

Ps Master Photoshop and improve your photos

Photoshop

Photo Editing

For Photographers

*Learn what you
need to make your
images amazing*

Become more accomplished and

CREATIVE

We pass on our

EXPERTISE

in easy-to-follow guides

EXPAND

your understanding of digital
photo editing

Photo Editing

For Photographers



**Your essential guide
to the power of digital
photo editing.**

From the simplest adjustment to the exposure of a photograph, to the merging and blending of multiple images to create HDR photos, Photoshop has become the one stop shop for all your digital editing needs. Everyone from beginners to top level graphics professionals and photographers can all use this amazing image manipulation program and achieve great results very quickly. Let us show you just how powerful Photoshop is, and discover a range of tools and techniques that can make excellent digital artists of us all.



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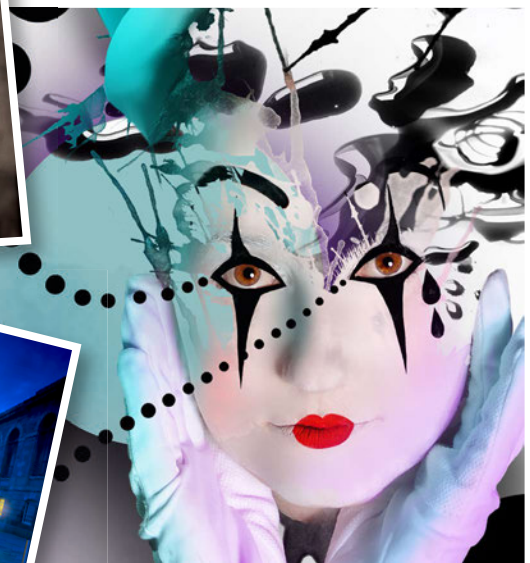


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Starting with Photoshop

Photoshop is a very complex image editing program, of that there is no doubt; but there's no reason to be daunted by all those tools, menus and technical jargon that surround this amazing piece of software. This is where you begin your journey into the world of digital image editing and make the most of your photos.

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Main Interface

This is Photoshop's graphic user front end

Photoshop has a great interface, with a dark slate grey work area, slightly lighter menu and palette bars and sharp white text. It looks great and really makes photos stand out from the background. Let's see what it has to offer.

Menu Bar

You'll find all the options menus here. Read on for more details.

Tool Palette

Here you'll find your main editing tools. The following pages look at the individual tools and what you can do with them.

Tool Option Bar

For each tool on the palette there are options, such as brush size or softness. You'll find them in this area.

Document Window

Each window you open will have its own tab to identify it. It includes the document name, current scaling and colour space being used.

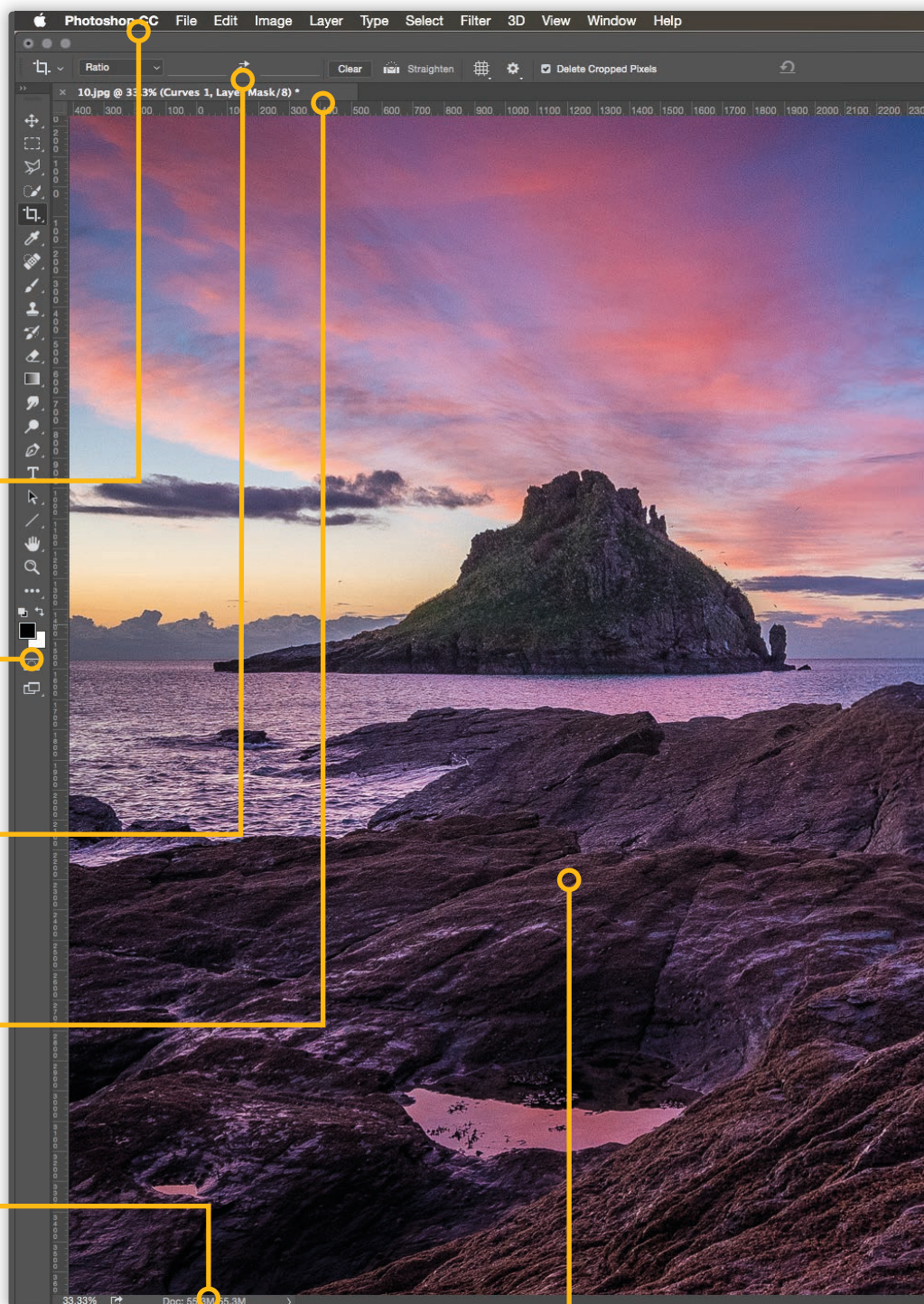
Document Details

Here you'll find the compressed and real size of your document.



USEFUL TIP

You can set up your own workspaces to reflect the way you work, and save them so that you can quickly switch from one to another.



Active Image

The new interface provides a larger area to work on your images, with a darker background colour.

Rulers

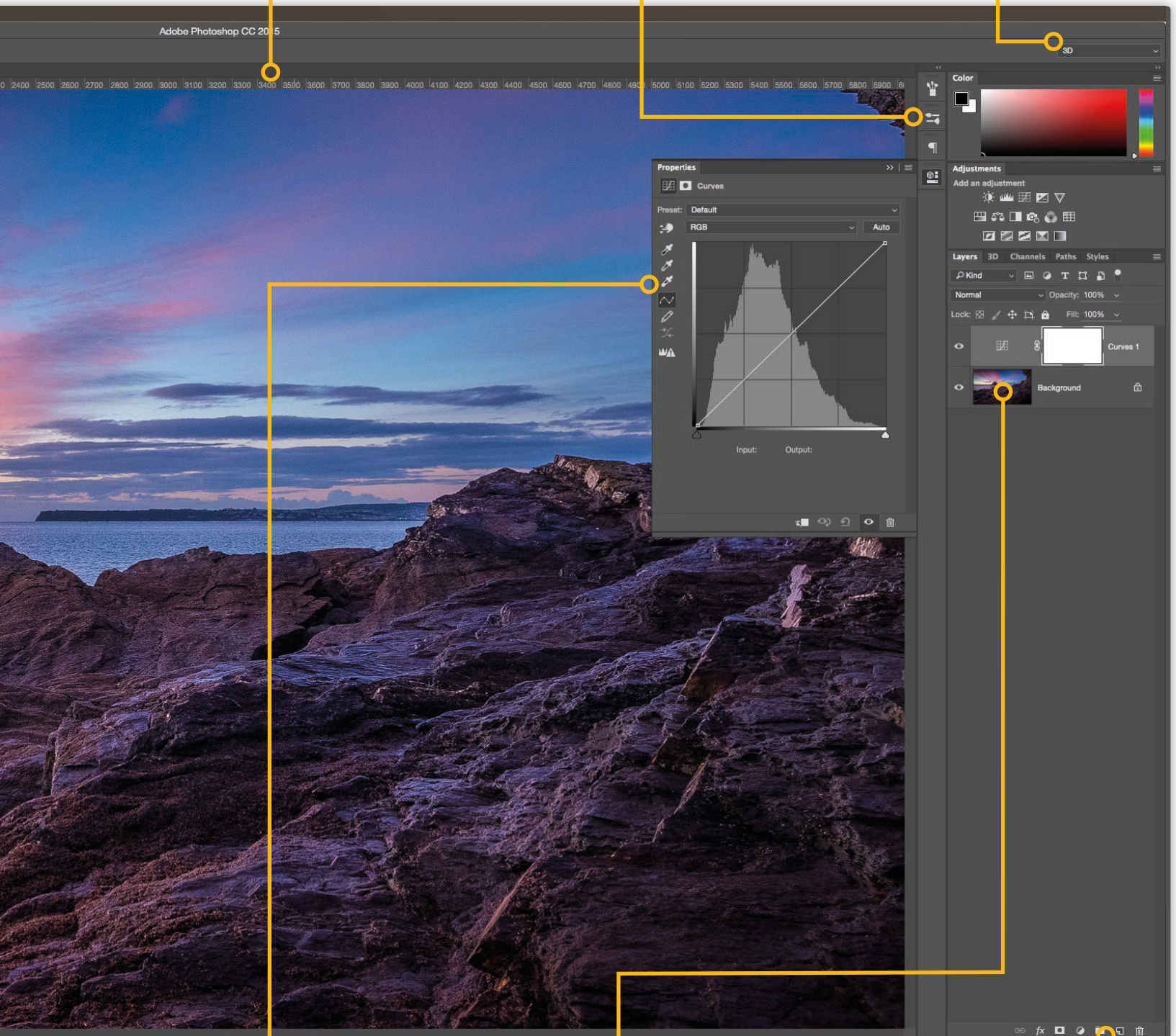
Use these to accurately measure positions on your image, and drag guidelines from here to help line up text and layers.

Palettes

There are a number of interchangeable palettes available, which you can choose from the Window menu.

Workspace Option

Choose between pre-set workspace arrangements, including 3D workspaces and other user options.



Fly-out Palettes

You can set up your own custom list of frequently used palettes, and access them by clicking on these buttons.

Layer Palette

Here you'll find the layers of the image you're currently working on. Layers at the top of the stack will appear above those below.

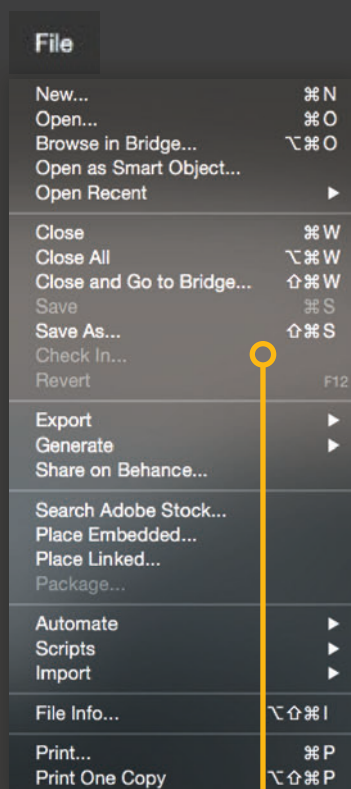
Layer Options

Here you can add effects, layer styles, adjustments and other options to your currently active layers.

Menus

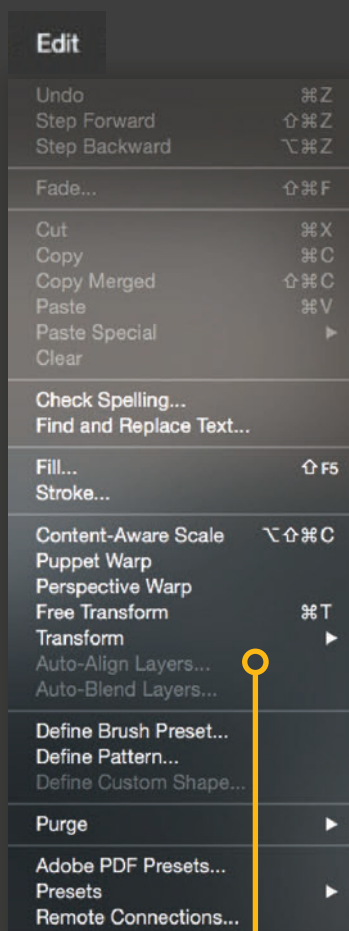
One look at the menus and you begin to understand Photoshop's complexity and versatility

The main interface of Photoshop has no fewer than eleven menus, each with a dozen or more options, and with many additional nested sub-menus. It's vital to become familiar with the contents of the most important ones, because once you know where to look for everything you'll be able to work more quickly, efficiently and confidently.



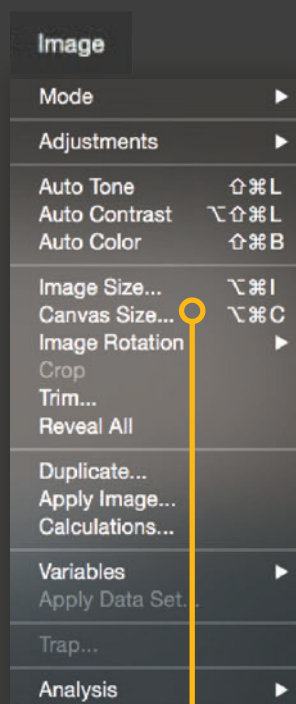
File

The most important options here are New... to create a new document, Open... to open an existing document, Save to save your current project in its default file format and location, and Save As... which gives you the option to save in a different format or location, and to change the file name. Also in the File menu are the important Automate and Scripts sub-menus, which provide advanced batch processing and automated editing options.



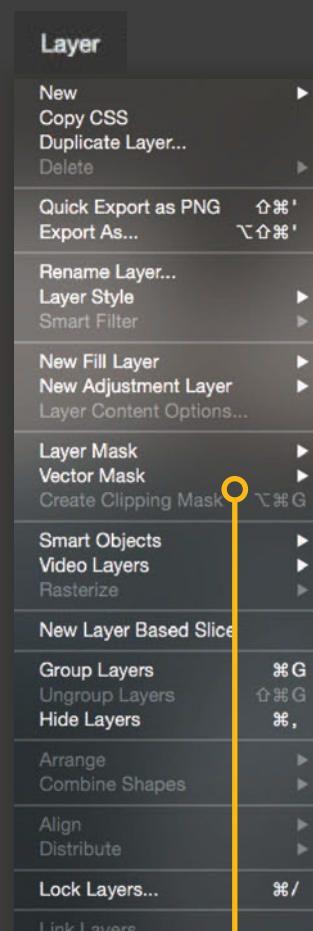
Edit

The Edit menu has many features you'll find familiar if you use a word processor, including Copy, Paste and Cut functions and even a spelling checker, although you'll probably find it quicker to use the keyboard shortcuts for these. You'll also find the useful features Fill, Stroke, Content-Aware Scale, Puppet Warp and Free Transform, as well as the colour profiles and Preferences sub-menu.



