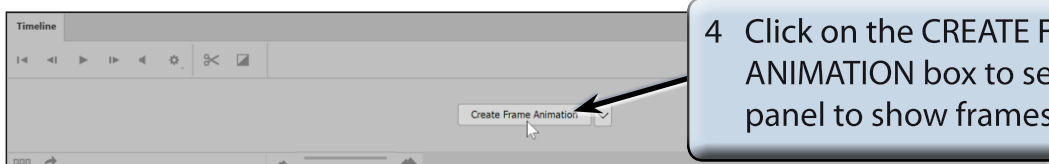
1 Click on the WORKSPACE icon in the OPTIONS BAR and select MOTION.



2 The TIMELINE panel is added to the base of the canvas and the PANEL GROUP shows the relevant animation panels.



3 In the TIMELINE panel click on the arrow next to the centre box and select CREATE FRAME ANIMATION.



4 Click on the CREATE FRAME ANIMATION box to set the TIMELINE panel to show frames.

Using Artboards and Frames

Artboards allow you to have different versions of a design in the one document. For example, you can create one design for viewing on a desktop computer, another for a tablet and a third for a mobile phone all in the one document. This saves the need to have several individual files. It also allows you to experiment with different versions of a design side-by-side in the one document.

Frames allow partitions to be created within the one document and to place content within those partitions. You could then create Artboards of that document to create different versions of it.

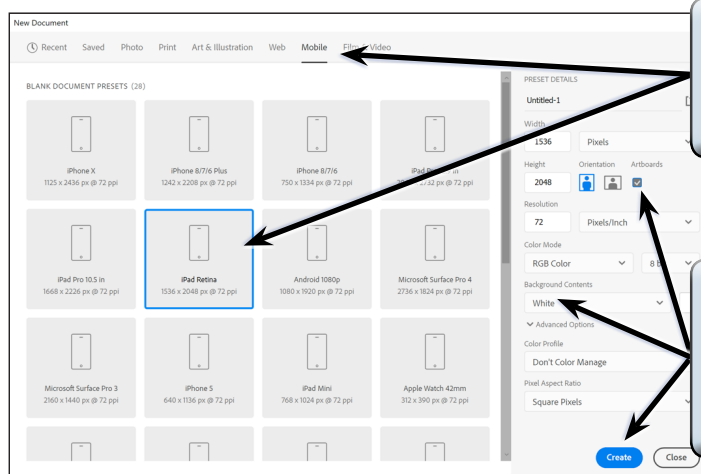
To illustrate the use of Artboards and Frames advertisements for a hair salon will be created for viewing on different sized screens.

Creating an Artboard File

When Artboards are going to be used you need to indicate this when the file is started. Photoshop provides a range of standard canvas sizes based on the current devices available. In this case Artboards will be created for tablets and mobile phones.

A Setting the Artboard Size

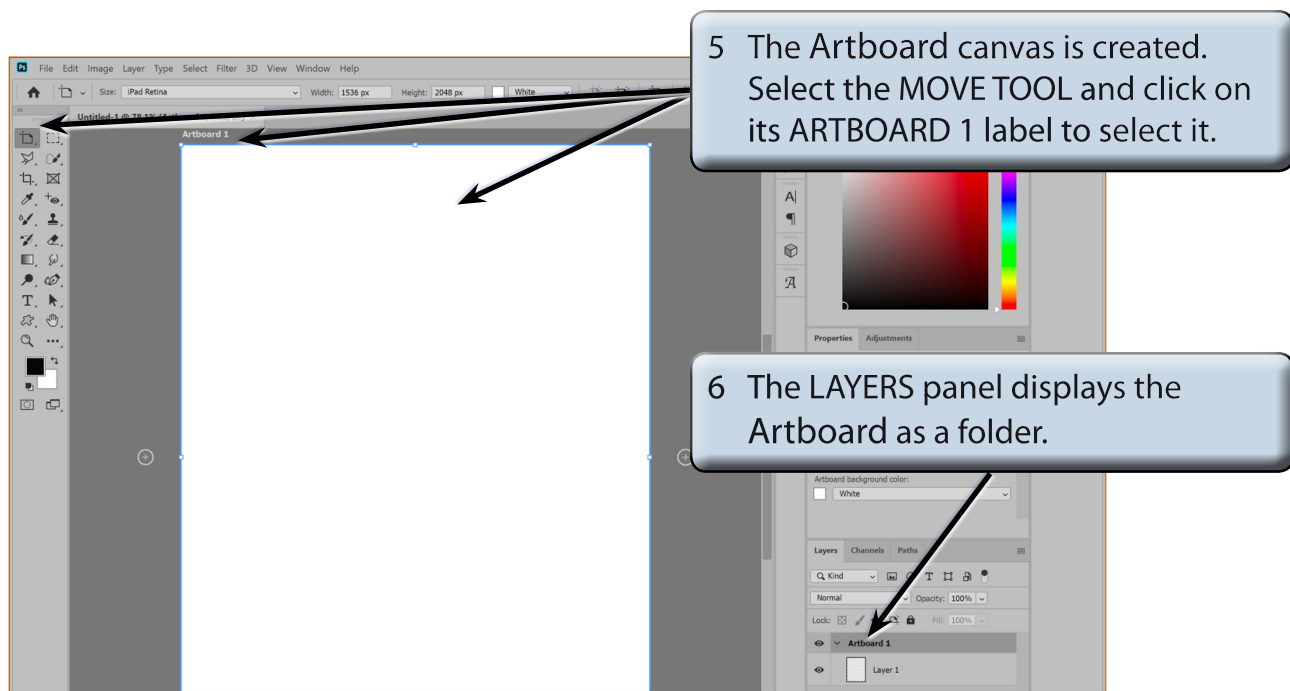
- 1 Load Photoshop or close the current files and select CREATE NEW from the WELCOME screen or select NEW from the FILE menu.



- 2 Set the CATEGORY to MOBILE and select IPAD RETINA (which is a good representation for a tablet screen).

- 3 Check that the ARTBOARDS option is turned on, the BACKGROUND CONTENTS should be set to WHITE and select CREATE.

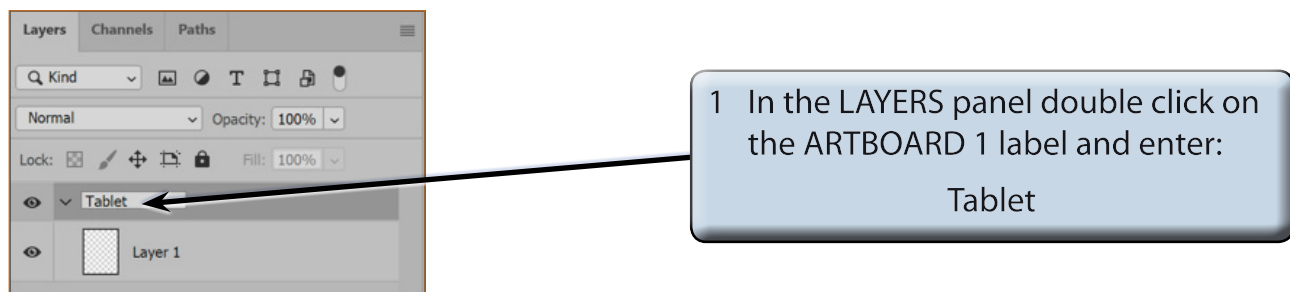
- 4 Set the screen to the ESSENTIALS workspace.



- NOTE:**
- i The Layers for each Artboard are displayed within each ARTBOARD folder in the LAYERS panel.
 - ii The + symbols around the Artboard canvas are used to create new a Artboard or to duplicate a current Artboard.

B Renaming the Artboard

Artboards are given default names, Artboard 1, Artboard 2, etc, but it is usually better to rename them so that you know what type of device each refers to.



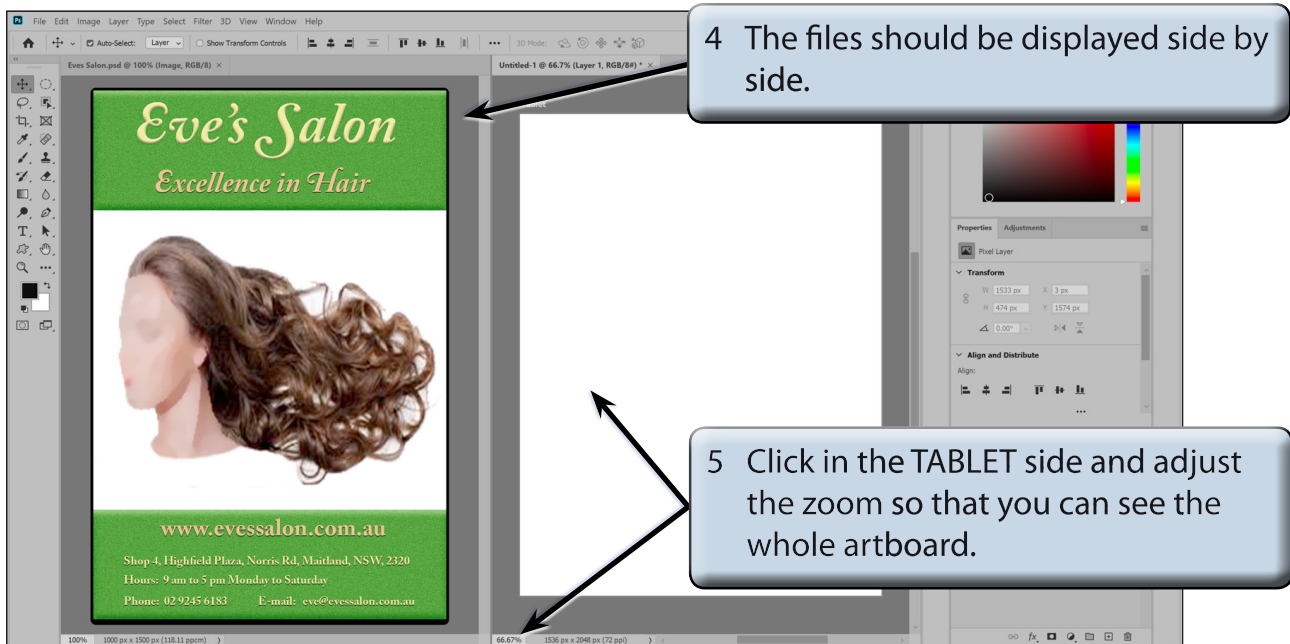
- 2 Press <enter> or <return> to set the label.

Adding Content to Artboards

Content can be added to Artboards in the same that you do with any other Photoshop canvas, but to save time, a sample advert has been prepared for you. Its content will be added to the first Artboard before the other Artboards are created.