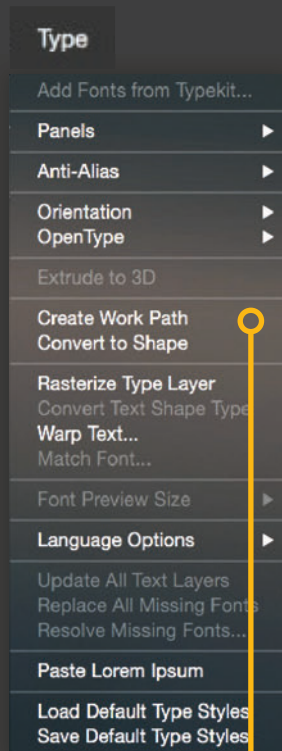
Image

The Image menu is where you come to make changes to the whole image, including Mode (colour type), Image Size, Canvas Size and Image Rotation, but the most important thing you'll find here is the Adjustments sub-menu, which Adobe could probably have made into a separate main menu in its own right. Under Adjustments you'll find all your main image controls, such as Brightness/Contrast, Levels, Curves, Hue/Saturation and many more. You'll find many of these duplicated on the Adjustment Layer palette.



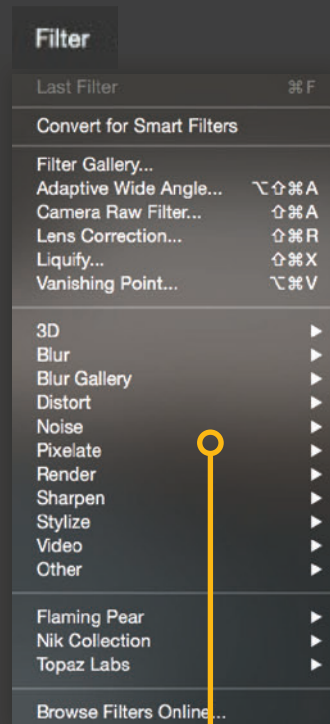
Layer

Layers are a vital feature of Photoshop. Over the long history and development of the program Layers have evolved into complex multi-functional things, hence the large number of sub-menus in this section. The most important options here though are New, which lets you create and name a new layer, and New Adjustment Layer, which adds a non-destructive editing layer to your image. The Merge and Flatten options can also be found here.



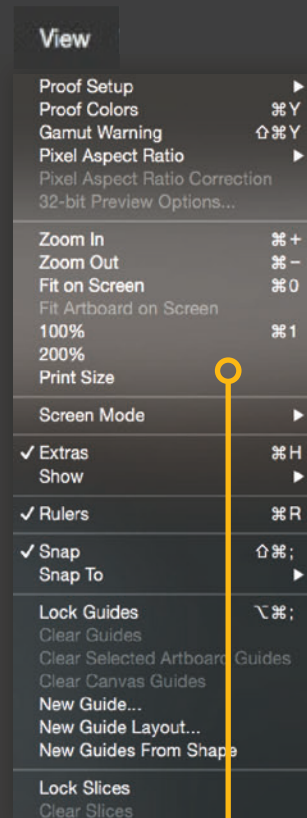
Type

The latest version of Photoshop includes many new text presentation and handling options. Most of these can be found in the fly-out Character and Paragraph panels on the right of the screen or accessed from the Panels option at the top of the menu, but others can be found here, including 3D text, warping, and special foreign language options.



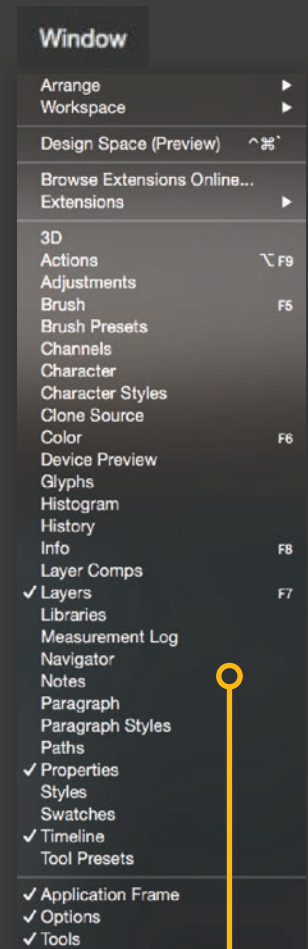
Filter

Photoshop CS6 and Creative Cloud saw a major overhaul of the Filters menu, with many new options, including the amazing Adaptive Wide Angle feature. There's the ever-popular Liquify filter, automatic lens distortion correction, as well as a huge range of other filters and effects. Don't go too wild though, most of them are best used sparingly!



View

The View menu is home to the basic viewing controls such as zoom level, but again you'll want to control those using shortcuts to save time. You'll also find the very useful controls for the Snap functions, including guide lines, essential when you're laying out a design or composing text on an image.



Window

This isn't a menu you'll be using constantly, but it does hold some very useful features, such as the Arrange and Workspace sub-menus, which allow you to control the layout of tabs, windows and the various tool palettes and panels.

The Toolbar

Let's take a look at Photoshop's main editing tools

The main elements of the Photoshop Toolbar haven't changed all that much since the introduction of Layers and the Move tool with version 3.0, back in 1994. The shape has changed a bit, elongating into a single column to take advantage of today's larger monitors, and a few more tools have been added over the years, but anyone who's familiar with any previous version of Photoshop will soon feel right at home with the latest version.

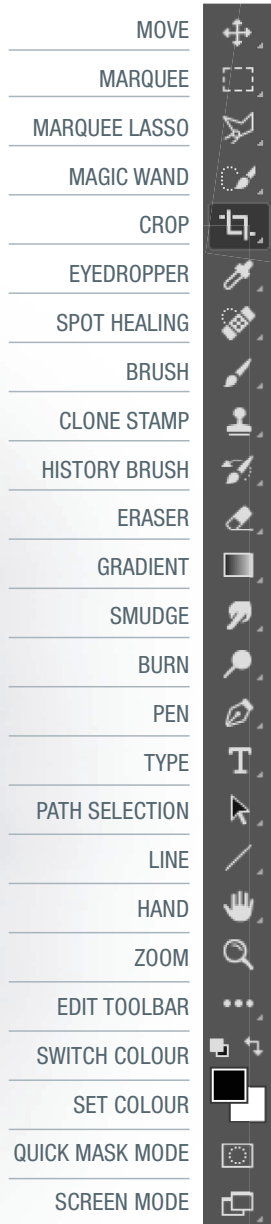
In common with previous versions, most of the tools have alternate

options, denoted by a small arrow in the bottom right corner of the tool icon. Click and hold on any tool bearing this mark to see a pop-up menu showing the other options that are available. Most of the tools can also be selected by using a hotkey shortcut. These shortcuts can be customised via a link in the Edit menu, but of the default keys, among the most useful are "C" for the Crop tool, "M" for Marquee selection tool, and "E" for the Eraser. Here's a quick run-down of what you have available on the Toolbar.



USEFUL TIP

Most of the tools in the toolbar have alternative options, denoted by the small arrow below and right of the icon. Click and hold on the icon to see the pop-up alternative menu. This diagram shows the alternative menus for each tool. You can move the Toolbar around by dragging the border at the top, or switch back to the old two-column look by clicking the double arrow.



Move

Used to move pixel information on the active layer or selection. You can also create multiple layouts using the Artboard feature.

	Move Tool	V
	Artboard Tool	V

Marquee

The Marquee is used to select an area of the active layer. Alternative options include an elliptical shape and single row or column selections.

	Rectangular Marquee Tool	M
	Elliptical Marquee Tool	M
	Single Row Marquee Tool	
	Single Column Marquee Tool	

Lasso

The Lasso is also used to make area selections from the active layer, but this time the shape can be irregular, marked out by clicking or drawing a line around the area to be selected.

	Lasso Tool	L
	Polygonal Lasso Tool	L
	Magnetic Lasso Tool	L

Magic Wand

Yet another area selection tool, this one can select an area based on its colour. The alternative option is Quick Selection, which as the name suggests can be used to paint an area into the selection created.

	Quick Selection Tool	W
	Magic Wand Tool	W

Eyedropper

The Eyedropper and its extensive list of alternatives provide you with tools that can tell you more about the image you're working on, such as colour values, sizes and even a tool for counting objects in an image.

	Eyedropper Tool	I
	3D Material Eyedropper Tool	I
	Color Sampler Tool	I
	Ruler Tool	I
	Note Tool	I
	Count Tool	I

Crop

The Crop tool has seen a major overhaul in Photoshop CS6, but it still does the same job. Use it to select one area of an image and discard the rest.

	Crop Tool	C
	Perspective Crop Tool	C
	Slice Tool	C
	Slice Select Tool	C

Burn

Burn, and its alternatives Dodge and Sponge, are based on photographic darkroom techniques, and are used to selectively lighten, darken images.

	Dodge Tool	O
	Burn Tool	O
	Sponge Tool	O

Spot Healing

Another tool that has seen some changes in the latest version, the Spot Healing tool is for removing small blemishes such as stray hairs or dust spots from your images.

	Spot Healing Brush Tool	J
	Healing Brush Tool	J
	Patch Tool	J
	Content-Aware Move Tool	J
	Red Eye Tool	J

Pen

The Pen tool is used to draw smooth curves for lines or selections, using something called Bezier curves. They can produce great results.

	Pen Tool	P
	Freeform Pen Tool	P
	Add Anchor Point Tool	
	Delete Anchor Point Tool	
	Convert Point Tool	

Path Selection

Paths are used for many purposes in Photoshop. Use this tool and its alternative to select a path to use.

	Path Selection Tool	A
	Direct Selection Tool	A

Type

The Type tool is another area that received a major overhaul in version CS6. It is now part of a powerful text system.

	Horizontal Type Tool	T
	Vertical Type Tool	T
	Vertical Type Mask Tool	T

Brush

The Brush tool is one of the most basic and most useful for all types of image editing, painting and drawing. Alternatives include the equally useful Pencil tool, as well as colour replacement and colour mixing.

	Brush Tool	B
	Pencil Tool	B
	Color Replacement Tool	B
	Mixer Brush Tool	B

Line

The Line tool and its alternatives are used to create shapes and paths on your images. It is very useful for graphics work and adding arrows and custom shapes.

	Rectangle Tool	U
	Rounded Rectangle Tool	U
	Ellipse Tool	U
	Polygon Tool	U
	Line Tool	U

Clone Stamp

Arguably the most powerful of Photoshop's many tools, the Clone Stamp is used to copy one area of an image onto another. Remove any unwanted element in your image.

	Clone Stamp Tool	S
	Pattern Stamp Tool	S

History Brush

Used in conjunction with the History palette the History Brush can be used to selectively restore certain areas of an image to a previous state. It's useful if you're making a changes to an image.

	History Brush Tool	Y
	Art History Brush Tool	Y

Eraser

As the name implies, the Eraser tool is a special brush that can delete an area of an image, layer or selection.

	Eraser Tool	E
	Background Eraser Tool	E
	Magic Eraser Tool	E

Gradient

The Gradient tool can apply a fill-in to an area that fades gradually from one colour to another.

	Gradient Tool	G
	Paint Bucket Tool	G
	3D Material Drop Tool	G

Smudge

The Smudge tool, along with its alternatives the Blur and Sharpen tools, can be used to blend and alter colours and details in smaller areas of the image.

	Blur Tool	
	Sharpen Tool	
	Smudge Tool	

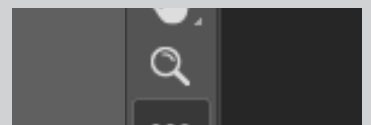
Hand

The hand tool is used to navigate around a large image. It is most often used via its default keyboard shortcut, the space bar.

	Hand Tool	H
	Rotate View Tool	R

Zoom

This tool simply zooms in to an area of the image. Again it is most often used via a shortcut, in this case CTRL + or CTRL -.



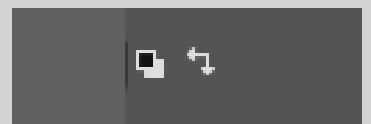
Edit Toolbar

The Edit Toolbar enables you to customise your toolbar to add or remove tools to your specific requirement.



Switch Colour

Clicking on this swaps the current background colour for the current foreground colour.



Set Colour

Clicking here brings up the colour chooser palette, which lets you choose the foreground or background colours.



Quick Mask mode

The Quick Mask mode is a great way of making complex selections using the drawing and painting tools.





Keyboard Shortcuts

There's always a quicker way of doing almost everything in Photoshop

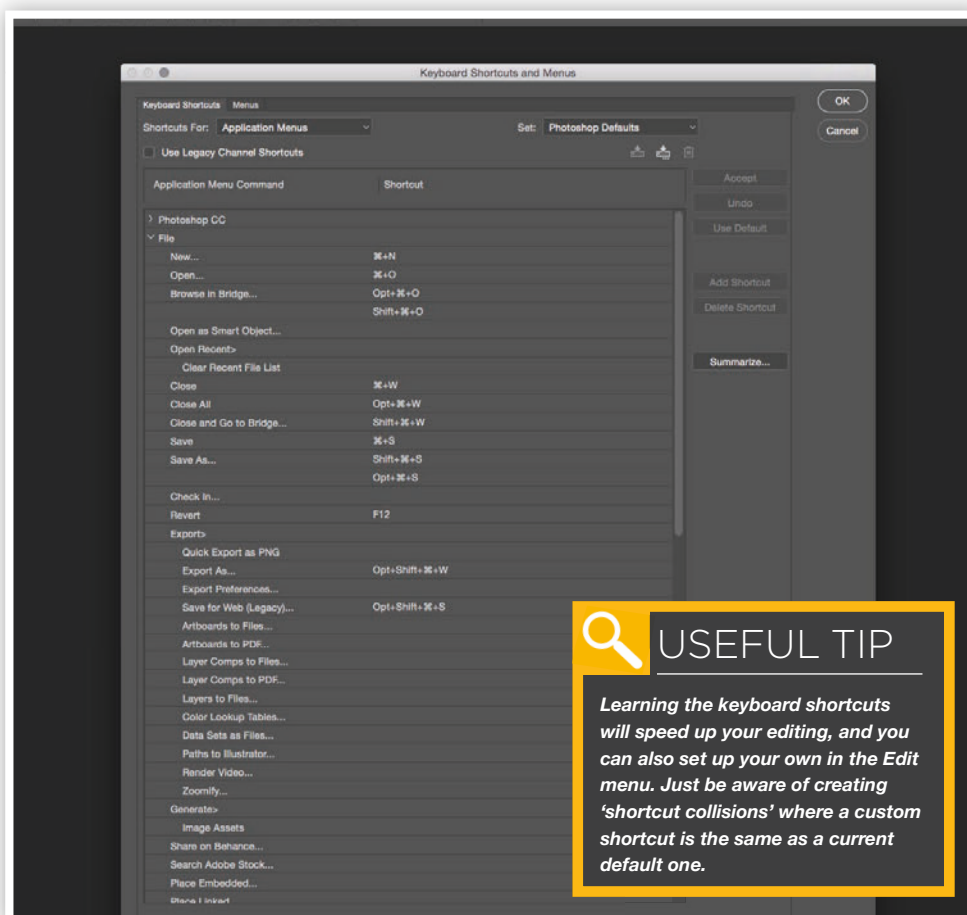
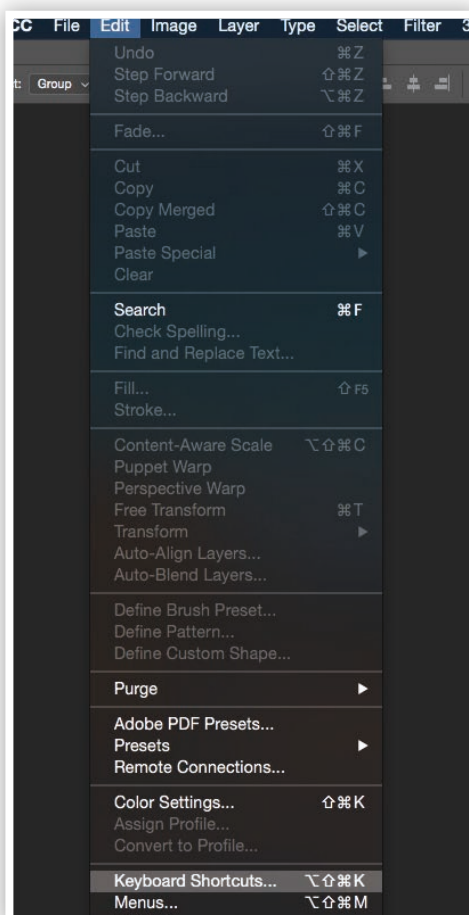
One of Photoshop's best features is its huge list of fully customisable keyboard shortcuts. Almost all of the program's functions can be accessed quickly by pressing various combinations of keys, and once you learn those shortcuts your workflow will speed up immensely. You can even make up your own for your most frequently-used operations.