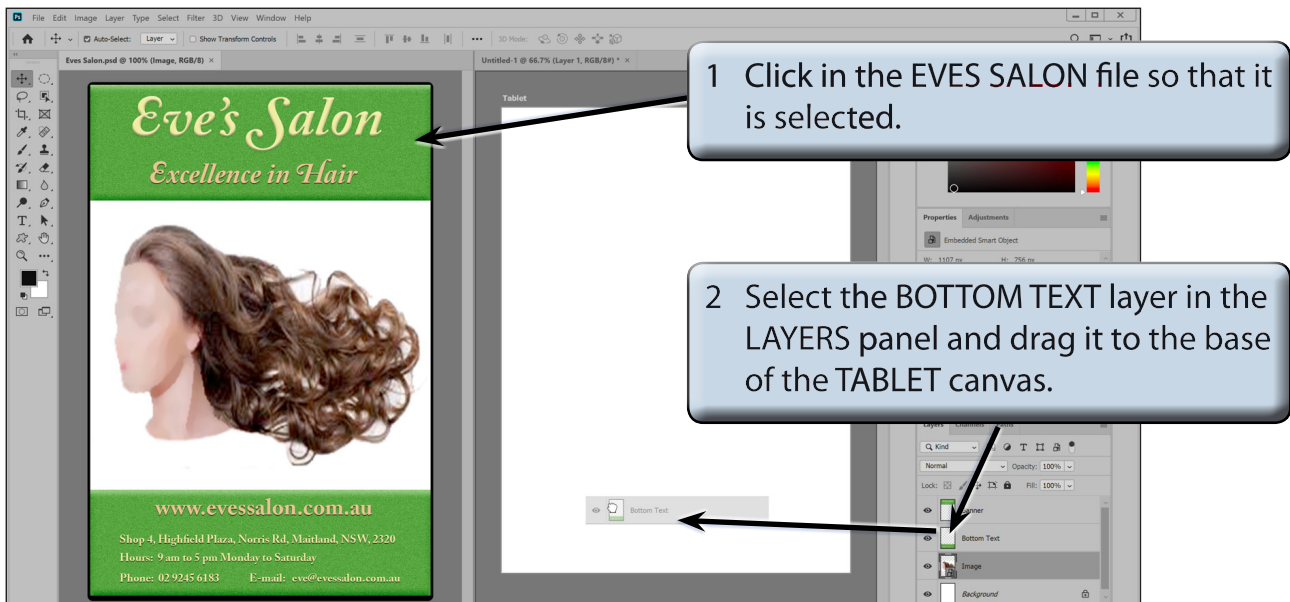
A Opening the Sample File

- 1 Display the FILE menu and select OPEN.
- 2 Access the PScC SUPPORT FILES, open the CHAPTER 25 folder and open the file:
Eves Salon
- 3 Display the WINDOW menu, highlight ARRANGE and select 2-UP VERTICAL.

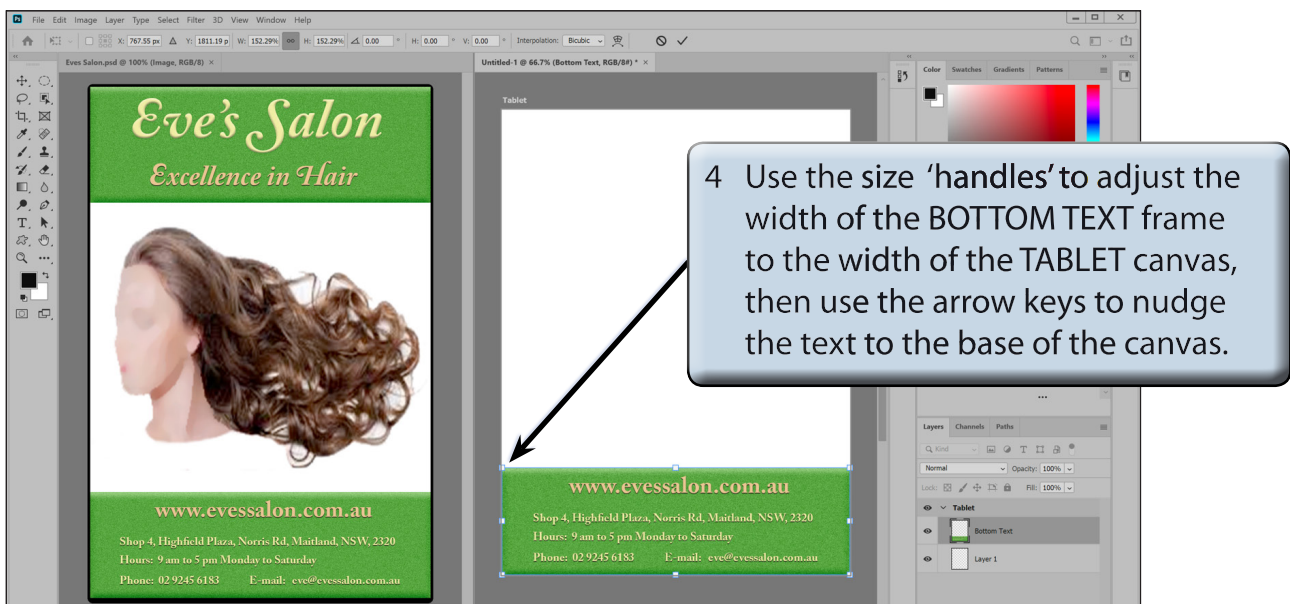


NOTE: There are three layers for the EVES SALON file that will be placed in the ARTBOARD, a BANNER, the BOTTOM TEXT and an IMAGE.

B Inserting the Content into the Artboard



- 3 Press CTRL+T or COMMAND+T to display the FREE TRANSFORM frame around the BOTTOM TEXT frame.



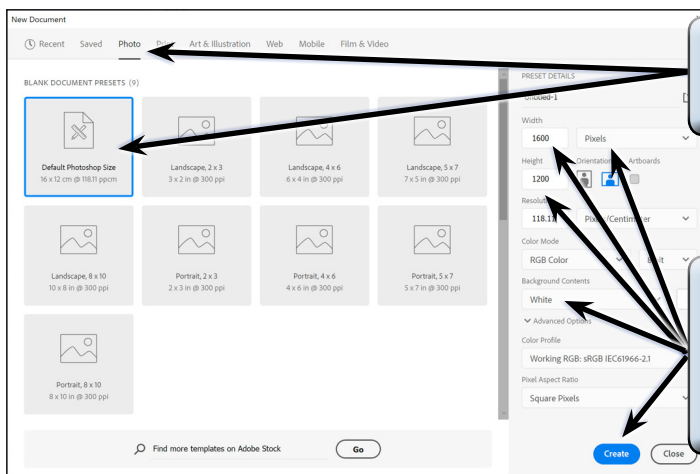
- 5 Press <enter> or <return> to complete the transformation.

The Curvature Tool

The CURVATURE TOOL is basically a simplified PEN TOOL for those people who find the PEN TOOL difficult or annoying. The PEN TOOL is covered in Module 3. The CURVATURE TOOL is not quite as powerful as the PEN TOOL, but it does allow you to create detailed drawings.

Starting a New Document

- 1 Load Photoshop or close the current files and select CREATE NEW from the WELCOME screen or select NEW from the FILE menu.

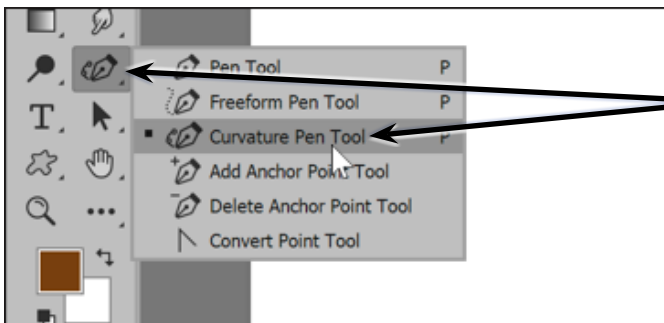


- 2 Set the CATEGORY to PHOTO and select the first preset.

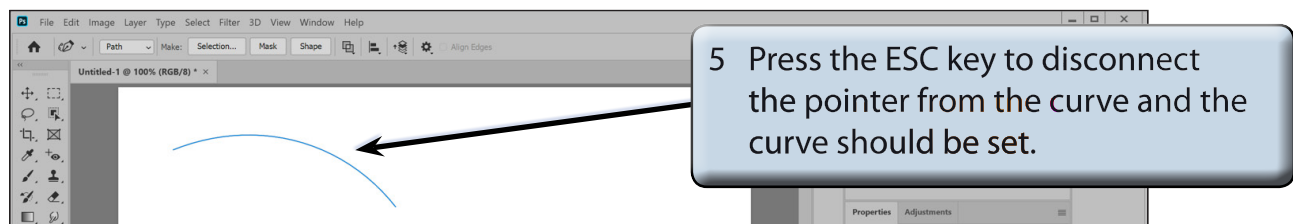
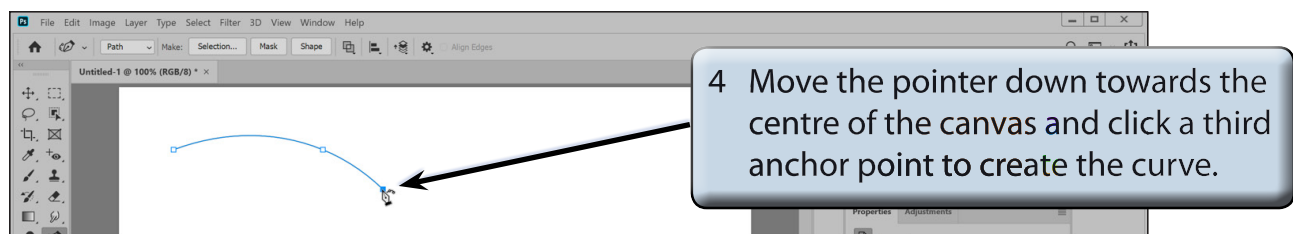
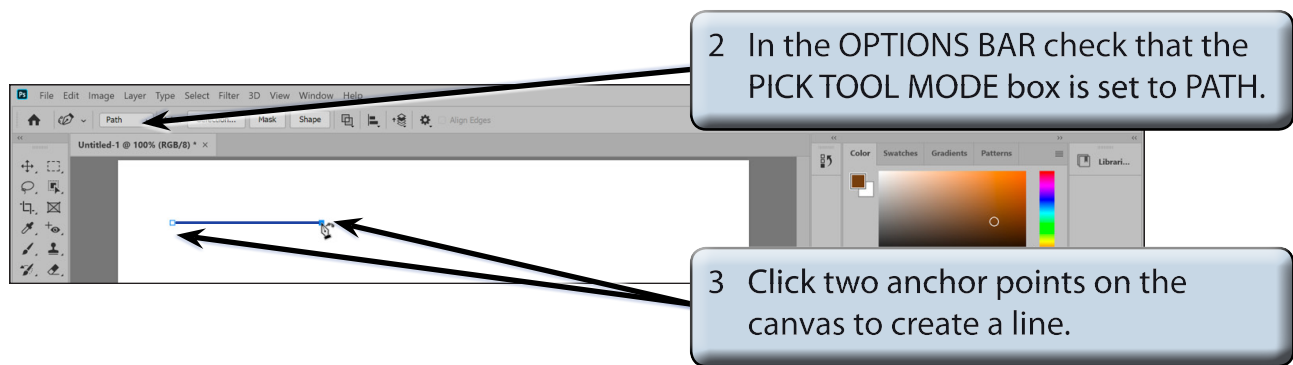
- 3 Set the WIDTH to 1600 px, the HEIGHT to 1200 px, the BACKGROUND CONTENTS to WHITE and select CREATE.

Drawing Simple Curves

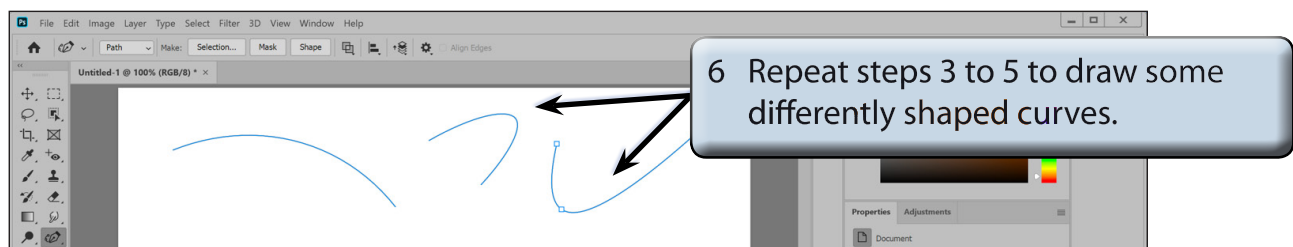
As the name suggests the CURVATURE TOOL is used to create curves, but it can also be used to create straight paths. You click 3 anchor points to create the curve.



- 1 Select the CURVATURE TOOL from the TOOLS panel. It is within the PEN TOOL.