Customising Shortcuts

You'll find the keyboard shortcut preferences menu at the bottom of the Edit menu, although naturally it has its own keyboard shortcut, Alt+Shift+Ctrl+K. You'll find an exhaustive list of all Photoshop functions, broken down into category headings matching the names of the main menus. You'll find that many operations

already have their own default shortcuts. You can easily change these, or even add your own new ones. To apply a shortcut to an operation, first locate it in the list, and then click in the space to the right of the name. You'll see a small text window appear, and the next key or combination of keys that you press will appear here. If the

combination is already used by another shortcut you'll see a notification warning you of this, and asking if you want to proceed with the change. If you click Accept the new shortcut will be applied immediately. Take care when making your own shortcuts that you don't accidentally overwrite some useful defaults.



USEFUL TIP

Learning the keyboard shortcuts will speed up your editing, and you can also set up your own in the Edit menu. Just be aware of creating 'shortcut collisions' where a custom shortcut is the same as a current default one.

Some Useful Default Shortcuts

Here are some of the more commonly-used shortcuts for image editing. There are many more of course, but it's worth taking the time to memorise these ones. You'll work efficiently and they'll make your life a whole lot easier.

CREATE NEW DOCUMENT

control + N

REDO LAST STEP

shift + control + Z

INVERT SELECTION

shift + control + I

PASTE FROM CLIPBOARD

control + V

CREATE NEW LAYER

shift + control + N

LEVELS

control + L

ZOOM IN VIEW

control + +

COPY TO CLIPBOARD

control + C

CLOSE CURRENT DOCUMENT

control + W

CURVES

control + M

ZOOM OUT VIEW

control + -

CUT TO CLIPBOARD

control + X

CLOSE ALL DOCUMENTS

alt + control + W

INCREASE BRUSH SIZE

}

FIT ON SCREEN

control + 0

FREE TRANSFORM

control + T

SAVE CURRENT DOCUMENT

control + S

DECREASE BRUSH SIZE

{

100% ZOOM

alt + control + 0

TURN SNAP ON OR OFF

shift + control + ;

SAVE AS

control + shift + S

BRING CURRENT LAYER TO TOP

shift + control + }

SHOW RULERS

control + R

SELECT ALL ON CURRENT LAYER

control + A

UNDO/REDO

control + Z

MOVE CURRENT LAYER UP

control + }

SHOW OR HIDE GRID

control + "

DESELECT ALL

control + D

UNDO LAST STEP

alt + control + Z

MOVE CURRENT LAYER DOWN

control + {

SHOW OR HIDE GUIDES

control + ;

HELP

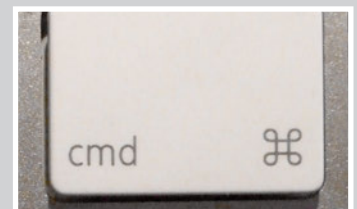
F1

Important Note

On a PC the Ctrl key for your shortcuts looks like this on a standard Windows keyboard. If you use a PC and you see an instruction in this title to use a Cmd key, then just use Ctrl instead.



On a Mac computer the Ctrl key is replaced by the Cmd key on a standard Mac keyboard. If you use a Mac and you see an instruction in this title to use the Ctrl key, just use your Cmd key instead.



Selection Tools

Photoshop provides multiple methods for isolating areas of your image

The ability to select discrete areas of an image and change them in isolation is fundamental to Photoshop editing, and to help with this there are many different ways of making that selection. The most frequently used are the Marquee tools, which allow

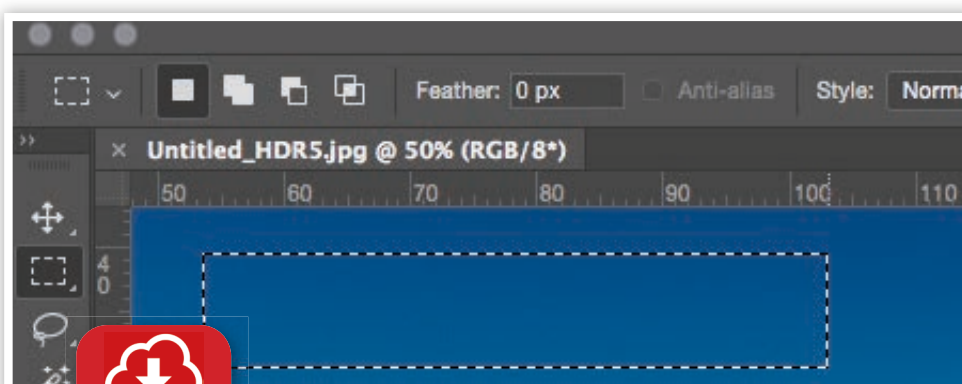
you to select regular shapes such as rectangles, ellipses and lines. For irregular shapes there are several Lasso tools, which let you draw the area to be selected. For quicker selections there are the Magic Wand and Quick Selection tools.

Common Options

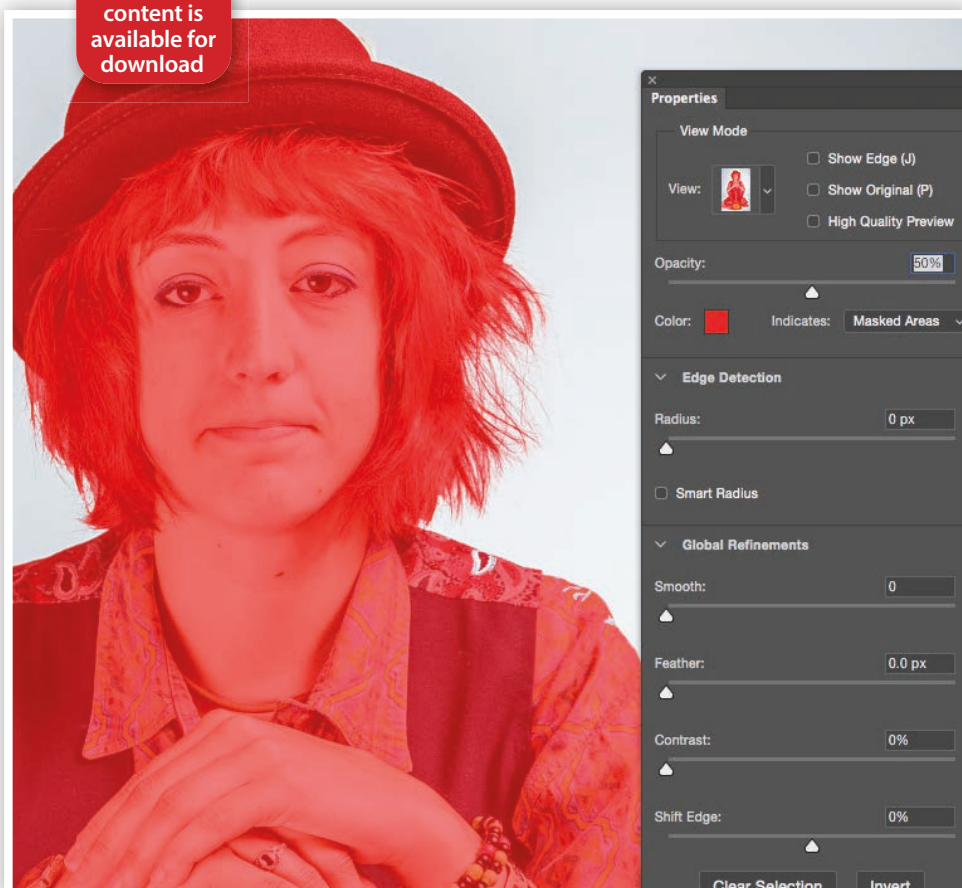
If you look across the top left of your menu bar, you will see there are common tool options for all of the selection tools. The first row of four buttons are: New Selection, which is the default setting; Add To Selection, which can also be activated temporarily by holding down the Shift key; Subtract From Selection, also activated by the Alt key; and Intersect With Selection, which selects only from areas you have already selected.

Edge Refinement

The next option is Feather, which softens the edge of the selection, useful for gradual effects. The edge of the selection can be further adjusted by using the Refine Edge menu in CS6 or Select and Mask in Photoshop CC, which uses sophisticated edge-detection techniques to automatically select around things like fine hair or soft and blurred edges.



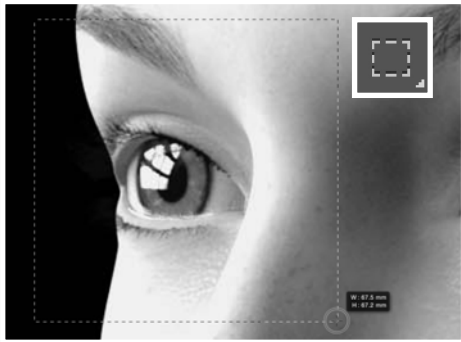
This tutorial content is available for download



USEFUL TIP

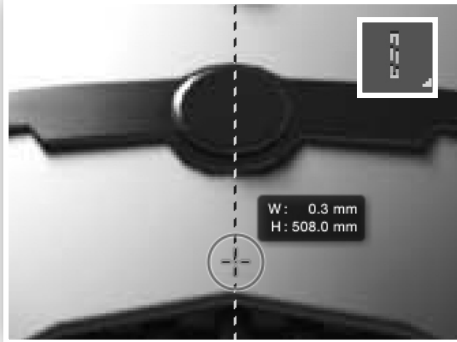
You can use the Quick Selection tool to quickly paint a selection using an adjustable round brush tip. As you drag, the selection expands outward and automatically finds and follows defined edges in the image. If the tool isn't visible in your toolbar, hold down the Magic Wand tool to see the fly-out menu with the additional options that are available to you.

Rectangular Marquee



Lets you make a selection of a rectangular area of any size or aspect ratio. Just click and drag to the right size. Hold down the Shift key to constrain the selection to a square shape, and use the arrow keys to move the selection area.

Single Column Marquee



This option creates a selection of just a single vertical column of pixels. This is useful for tidying up other selections or crops that are just a little too big. Click near the area you want to select, and then drag the marquee to the exact location.

Elliptical Marquee



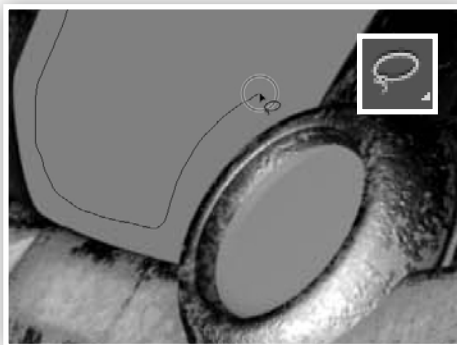
Create a selection of an elliptical shape of any size or proportion. Just click and drag to the size and shape you need, and hold down the Shift key to draw a circle. If you hold down the Alt key the ellipse will be centred on the starting point.

Magnetic Lasso



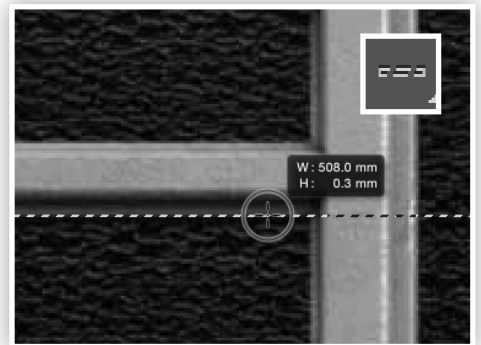
This tool uses edge-detection to try to match your selection to the edges of the subject in the image. You simply draw a line as closely as possible to what you want, and it should automatically snap to the edge. Works best on high contrast areas.

Lasso



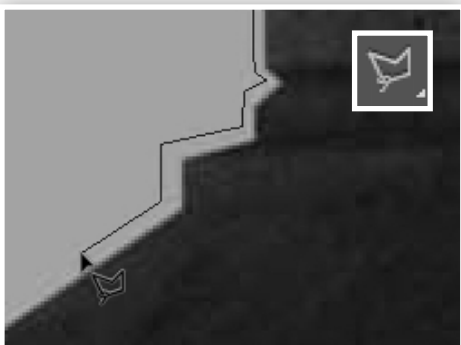
The Lasso is also used to make area selections from the active layer, but this time the shape can be irregular, marked out by clicking or drawing a line around the area to be selected. Join up your lasso at the point you started to close the selection.

Single Row Marquee



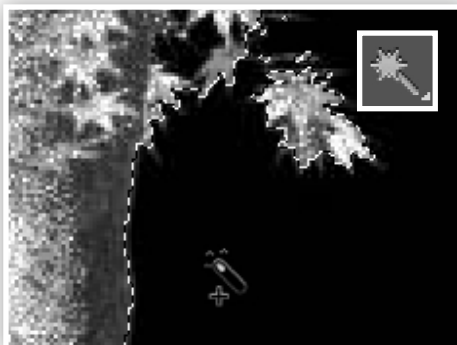
This is the same as Single Column Marquee, but this time it selects a single horizontal row of pixels. As with the Single Column Marquee option, click near the area you want to select, and then drag the marquee to the exact location.

Polygonal Lasso



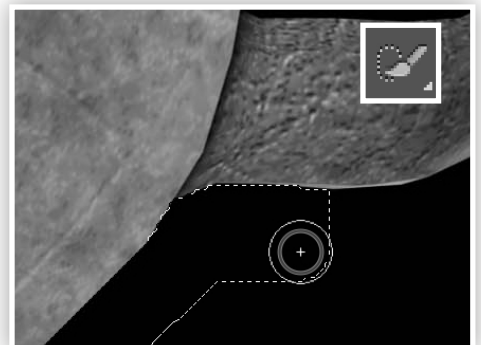
The Polygonal Lasso lets you draw a point-to-point line around your subject. It can only draw straight lines, but by using very short sections it's possible to approximate a curved line. To draw curved lines you need to use the Pen tool.

Magic Wand



This tool lets you select areas of the same colour and brightness, and by adjusting the tolerance and whether or not it will select contiguous areas, you can use it to do things like automatically select all the sky in your image.

Quick Selection

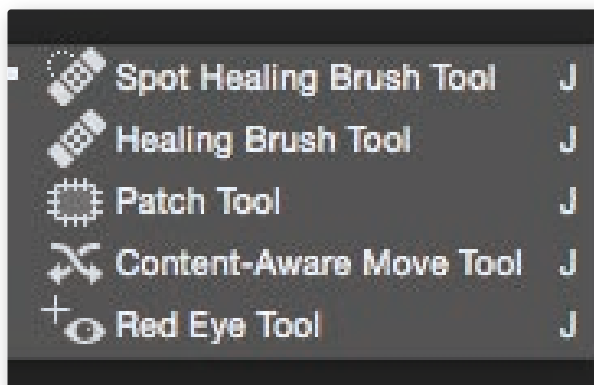


This tool lets you paint a selection, and uses edge detection to try to match the selection to the nearest edge in the image. Again it's often only an approximation, and will have problems with blurred or low contrast edges.