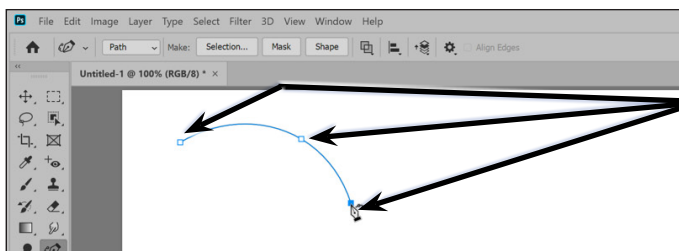
NOTE: In general you click the second anchor point part of the way along where you want the curve to finish, then click the third anchor point at the end to create the curve.



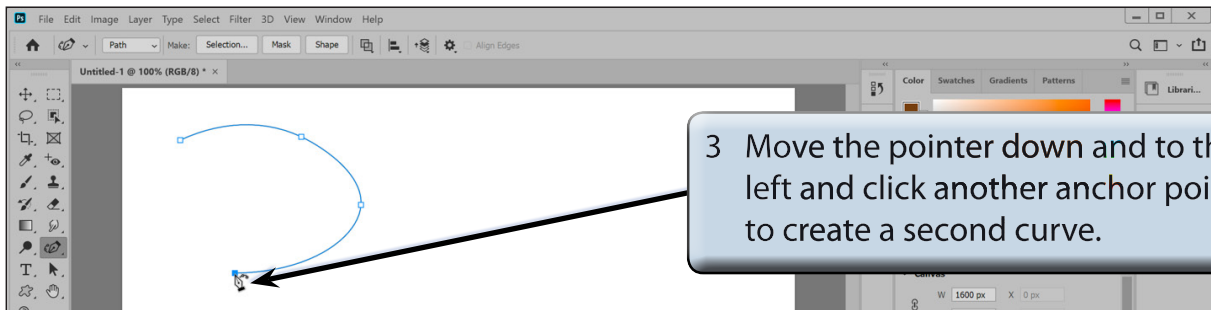
Combining Curves into Shapes

You are not limited to one curve. You can continue clicking anchor points to create shapes. To illustrate this, a rough oval shape will be drawn.

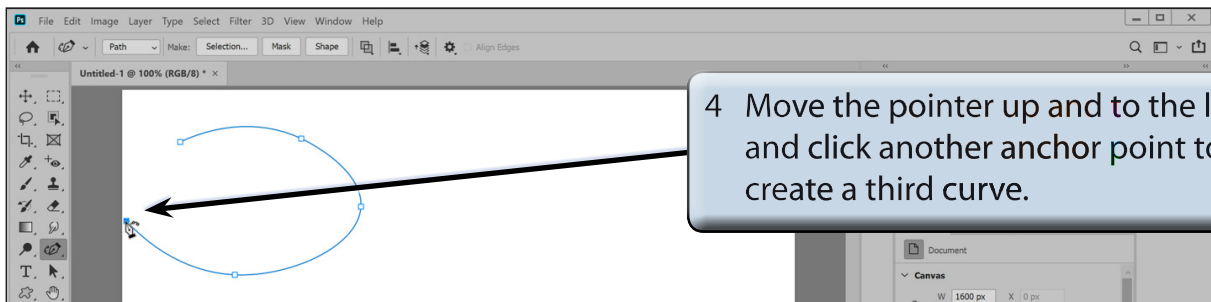
- 1 Press CTRL+Z or COMMAND+Z until all the curves are undone.



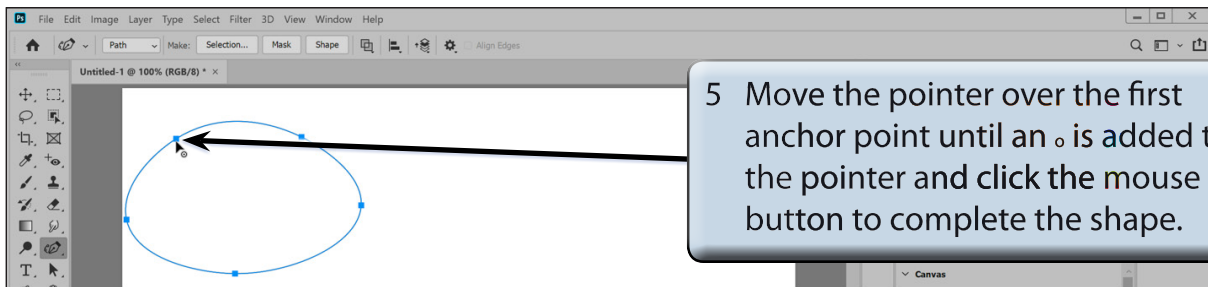
- 2 Click a start anchor point near the left of the canvas, a second anchor point to the right of it then click a third anchor point down and to the right of the second anchor point to create a curve.



- 3 Move the pointer down and to the left and click another anchor point to create a second curve.

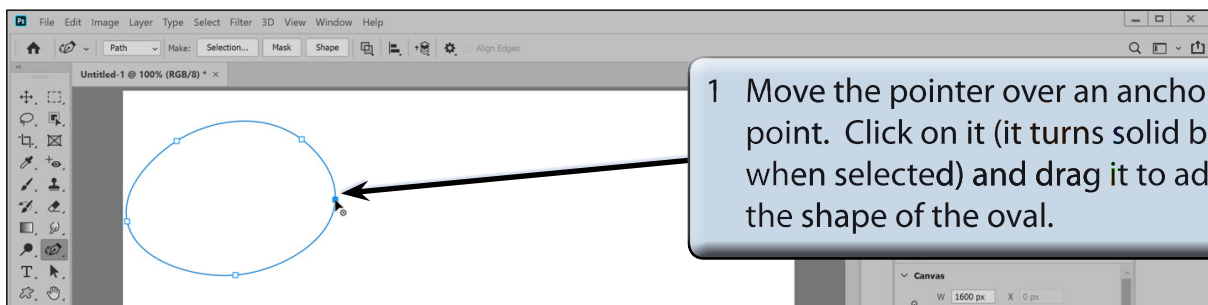


- 4 Move the pointer up and to the left and click another anchor point to create a third curve.

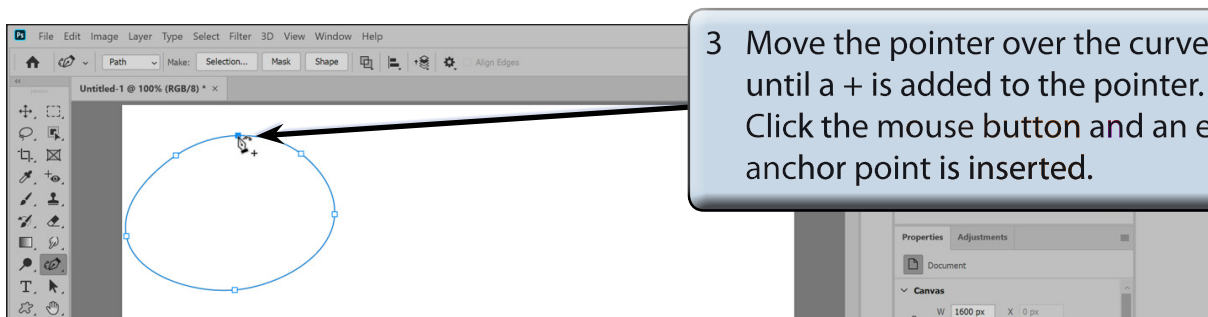


Editing Curves

Shapes produced using the CURVATURE TOOL are live and anchor point positions can be altered or new anchor points added to the curve.



2 Adding extra anchor points can help refine the shape further.



Useful Tools

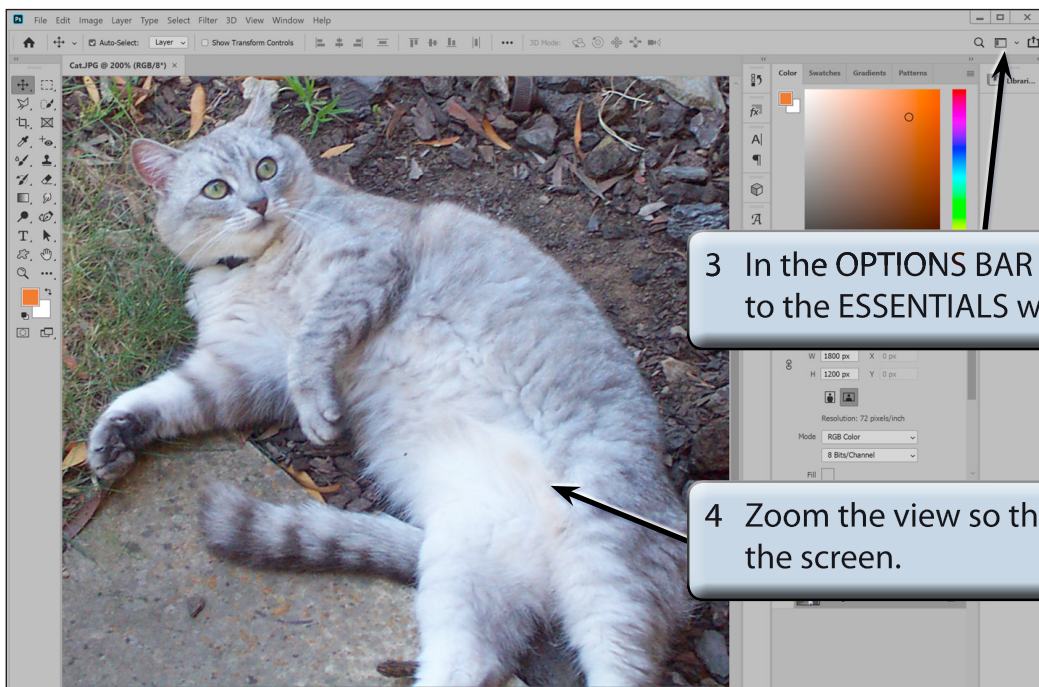
To complete this module some other useful Photoshop tools will be demonstrated. These include the MAGNETIC LASSO TOOL, the PUPPET WARP TOOL, the REPLACE COLOUR TOOLS, resizing images, resizing the canvas and the CONTENT AWARE SCALE TOOL.

The Magnetic Lasso Tool

You have used the selection tools such as the OBJECT SELECTION TOOL and the QUICK SELECTION TOOL to select parts of images. Another tool that can be used to do the same thing is the MAGNETIC LASSO TOOL. It can be difficult to master, but the MAGNETIC LASSO TOOL can be more effective when the colour difference between the area being selected and the surrounding background is high.

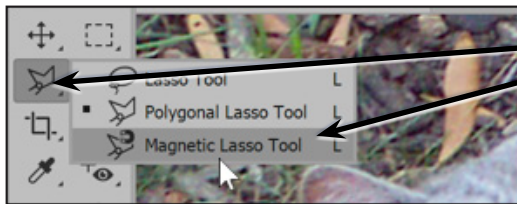
A Loading the Sample Photo

- 1 Load Photoshop or close the current files and select OPEN from the WELCOME screen or FILE menu.
- 2 Access the PScC SUPPORT FILES, open the CHAPTER 27 folder and open the CAT file.