Healing Brush Tools

Clean-up minor blemishes, dust spots and stray hairs with the Healing Brush tools

Even with a modern digital camera, your photos may have slight imperfections. Maybe it's just a stray hairs or an unwelcome skin blemish in a portrait, or maybe some dust has managed to get onto your sensor, causing dark spots on your photos. Whatever the reason, sometimes you need to remove some small features from your images, and the best tools for this are the Healing tools. There are five healing tools in Photoshop, which you can see if you click and hold on the Spot Healing Brush tool icon in the tool palette.



USEFUL TIP

To get the best out of the healing tools, you need to work with care and not overdo the effect. The key to success is to be subtle. There is also no reason you can't use several of the healing brushes to make sure you get a perfectly healed image.

Healing Brush Tool



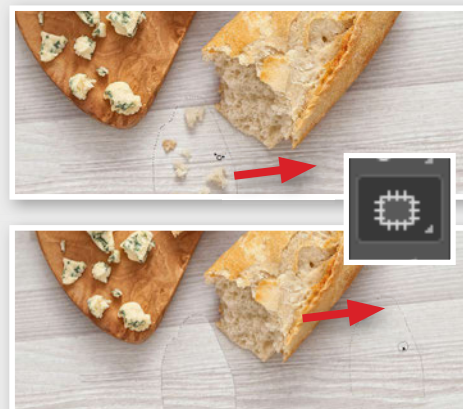
The Healing Brush is a legacy from older versions of Photoshop. It does much the same job as the Spot Healing Brush, but is rather less sophisticated. It works in much the same way as the Clone Stamp tool. To heal a blemish, you first need to set a sample point by clicking on an area of similar texture while holding down the Alt key, then painting the sample over the blemish. As ever, when it comes to healing and cloning techniques, subtlety is the key. You may find that it might take several attempts to get a good texture that doesn't stand out as being cloned in.

Content Aware Move

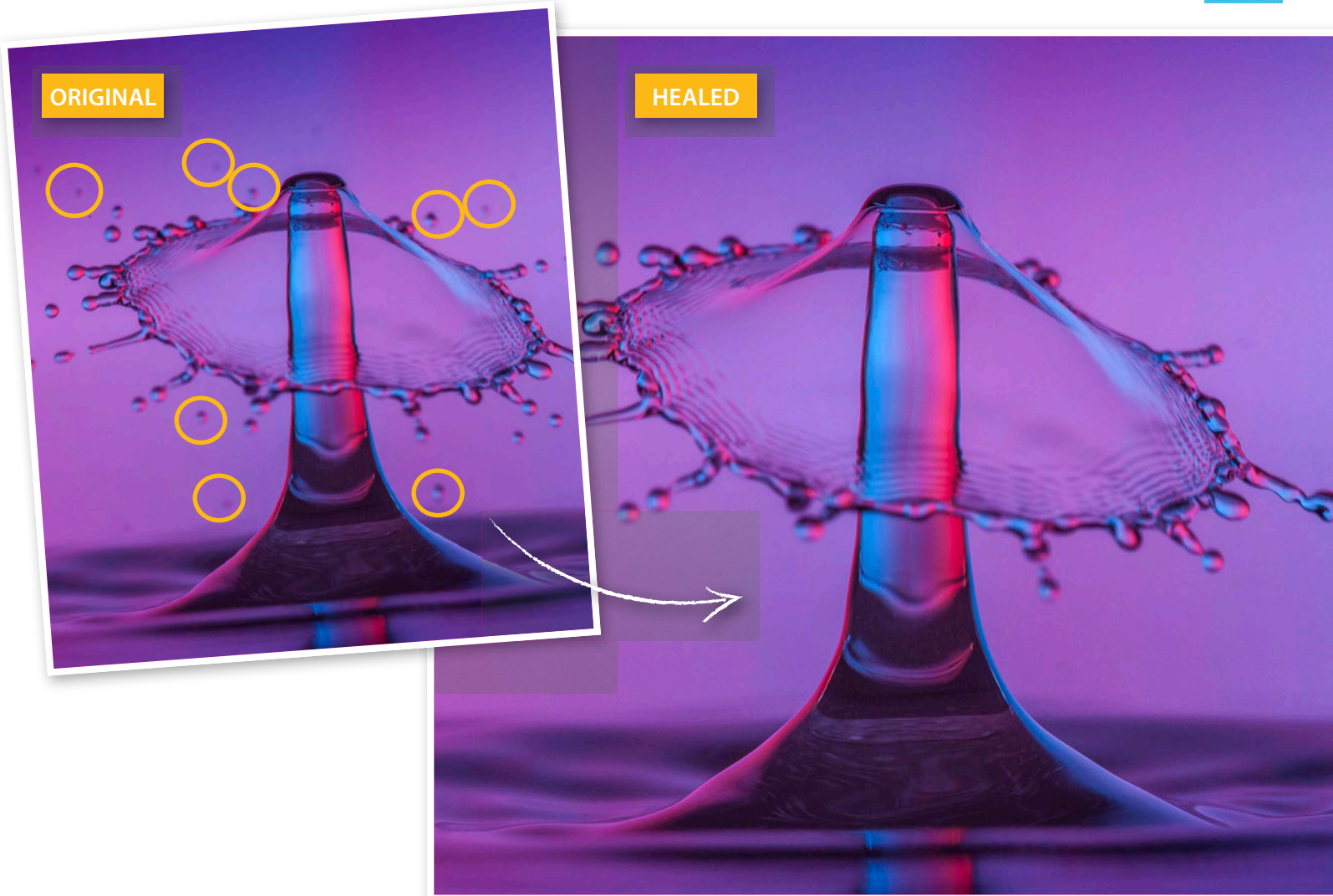


The Content Aware Move tool was introduced in Photoshop CS6. The idea is that you can simply draw a selection around an object and then drag it to another place. The program analyses the surrounding area and fills in the source with a matching texture. In practice the Content Aware Move tool is only useful in very specific circumstances, when the object you want to move is surrounded by a uniform texture. You will find that the more even the texture, the better the final result. Backgrounds such as grass and blue sky are much more successful candidates for this.

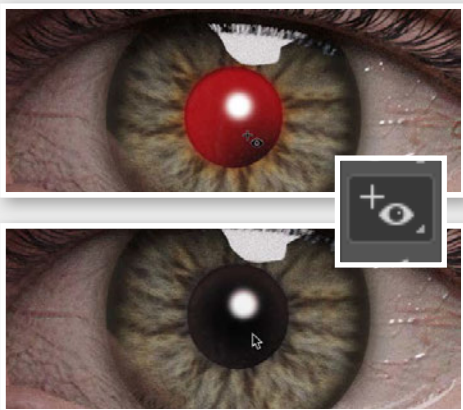
Patch Tool



The Patch tool is used for repairing larger areas. It can be used in one of two ways; either draw around the area you want to replace and then drag the sample to an area of matching clean texture, or sample an area of clean texture and then drag it over the part you want to replace. Here, a patch of wooden floor can be used to remove some bread crumbs from the shot. As you drag the patch, it will show you a real-time overlay over your target area so you can align it as best you can to ensure a good patch.

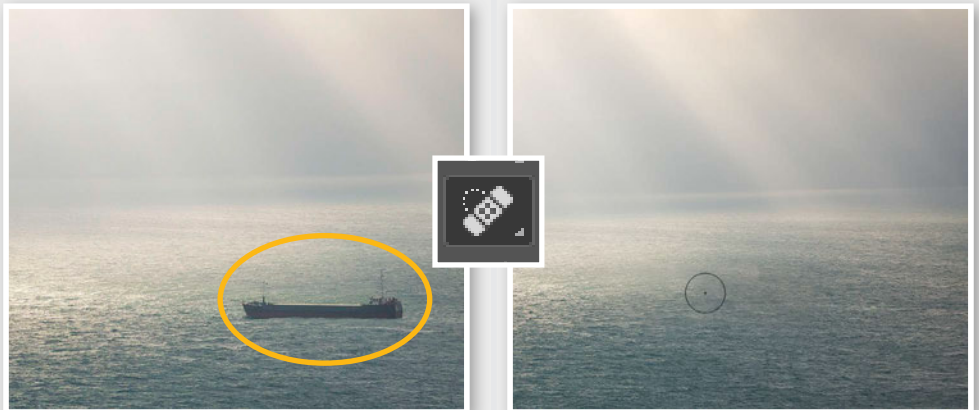


Red Eye Tool



Red Eye is caused by light from a camera flash reflecting off the blood vessels at the back of the eye when the pupil is wide open. It's possible to avoid it by proper camera technique, but if you find it in one of your portraits, Photoshop has a quick and easy tool to help remove it. Simply click on the offending redness and the tool will automatically analyse how much redness there is in the subject's eyes and remove it and replace it with a more natural-looking tone which is usually black or a very dark tone.

Spot Healing Brush Tool



For removing small objects such as dust spots and stray hairs, the Spot Healing Brush is the most useful and effective tool at your disposal. In some cases, you can even remove larger objects and people. When you use it to paint over an object, the brush samples the area around it and replaces the object with a simulation of the background. The way that it samples can be selected, and most effective option is Content Aware sampling. The brush parameters can be adjusted like any other brush.



USEFUL TIP

Camera sensors pick up dust spots over time. Use the Spot Healing Brush to remove unwanted sensor dust spots that appear on your digital images. As you can see from these examples, you can also remove larger objects as long as you have an even background behind it, otherwise the effect might look fake.

The Clone Stamp Tool

Remove unwanted elements from your photos

The Clone Stamp tool (also known as the Clone Brush in some programs) is one of the most useful items in your image editing tool kit. Despite recent developments such as Photoshop's Spot Healing tool and Content-aware fill, it is still the most precise and reliable way to retouch photographs, allowing you to remove unwanted

elements such as dust spots, skin blemishes, lens flare, telephone lines and other intrusive objects from your pictures. Because the process is entirely manual it can be somewhat time-consuming, but the results are often superior to the output of the more modern automatic tools.

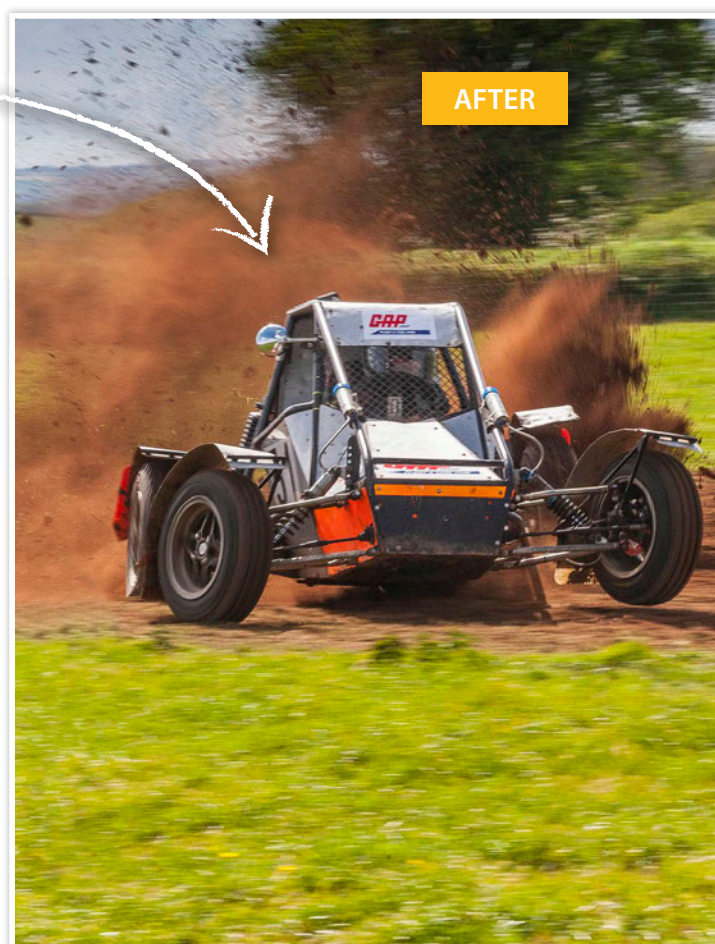


USEFUL TIP

Vary brush size by using the open and close square brackets keys, and vary brush hardness with the curly brackets.



BEFORE



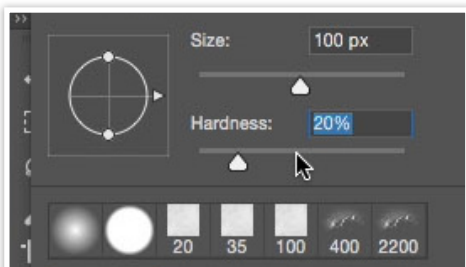
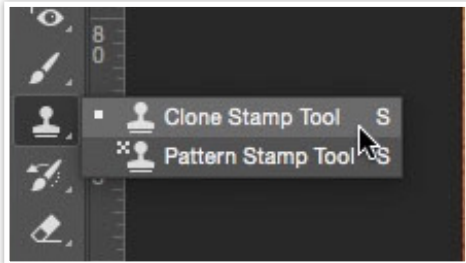
AFTER

The Clone Stamp works by copying ("cloning") pixels from a selected target area and placing them over the unwanted objects. Using the Clone Stamp it is relatively straightforward to remove even quite large unwanted objects from a photo. Our example is a photo taken at a motorsport event. It is a good shot with plenty of action and flying dirt, but we thought the flags in

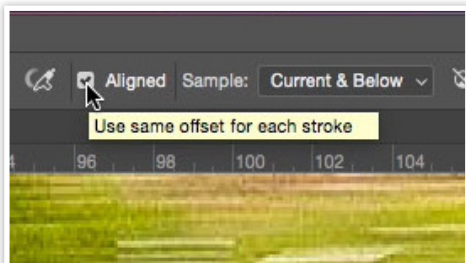
the foreground were a bit distracting, as was the telephone line stretching across the back of the shot in the top left corner.

We decided it would be a good demonstration of the power of the Clone Stamp tool to remove both flags and the telephone line from the shot. Let's see how they were removed.

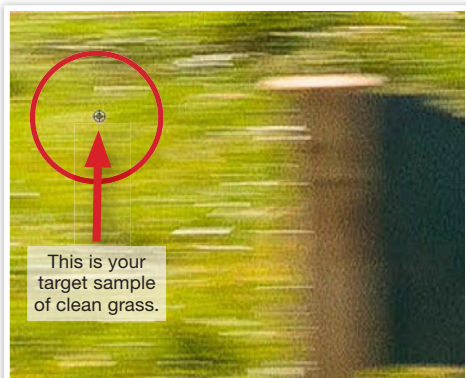
01 Go to your toolbar and select the Clone Stamp Tool (S). For the image we're working on, a brush Size of about 75 - 100 pixels will be fine. You can make the brush Hardness anywhere between 0% - 20%. We're going to start with the flag in the lower right corner.



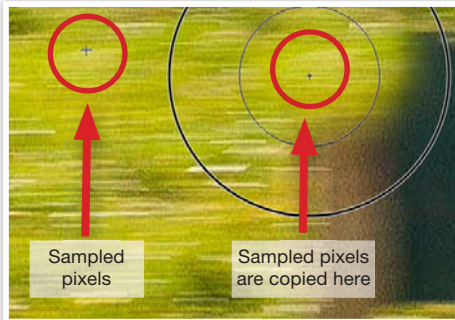
02 Make sure that you have the Aligned option ticked. This means that the sampling area of your brush moves as your brush does, otherwise you will clone the same sampled area repeatedly until you alter it.