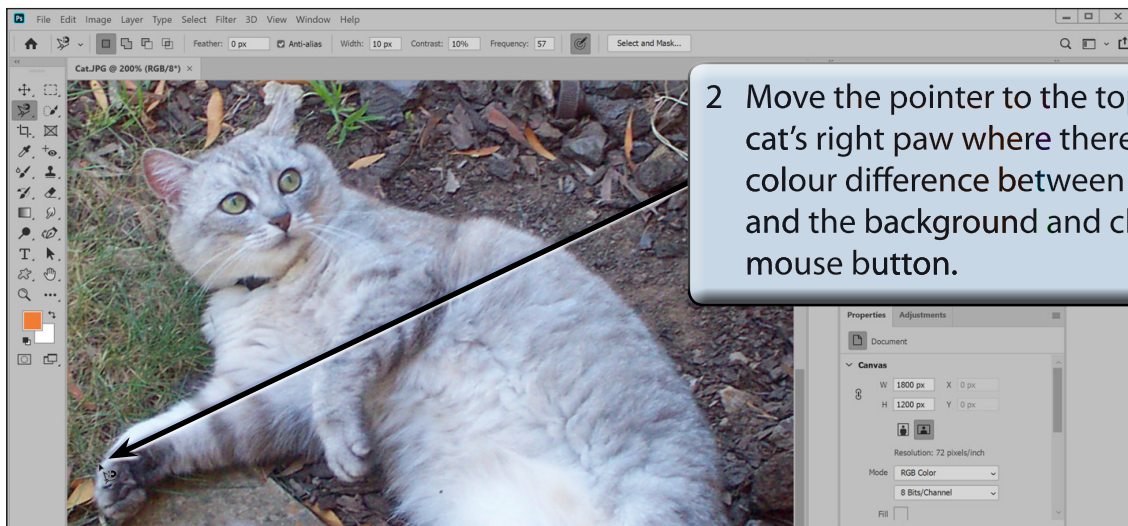


- 5 The difference between the cat and the background is clear for most of the image so the MAGNETIC LASSO TOOL can be used to select the cat. The tool will probably need a bit of help around the head and tip of the tail.

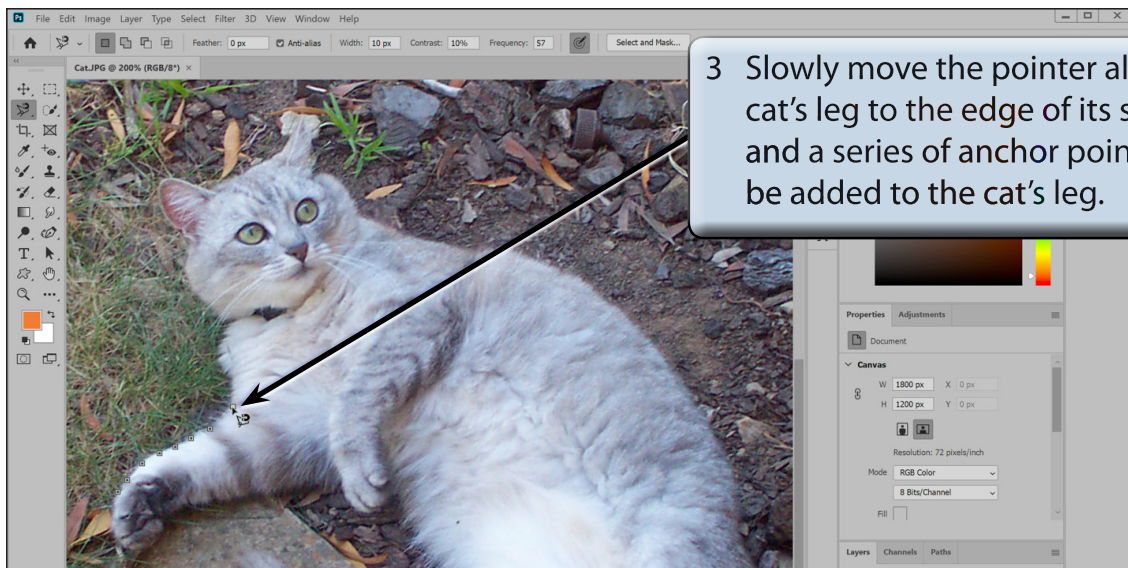
B Selecting the Cat



1 Select the MAGNETIC LASSO TOOL from the TOOLS panel. It is within the LASSO TOOL.



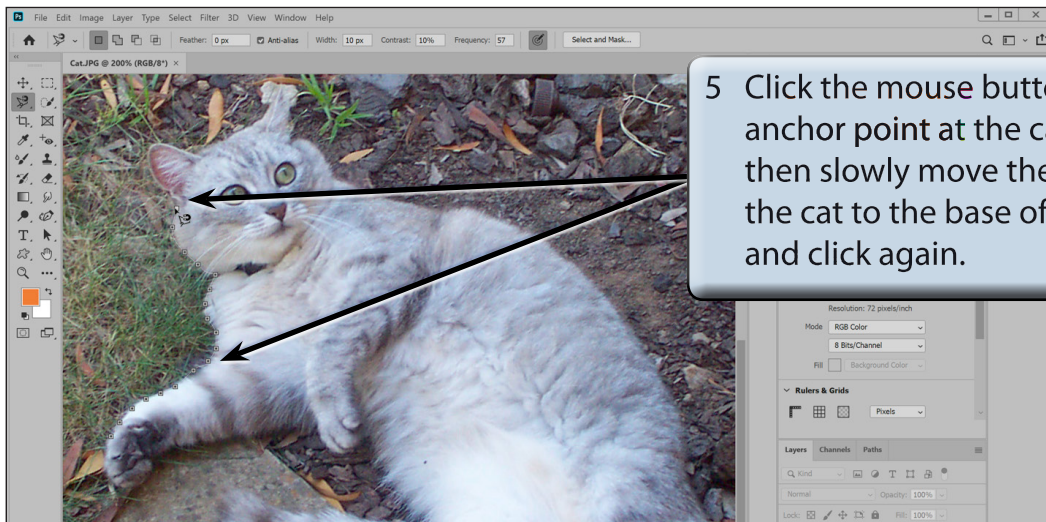
2 Move the pointer to the top of the cat's right paw where there is a clear colour difference between the cat and the background and click the mouse button.