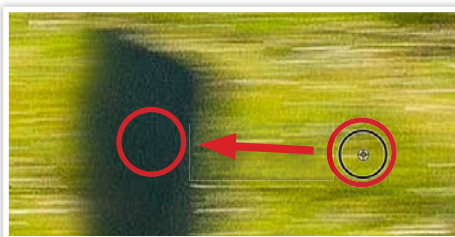
03 Find an area of clean grass next to the flag and then press your Alt key. A small target icon will appear. Anything under this target will be your sample to be used as the starting point of the cloning. Left-click your mouse to confirm this as your sample area.



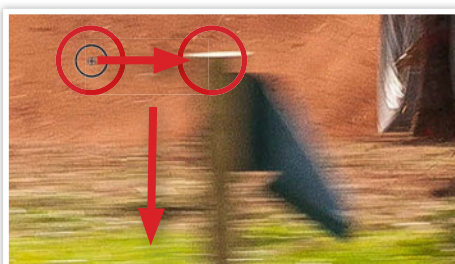
04 Now move your cursor over the top of the flag, level with your target area from the last step. It is shown as an overlay so you can see what you are about to clone on top of your flag. If you click and drag your mouse down the flag pole, the grass adjacent to it will be cloned over the top, removing the pole.



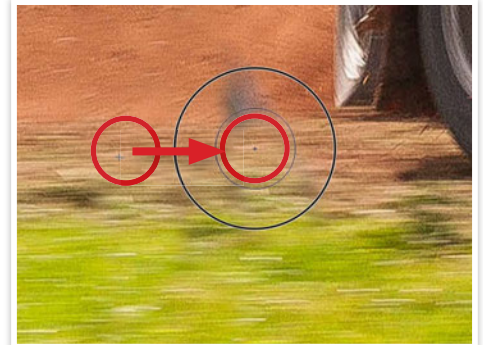
05 You can now choose another target sample to the right of the flag and clone grass from that side over the remaining area of the green flag. If you notice any repeated areas that stand out as being cloned, you can choose a new target area and clone in some new grass to keep the pattern random.



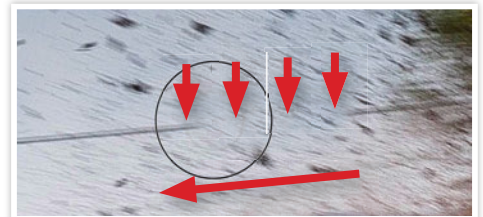
06 You can now move to the second flag on the left and create a new sample to clone over the pole as you did with the first. Again, watch out for obvious repeat patterns as you clone clean areas on top of the flag pole.



07 Now you can remove the green flag by sampling an area of the mud to the left of it and cloning that over the top of the remaining part of the flag. Finally, we can remove that telephone line from the top of the shot using the same techniques for both flags.



08 The random nature of the dirt flying across the frame is actually quite useful. sample an area directly above the unwanted telephone line and then clone the sample on top of it. You can simply click on the telephone line and drag the mouse to the left, cloning the patch of dirt that is directly above it as you do.



09 Once complete, you can assess the result and if you see any obvious repeating patterns that give the game away, you can simply clone new areas over the offending repeated parts with random grass and sky as needed.



Brushes, Pencil and Eraser

Photoshop has many tools to help you create images as well as edit them

Although it is primarily designed and best known as an image editing program, Photoshop also offers a range of versatile tools, allowing you to create original artwork as well as adapting existing images. The brushes, pencils and eraser are designed to behave as much like their real life counterparts as possible, to make using them an intuitive process. If you have a graphics tablet and a pen, this helps even more.

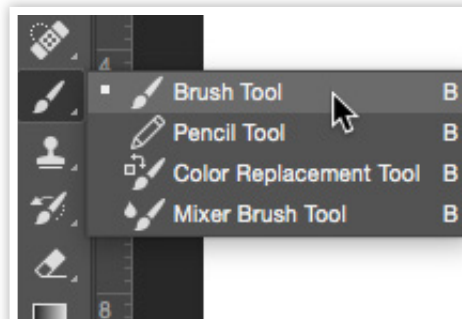


The Brush Tool

The most useful drawing implement is the Brush (keyboard shortcut B), which is a multi-purpose tool that can emulate almost any type of drawing tool imaginable, be it a fine pencil, a felt-tip marker pen, a soft-bristle brush, an airbrush, or anything in between. The Brush tool has received a major upgrade for version CS6, and now has more options and more pre-sets than ever before, giving you unparalleled versatility for creating your own artistic Photoshop masterpieces.

You select the Brush tool by clicking on its icon in the tool palette, but to get the most out of it you need to open the new Brush palette by clicking on the little folder-shaped icon in the options bar.

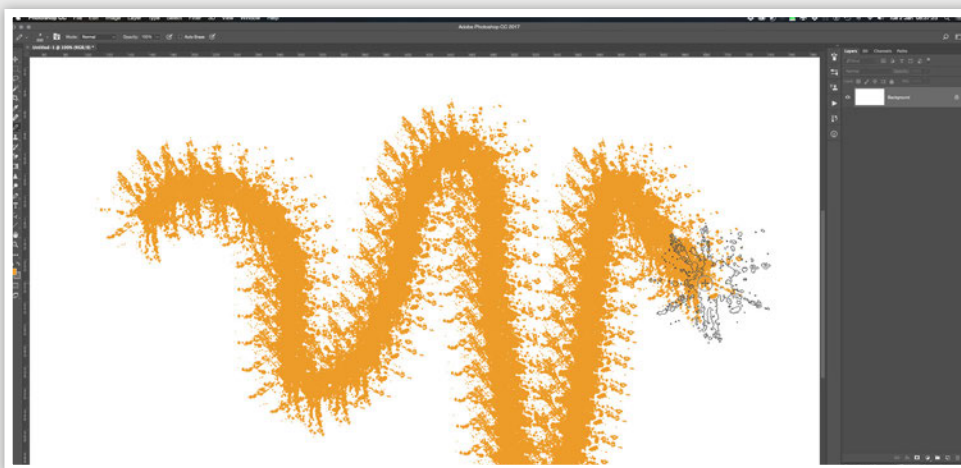
When you take a look at the new Brush palette you'll be blown away by just how customisable it is. You can adjust the shape of the brush tip, the density, length, thickness, stiffness and angle of the brush bristles, and adjust or disable brush spacing. As well as



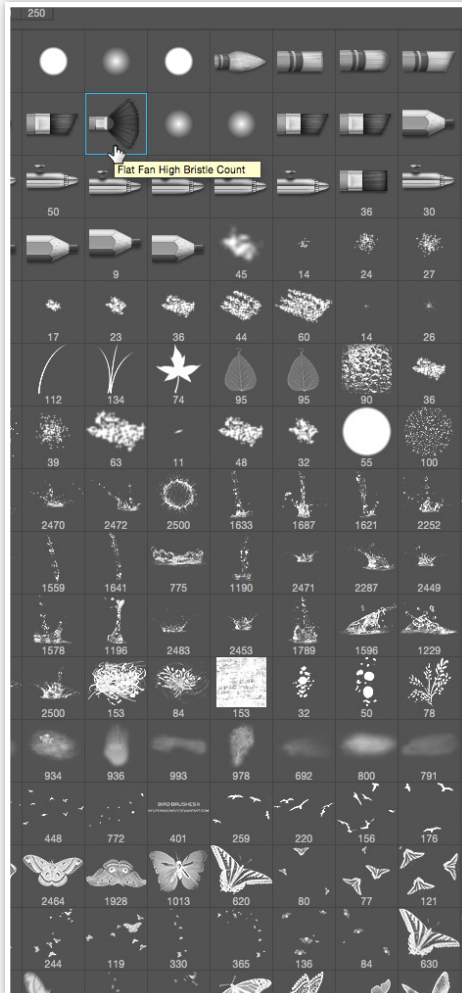
The Pencil Tool

The Pencil tool used to be a separate item from the Brush tool, but with radical expansion of the Brush in Photoshop to include simulations of numerous types of pencil, the Pencil tool itself now is just a variation of the Brush tool, and uses the same options palette. It's not without its uses though.

The Pencil can be used as a secondary brush, which can save time swapping between pre-sets, and can also be used to apply a stroke to work paths. You can press Shift + B to make it appear. By default it uses the 1 pixel brush size. The pencil tool is limited to hard-edged brush shapes of various sizes.



this there are many more options, allowing you to add random scattering, noise, texture, wet edge simulation, airbrush-like build-up, and both shape and colour dynamics. If this degree of control is too time-consuming there are also dozens of pre-set brushes, a small sample of which you can see in the picture shown below.

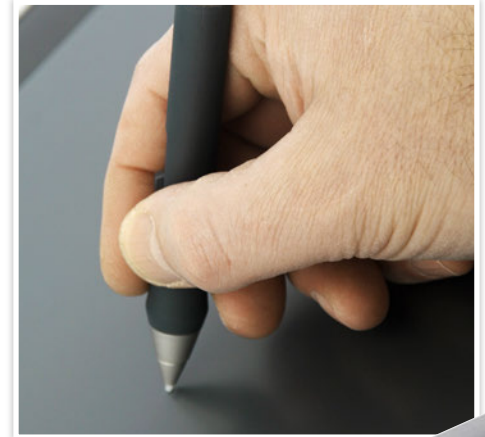


There are pre-set brushes to simulate airbrushes, pastel crayons, big soft brushes, small stiff bristles, pencils, felt pens, sponges, and even template brushes to quickly draw grass or leaves. The options and adjustments can be applied to pre-set brushes, so you can customise them for your own specific needs. You can even make your own brushes if you want.

As well as options for the appearance and texture of the brush, there are also options for how it interacts with the layer that you paint on. These are called Blend Modes, and you can choose which one to use by clicking on the Modes button in the tool options bar.



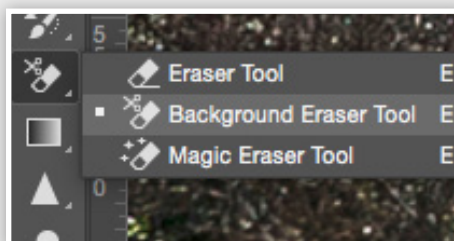
Many people will probably use Photoshop with a pen and tablet device, such as the Wacom Intuos 4 shown here. The Brush tool includes options for pen tablet users, such as allowing pen pressure to control either brush size or opacity.



The Eraser Tool

The Eraser tool (keyboard shortcut E) is a specialised variation on the brush tool, and uses the same palette options. It differs from the standard brush in that it can render pixels from a layer transparent, allowing the layer beneath to show through. If used on the background layer it paints in whatever the current background colour is set to.

As well as the Brush palette options, the Eraser also has tool options including Opacity, Flow, and one unique one, Erase to History, which can be used in conjunction with the History palette to selectively undo changes in layers. The Mode options for the Eraser are Brush, Pencil or Block, which is a small square-shaped eraser of fixed size and full opacity.



There are two other Eraser options available if you click and hold on the Eraser tool. Background Eraser can, as the name suggests, erase parts of the background, but it does this by converting the background into a layer. Magic Eraser simply combines the Magic Wand tool with the Eraser tool, and selectively erases contiguous areas of colour.



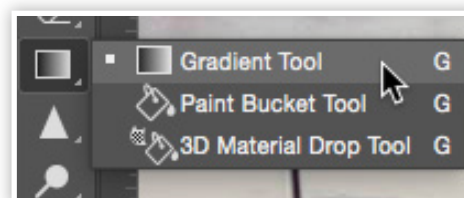
Gradient Fill & Paint Bucket

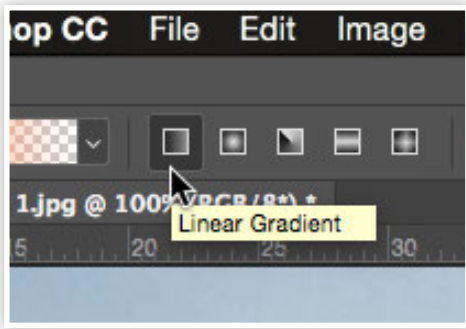
Fill layers and selections with colours, textures and gradients

One very useful facility that Photoshop provides is the Gradient tool. It can fill an area of a layer with a gradual blend between multiple colours. You can choose from a selection of pre-set gradient fills or create your own. It's a great way to add gradient filters for enhancing photographs, or to create effects

such as vignettes and centre-spot soft-focus. Let's take a closer look at how it works.

You'll find the Gradient tool about halfway down the Tool Palette. It has its own unique set of options in the Tool Options bar, the main one being the Gradient Picker, which lets you choose from a list of pre-set gradients.





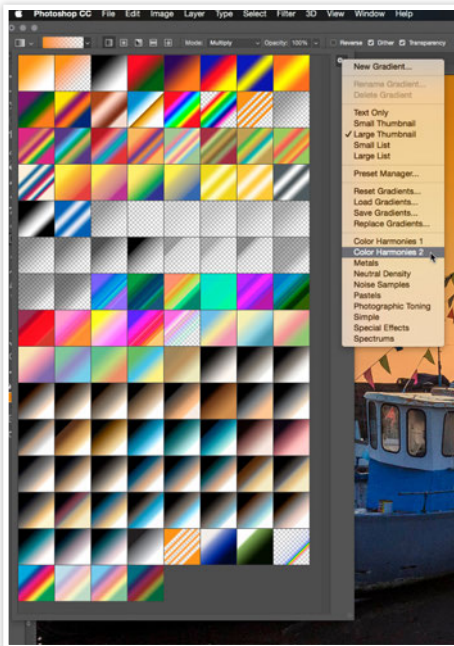
Next to this is a row of buttons that create different gradient shapes. The default setting is a straight linear gradient, but other options include Radial, Angle, Reflected and Diamond shapes.



Like the Brush tools the Gradient has blend modes that let you mix the gradient colour fill with the layer below it in various ways. This is a great way to enhance sunset landscape shots, by using a blue-to-transparent gradient fill in color mode, as in the example seen here.

Photoshop comes with a selection of default pre-set gradients loaded, but there are other packs of gradients available. You can load in these other packs via the Gradient menu. If you open the Gradient Picker you'll see a small icon like a cog wheel. If you click on this you'll see the menu, with the list of standard gradient packs available to load at the bottom.

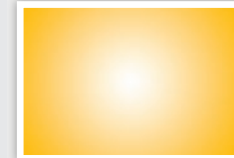
Other gradient tool options include the overall layer opacity, reversing the direction of the gradient colour mix, changing the "dither" of the colour mixing, and toggling the transparency.



Below are the main gradient types that you can choose from the tool options bar at the top left of your screen.



Linear



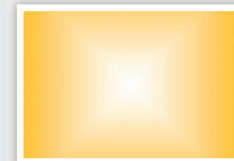
Radial



Angle

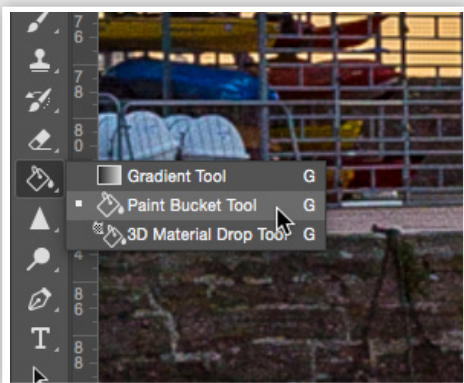


Reflected



Diamond

Paint Bucket Tool



If you click and hold on the Gradient tool you'll find that one of its options is the Paint Bucket tool, which is used to fill an area, a layer or a selection with a solid colour. In combination with layer transparency and blend modes it's a great way to add a colour tint or filter to a whole image.

If you use the Paint Bucket on the background layer of your image it will fill in an area of contiguous colour in much the same



way as the Magic Wand tool. To add a tint to a whole image, create a new layer, then fill it with the colour. It will fill the whole layer, and you can then use layer transparency and blend modes to achieve the effect you're looking for.

To get this vintage photo effect, we used a sand brown colour, at 100% opacity, and a Colour blend mode, which combines the fill colour with the tones and colours of the background image.



USEFUL TIP

Remember that the Paint Bucket uses the same edge detection as the Magic Wand tool. If you want to fill the whole screen, use a new layer.



Basic Editing Techniques

Now that you've had a look at the main tools that are available to you, we can move on to the next stage to get even more from your photos. Now you can explore some of the main editing and manipulation techniques you can apply to your images. You will be able to edit, select, mask, use layers and more.

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32 - 33	Modifying Selections	42 - 43	Quick Mask Mode
34 - 35	Using Layers	44 - 45	Using Layer Masks
36 - 37	Adjustment Layers	46 - 47	Content-Aware Fill and Scale
38 - 39	Curves and Levels		



Making Selections

The ability to select and modify only part of an image is fundamental to how Photoshop works



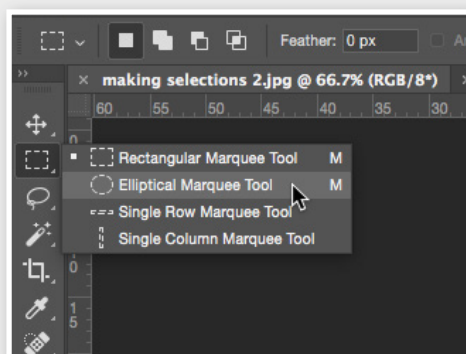
One of the most basic features of Photoshop is the ability to modify only part of an image, leaving the rest unchanged. The way that we do this is by using Selections, and there are several tools and menu operations that we can use to help us achieve this.

After the Move tool, the next three icons on the Tool Palette are all selection tools, giving you a wide range of methods for isolating an area of your image. Some are fully manual, while others use varying degrees of automation.

The most basic Selection tools are the Rectangular and Elliptical Marquee tools. These both allow you to manually select a simple shape of any size, or of a fixed size or aspect ratio. You can select several areas, either separately or joined together, and with a hard edge or a soft feathered edge. The various Lasso tools let you select an area of irregular shape, again with the option of a feathered edge. You can draw the area freehand, or use point-to-point lines for greater precision.

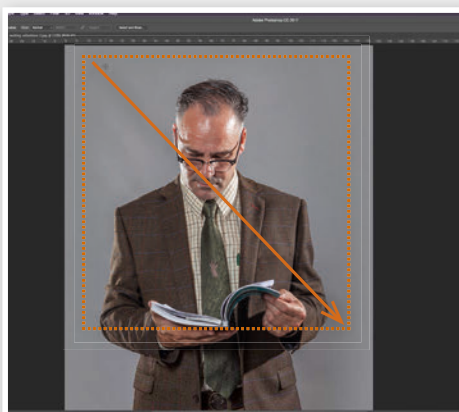
Let's take a look at the process of making a selection, and examine the various options that are available.

Elliptical Marquee Tool



01 The Elliptical Marquee tool works in much the same way as the Rectangular Marquee, but draws a curved shape.

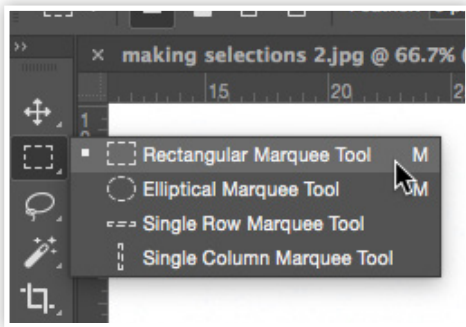
02 As with the Rectangular Marquee, you can set the size or aspect ratio. A ratio of 1x1 draws a circle, other ratios draw ellipses of various sizes.



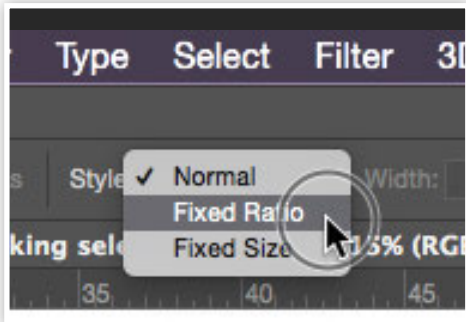
03 To draw an ellipse around your selection, imagine that it's actually a rectangle, start from one corner and drag to the diagonally opposite corner. This can be tricky to get right, so alternatively hold down the Alt key and start from the centre of where you want your ellipse to be.



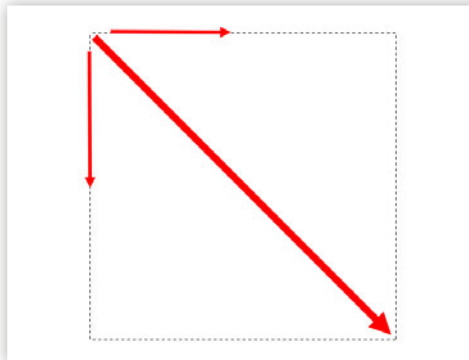
Simple Area Selection



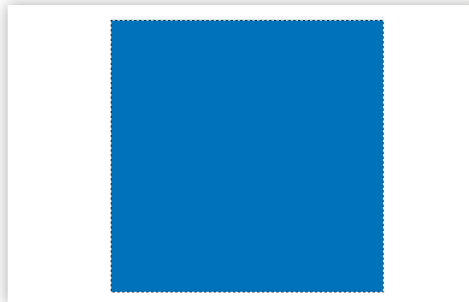
01 Let's start off with the simplest selection tool, the Rectangular Marquee. This is used, as the name implies, for selecting simple rectangular shapes.



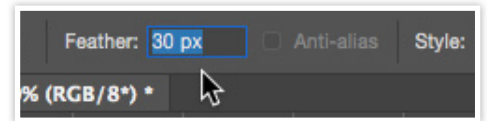
02 You can draw a freehand rectangle, or fix the size or aspect ratio by using the tool options. Let's draw a perfect square selection by setting a ratio of 1x1.



03 To draw a square, click on a point where you want one of the corners to be, then hold and drag to the diagonally opposite corner. You'll see the "marching ants" line of the selection box appear following the cursor.



04 If you use the Paint Bucket tool to fill the area you've selected you'll see that the edges are very sharp.



05 To make a soft-edged selection, type a number into the Feather box. The higher the number, the more blurred the edge will be.

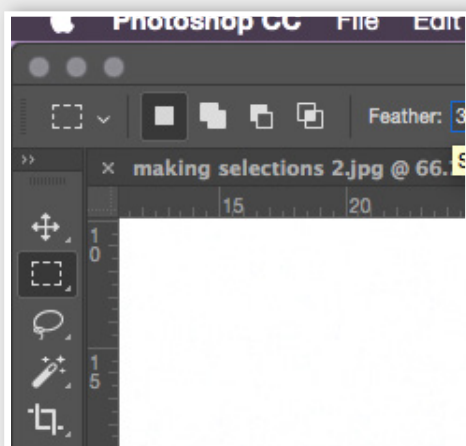


06 This time if you draw a selection and fill it, you'll see that the edges are very blurred, with the marquee "marching ants" line in the middle of the blurred area.

USEFUL TIP

If you want to select more than one area or add to the current selection, holding down the Shift key will temporarily put the tool into "Add to Selection" mode.

Polygonal Lasso Tool



01 For selecting more complex shapes, the best option is the Polygonal Lasso tool, or if you want to draw freehand, then the Lasso Tool is the one to go for. Drawing freehand may be quite odd using a mouse, but with a little practice you can use it with confidence.



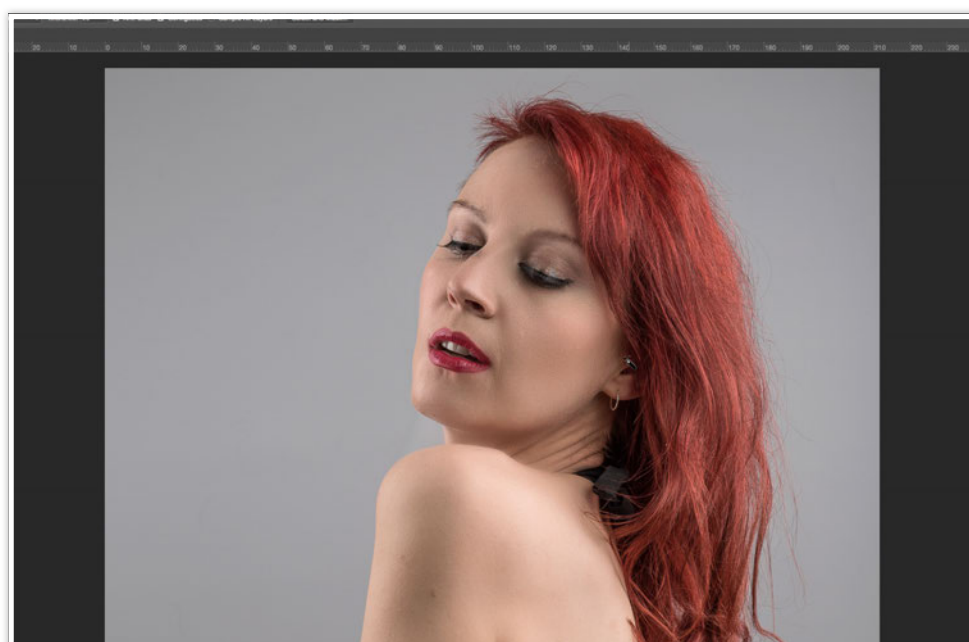
02 With the Polygonal Lasso, you click around the edge of the area you want to select. When you complete the loop, or double-click, the selection is completed and you'll see the "marching ants" border.



03 A Polygonal Lasso selection is ideal if you want to cut or copy a complex shape out of a background, for example to make it part of another picture. It is particularly helpful when your subject has lots of straight, regular edges that are easy to follow.

Modifying Selections

Photoshop has sophisticated tools to refine selections

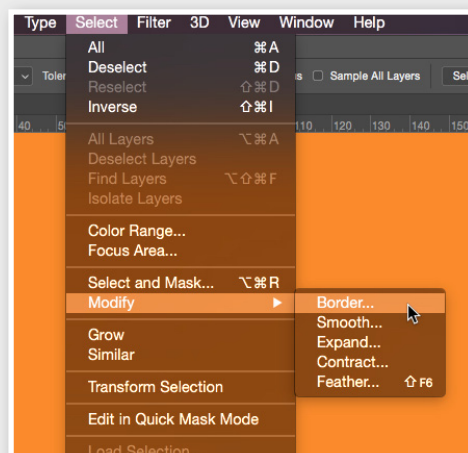


Photoshop's standard selection tools, the Marquee, Lasso and Magic Wand, are fine for making basic selections of regular, well defined shapes, but they're not so good at picking out soft-edged or very fine shapes. One thing in particular that has always been a problem is the edge of fine or untidy hair. Take this photo for example:

This model has been photographed in a typical studio setting, with good lighting and against a plain light grey background. Photos like this are used all the time for catalogues, advertising posters and the like.

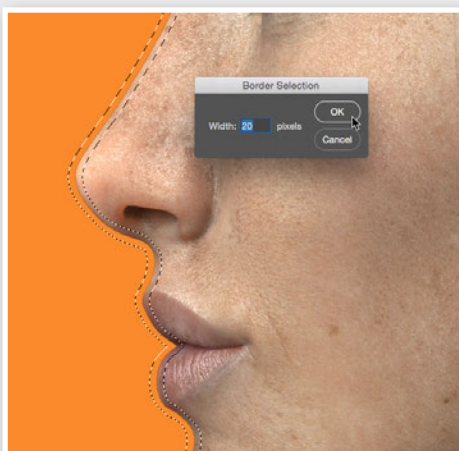
However, in order to fit these needs the model will have to be separated from the background. With a plain background like this, it would be tempting to use a normal selection tool such as the Magic Wand. However if we try it, what we end up with is something like this:

Modify Selection



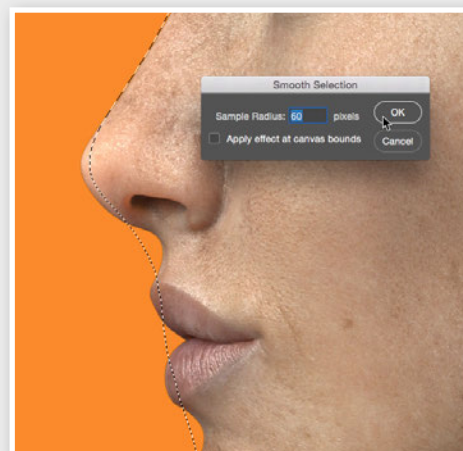
Photoshop has other tools to modify a selection which you'll find, appropriately enough, in the Select menu, under Modify. The options include Border, Smooth, Expand, Contract and Feather. They're all relatively simple, but useful nonetheless. We have some examples to show you.

Border



Border converts the single-line selection into a border of the specified width. You can use this selection to create a border around your selection by using the Paint Bucket tool. Be aware that the border extends an equal amount from either side of your original selection.

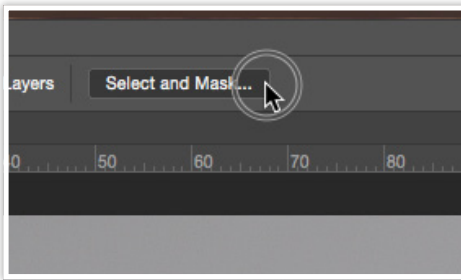
Smooth



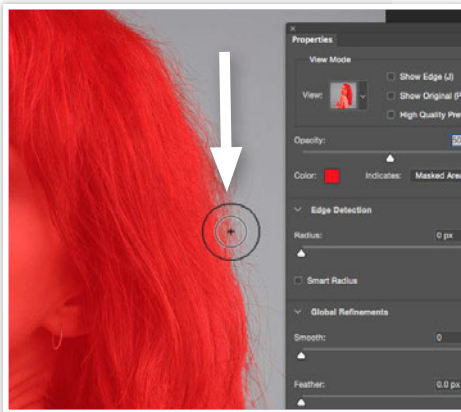
Smooth removes the kinks and wrinkles from the line of your selection. It's useful when you're selecting smooth-edged objects, but it will round off the corners of any irregular shapes. The larger the value of Smooth Selection, the smoother and less detailed the selection becomes.