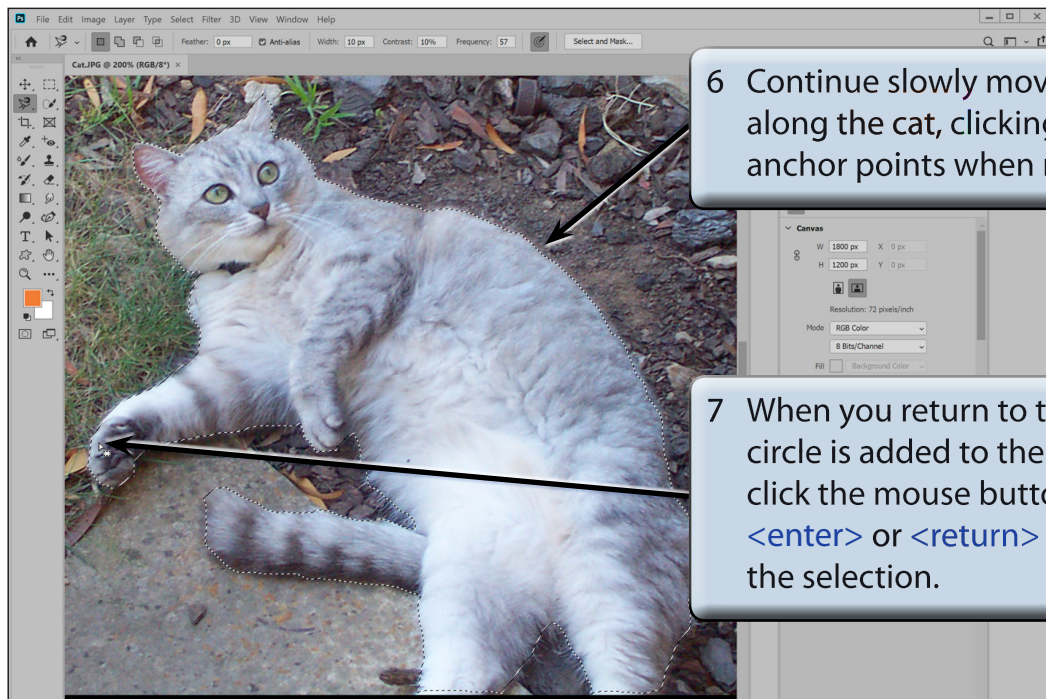
3 Slowly move the pointer along the cat's leg to the edge of its shoulder and a series of anchor points should be added to the cat's leg.

NOTE: Before the program assigns an anchor point you can move the pointer back if the selection jumps off the cat.

- 4 You can manually set an anchor point by clicking the mouse button. This can be useful when you need to change direction in the selection.



- 5 Click the mouse button to insert an anchor point at the cat's shoulder then slowly move the pointer along the cat to the base of its right ear and click again.



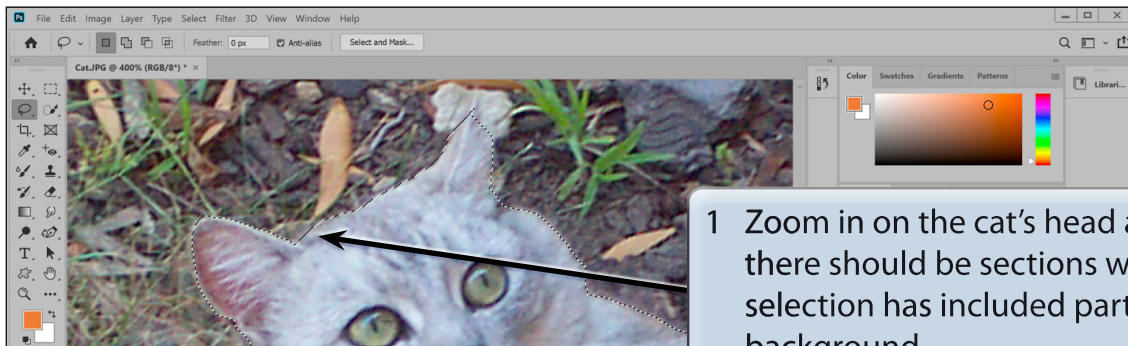
- 6 Continue slowly moving the pointer along the cat, clicking to set manual anchor points when necessary.

- 7 When you return to the start point a circle is added to the pointer. Either click the mouse button or press **<enter>** or **<return>** to complete the selection.

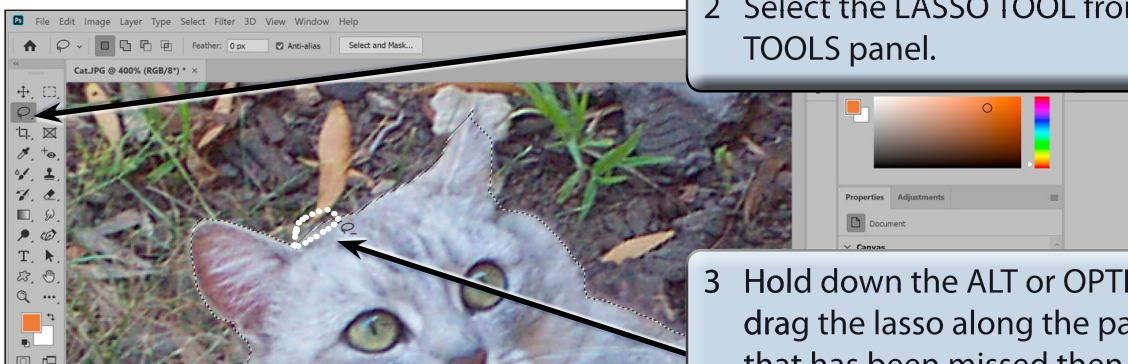
- NOTE:**
- i It might take a few attempts to get used to the **MAGNETIC LASSO TOOL**. You can press **CTRL+D** or **COMMAND+D** to remove the selection and try again.
 - ii Don't worry if the cat is not perfectly selected at a few points. The selection can be adjusted.

C Adjusting the Selection

The MAGNETIC LASSO TOOL is rarely able to fully select an object. Some manual adjustment to the selection is usually required.



1 Zoom in on the cat's head and there should be sections where the selection has included part of the background.



2 Select the LASSO TOOL from the TOOLS panel.

3 Hold down the ALT or OPTION key, drag the lasso along the part of cat that has been missed then enclose the selected part of the background.

- 4 When you release the mouse button the selection should be subtracted back to the cat.
- 5 Press CTRL+Z or COMMAND+Z if you make a mistake adjusting the selection and try again.