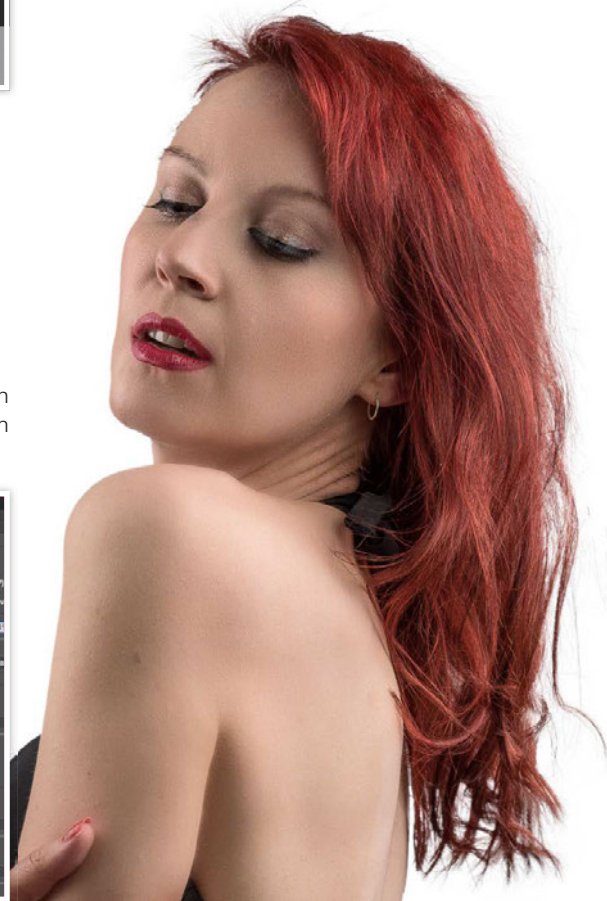
As you can see, the edge around the model's hair looks terrible. The automatic Magic Wand selection has produced a very jagged edge, because it can't distinguish between the fine edge of the hair and the background. Fortunately the latest version of Photoshop has a feature called Select and Mask, which is capable of making much finer distinctions.



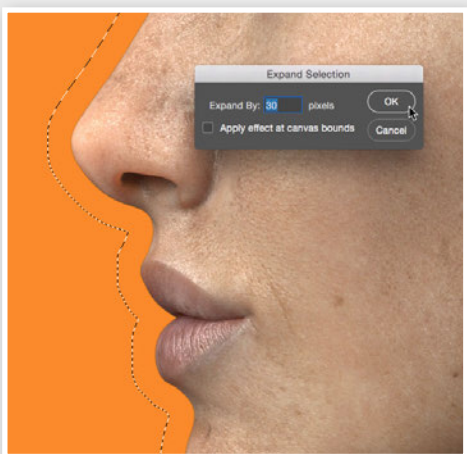
Select and Mask is very easy to use. Starting with a Magic Wand or Polygonal Lasso selection as close as possible to the edge of the hair or any other soft edge, click on the Refine Edge button on the tool options bar. In the dialog window that opens, in Edge Definition, check the box marked Smart Radius, and use the square brackets keys to set the brush size so that it's large enough to cover the hazy edge area around the hair. Then simply paint around the edge, overlapping both the model and the background.



When you've been around all the edge area that you want to refine, click OK, and then wait a few seconds while the program recalculates the edge. As you can see here, the result is a good improvement over the first attempt.

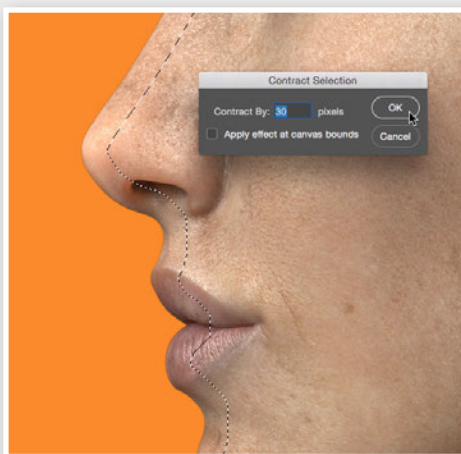


Expand



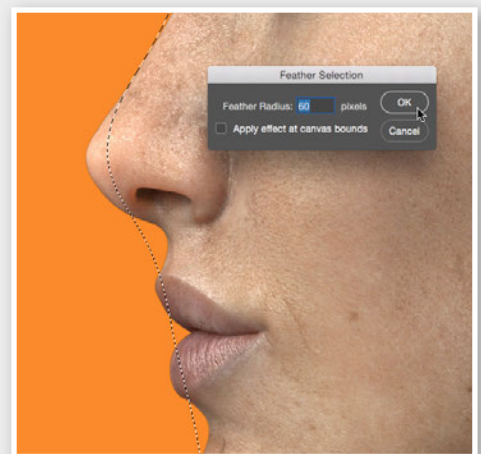
Expand, as the name suggests, expands the size of the selection by the specified number of pixels. The larger the value you expand the selection by, the detail and shape of your original selection will begin to decrease as it enlarges outwards.

Contract



Contract is the opposite of Expand. It shrinks the size of the selection by the specified number of pixels. As with the Expand option, the more you Contract the selection, the original selection shape's detail will become less well defined.

Feather



We've looked at Feather before. It softens the edge of the selection by the radius set in the dialog box. It's perhaps the most useful option here, particularly if you're trying to copy and paste the selection into a background. Unlike Smooth, this creates a soft vignette effect.

Using Layers

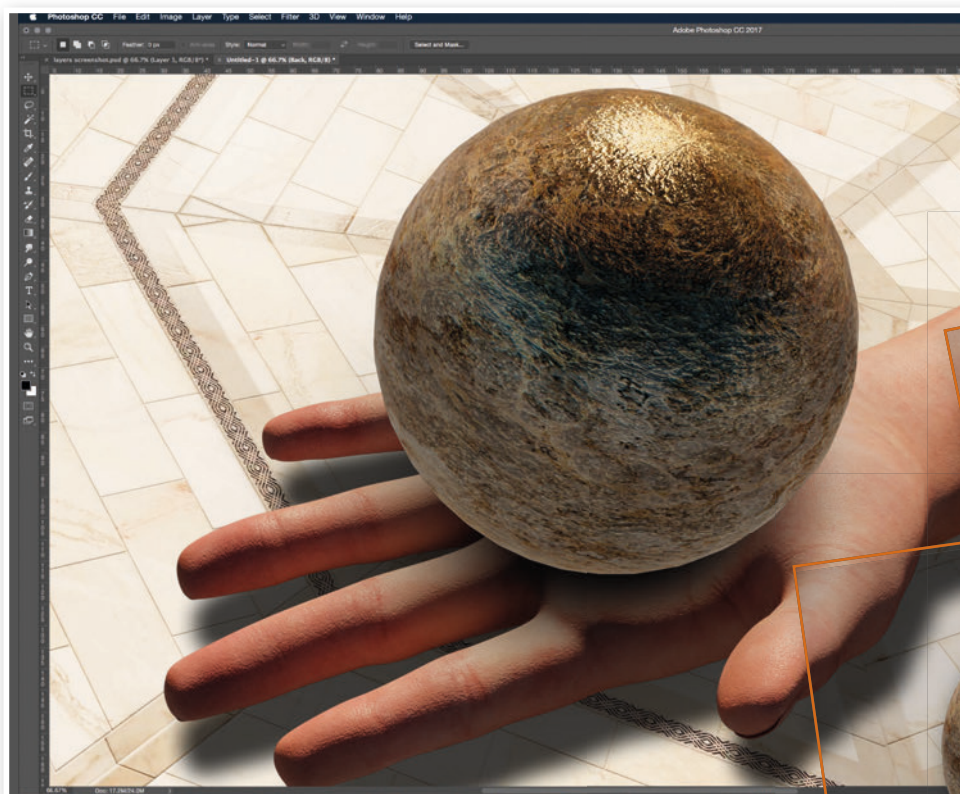
Understanding layers is fundamental to Photoshop editing

The concept of Layers was first introduced with Photoshop 3.0 in 1994, and has become the very core of Photoshop image editing, as well as being imitated by every other image editing program on the market. Layers are exactly what they sound like; the elements of the image are stacked up and displayed in

descending order. Since layers can include transparency, lower layers can be visible through higher layers.

Effects, adjustments and operations can be applied to individual layers, or to all the layers at once. You can move layers around relative to one another, change the order of layers in the stack, turn layers on

or off, and delete layers without affecting the others. Some people seem to have a hard time getting their head around the concept of layers, so the best way to think of them is as a pile of glass panels with the elements that make up the image painted onto them, with you looking down on them from above to see how they stack up.

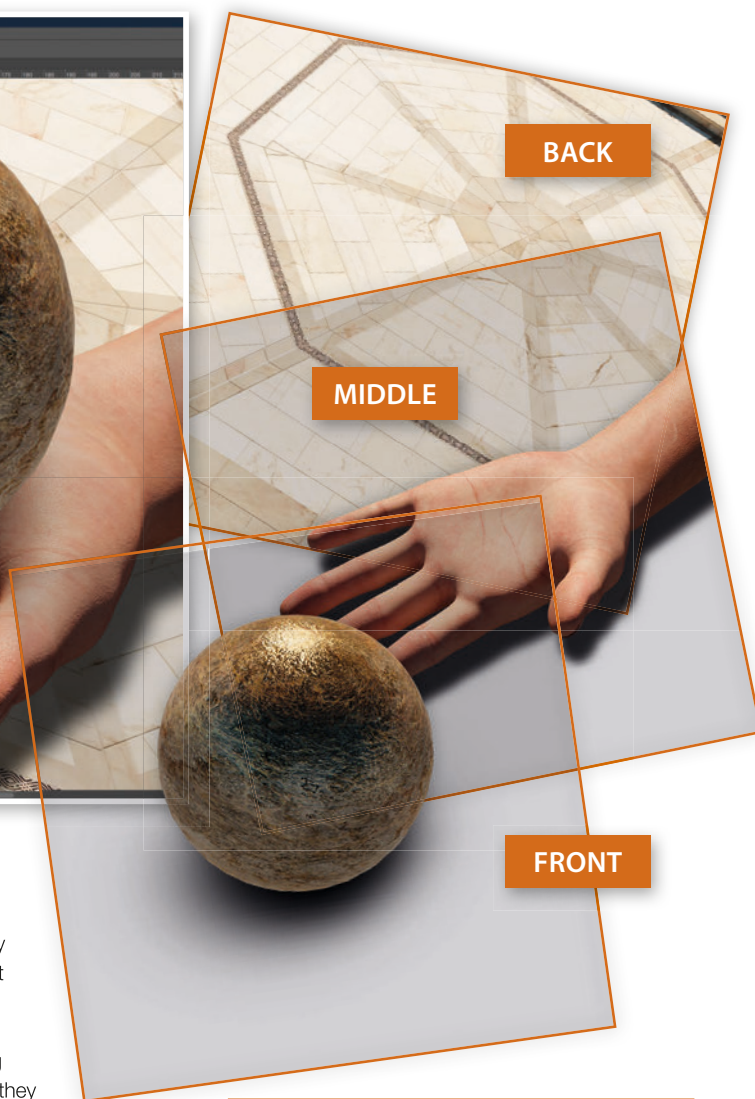


Layers have a number of advantages. For one thing, the ability to change one element on one layer without affecting the other layers means that you can edit your image non-destructively. For example if you want to perform an operation on a layer but you're not sure how it's going to turn out, just make a duplicate layer, set the original to be invisible, then do your editing on the copy. If you don't like the result, you can simply delete it and go back to the original.

There are four main types of layer. There are Pixel layers, which contain the graphical elements of the image. There are Text layers, which contain text information which can be edited and resized. There are Vector layers, which contain vector information such as shapes and

work paths, and then there are Adjustment layers, which contain embedded commands that affect the layer immediately below. We'll look at Adjustment layers in more detail on the following pages.

There is a downside to using layers, and that is the file sizes they generate. Adding layers and the information that goes along with them massively increases the size of the file, so when you've finished editing and you want to save the picture you've created, it's usually a good idea to Flatten the image, which merges all the layers together into a single image.



USEFUL TIP

Click on a layer, press and hold the Shift key on your keyboard and click on another layer to multi-select a number of layers.

The Layer Palette

Knowing your way around the Layer palette is vital if you want to make the best use of this feature.

Blend Mode

Determines how the layer interacts with the layer below it. Can be changed for every layer one by one, or for a group.

Opacity

Controls how transparent the layer is, and how much of the layer below will show through.

Layer Filters

Choose to display only one type of layer, or all of them, and by selecting from the drop-down you can choose what order to show them in.

Fill

Similar to Opacity, but only works on pixel information, ignoring blending options and layer effects.

Layer Locks

By clicking on these buttons you can lock the layer from any further activity. Transparency, image pixels and position can be locked independently of each other.

Text Layer

There are several different types of layer. Text layers, not surprisingly, contain text characters.

Background

The Background layer is the default bottom layer, and always starts off locked when you open a new Photoshop document.

Link Layers

Highlight a few layers and then click this button to link the layers. Transform and Move commands will affect all linked layers.

Visibility

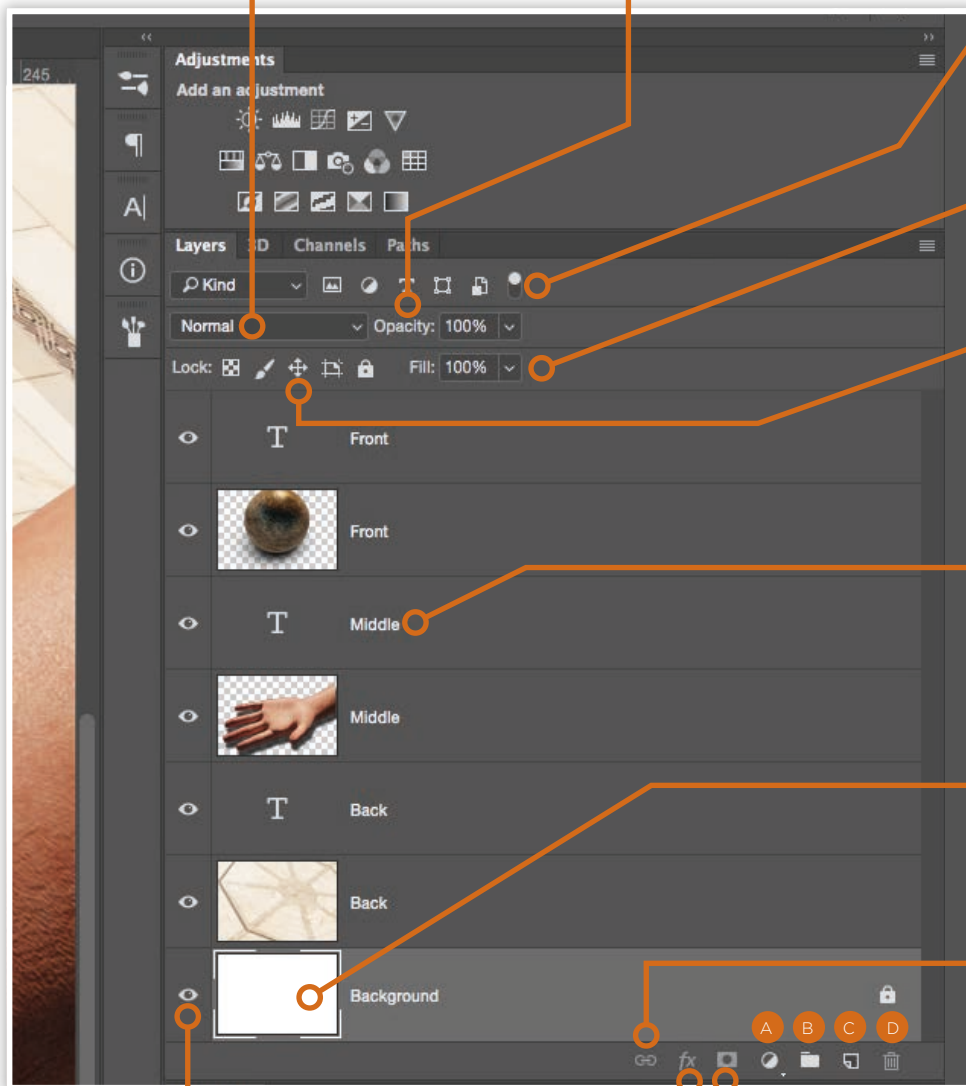
Clicking on the eyeball simply renders the layer and all its effects invisible.

Layer Styles

Add effects such as drop shadow, bevelled edges, inner glow and more.

Layer Mask

Add a mask to a pixel-based layer to reveal or conceal information using a black or white brush.



A Adjustment Layer

An alternative to the main layer menu, you can add all the adjustment effects such as Levels, Brightness and Contrast and Saturation here too.

B New Group

Creates a new layer group, into which you can drag and drop layers, which helps you to organise layers in a big complicated composition.

C New Layer

Clicking on this button creates a new blank layer directly above the currently active layer.

D Delete Layer

Does exactly what you'd expect it to do. Click to delete the currently active layer, or drag a layer onto the button to delete it.

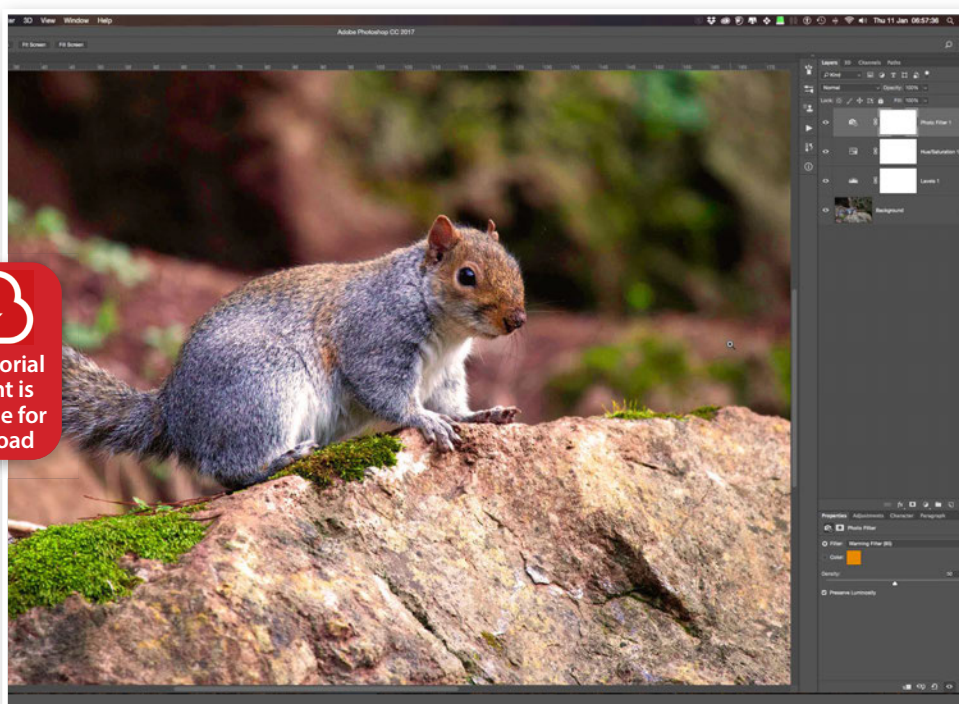
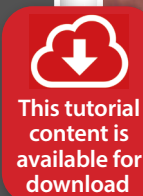
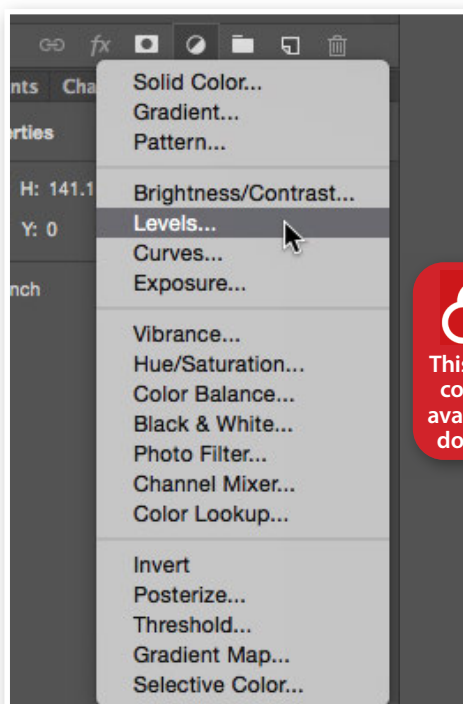
Adjustment Layers

A great way to edit your images without damaging them

Although there are many editing options in the Image > Adjustment menu, they all have one thing in common. When you apply them to an image the effect they have is destructive, because they discard information from the original image. For example, if you apply Curves, the Hue/

Saturation, then add a Photo Filter effect, that's three operations that have discarded information, each one degrading your image quality. If you apply an operation repeatedly, such as multiple Curves corrections, you'll actually be able to see the degradation. The only way to undo

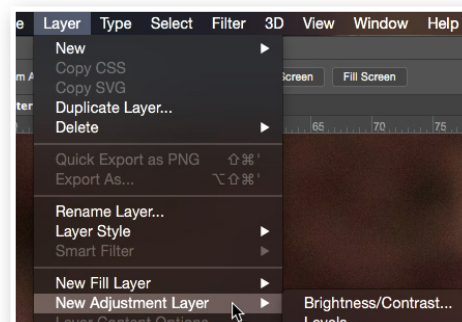
the damage done by these modifications is to revert to an earlier version by using undo or the History palette, but that also undoes all your subsequent editing as well. This degradation is much worse with 8-bit than with 16-bit images, since there's less information to start with.



It's impossible to avoid this image degradation altogether, but by using Adjustment Layers we can reduce it as much as possible. Adjustment Layers sit above the pixel layer in the stack, and their effects are applied in real time as the layers are displayed. That way if you change your mind about an effect, or wish to change it after it has been applied, your alteration doesn't have any further effect on the layer below it, and the image degradation isn't applied until the layers are

merged when flattening the image.

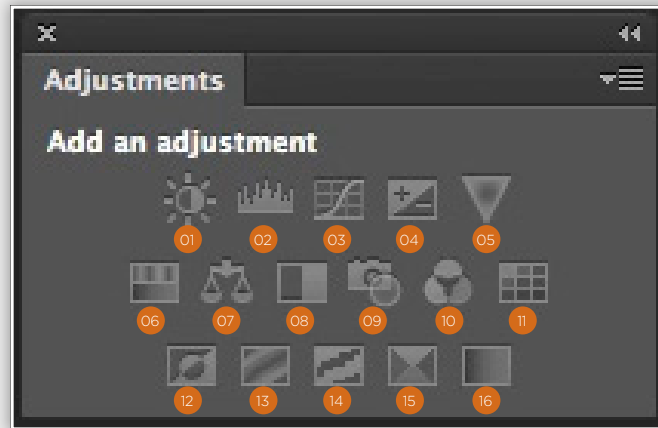
You can apply Adjustment Layers in several ways. First, you'll find a list of available layers in the Layer > New Adjustment Layer menu. Second, if you have the Adjustments palette open (it's open in the default interface workspace) you can click on the button for the layer you want to apply. Third, you can click on the middle button at the bottom of the Layer Palette. All of these offer exactly the same list of options and produce the same results.



The Adjustment Layer Palette

Click on any of these buttons to instantly create a new adjustment layer.

- 01 **Brightness/Contrast**
Edit image tonal range.
- 02 **Levels**
Adjust colour and tonal range.
- 03 **Curves**
Adjust points through the tonal range.
- 04 **Exposure**
Adjust an images' exposure range.
- 05 **Vibrance**
Enhance less saturated colours first.
- 06 **Hue/Saturation**
Alter Hue, Saturation and Lightness.
- 07 **Colour Balance**
Add colour to shadows and highlights.
- 08 **Black and White**
Convert to monotone or greyscale.



- 09 **Photo Filter**
Add custom colour cast to images.
- 10 **Channel Mixer**
Create tinted or greyscale images.
- 11 **Colour Lookup**
Add preset colour effects to images.
- 12 **Invert**
Inverts image colours like a negative.
- 13 **Posterize**
Adjust the number of tonal levels.
- 14 **Threshold**
Convert to black and white bitmap.
- 15 **Selective Colour**
Alter individual primary colours.
- 16 **Gradient Map**
Maps an image to a custom gradient fill.



Before and After

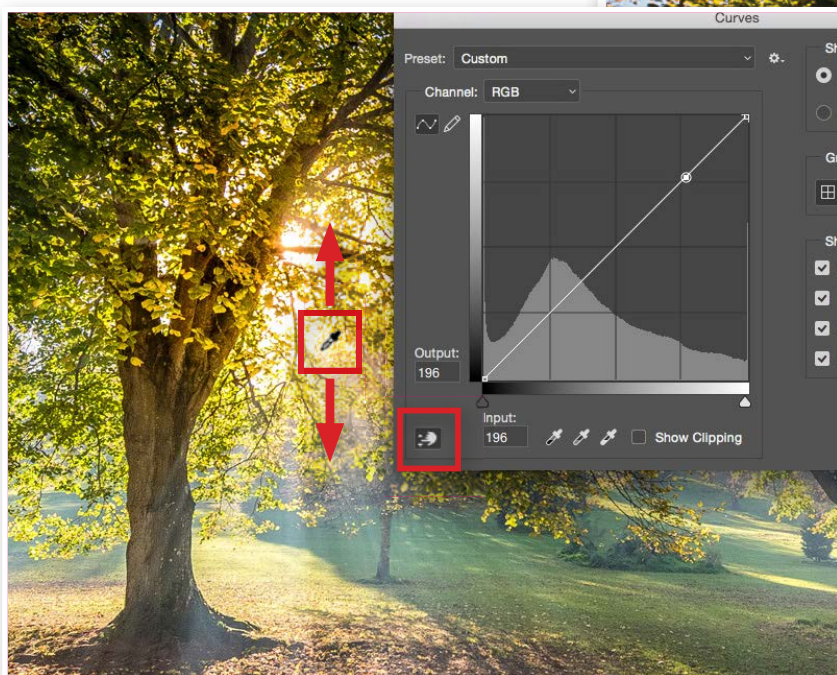
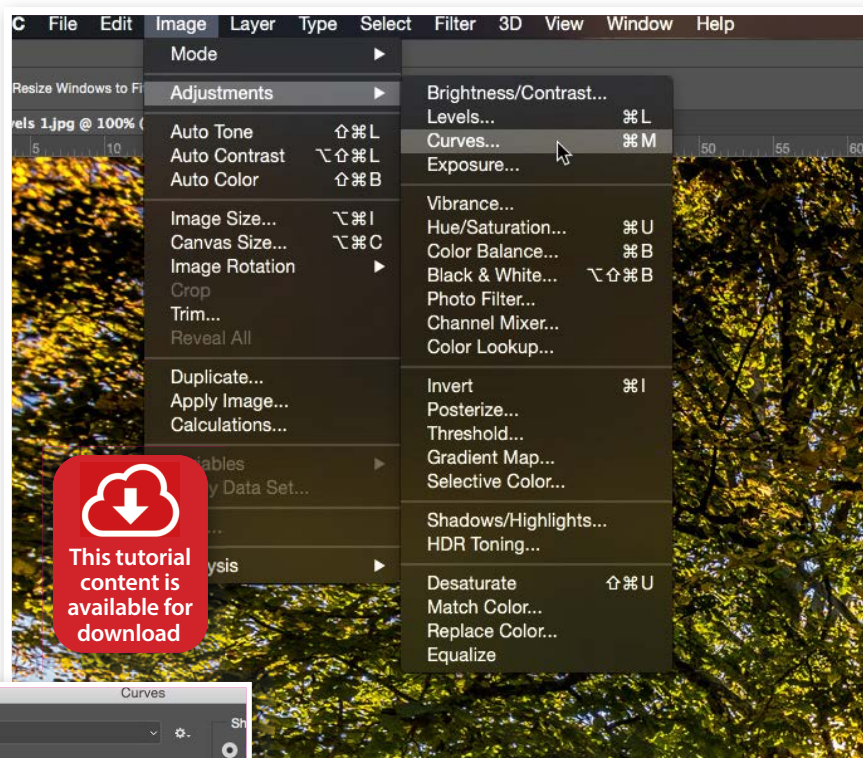
This photo of a squirrel was taken on a Canon 5DMK3. The subject was photographed on an overcast day and there was little contrast. By applying Levels, Saturation and Photo Filter adjustments to the image, the colours have been saturated and contrast enhanced to bring back some punch and detail to the image.

Curves and Levels

The most versatile way to adjust, brightness and contrast in your digital images

You'll find the Curves function in the Image > Adjustments menu, or use the keyboard shortcut Cmd+M. The Curves dialog looks a bit daunting at first; a graph with a diagonal line running up the middle of it, like a difficult piece of maths homework. It's nothing to be scared of though, and is in fact the most useful and versatile tool for making adjustments to the exposure and tonal balance of your images. We'll use this picture of a sunlit woodland walk as the image to begin with. What we want to do first is crop it down so we just have the main part of the tree with the strong lighting on the leaves and grass beyond.

The Curves graph is a histogram showing the relative strengths of different tones within the image. It shows the input distribution along the bottom of the graph, and the output up the vertical axis. The straight diagonal line from corner to corner indicates that there is a 1:1 ratio between input and output at all tones; the output is exactly the same as the input, as you'd expect. It is by adjusting the line and altering the ratio of input tones to output tones, that we can achieve a number of effects. The left-hand end of the horizontal axis represents the darker tones,



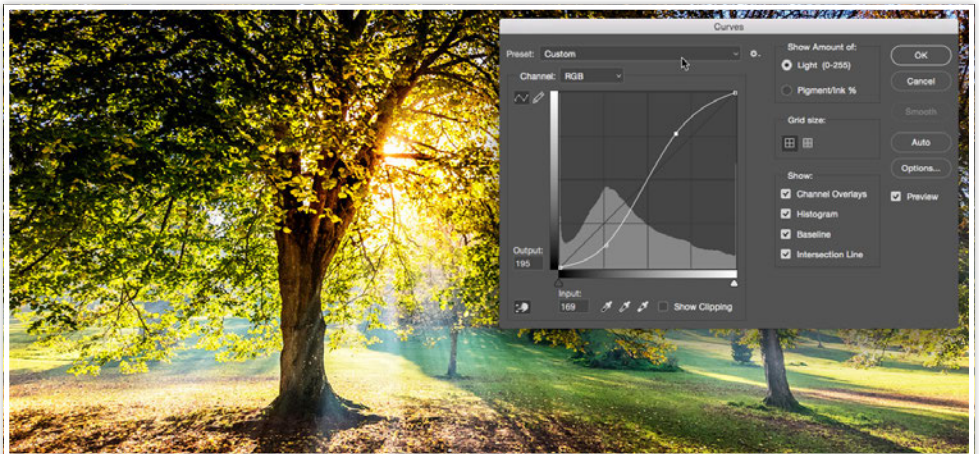
while the right-hand end represents the highlights.

The Curves graph can be manipulated in several ways. You can move the line directly, by clicking on it to place new anchor points and then dragging these points into new positions. You can also use the arrow keys to nudge a selected point up, down, left or right. There's no limit to where the line can start or finish, or where it goes in between, which can lead to some extraordinary results.

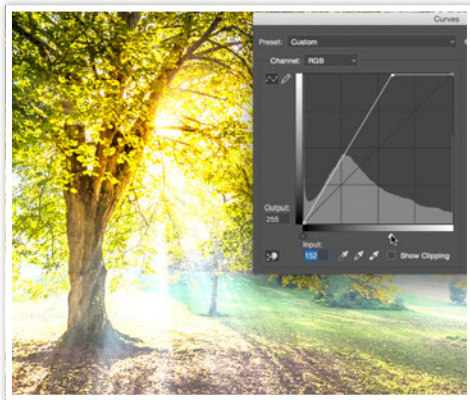
In later versions of Photoshop there's an even more useful way to use Curves. Just to the lower left of the histogram you'll see a button with a hand and two arrows on it. If you click this button and then move the cursor over the image you'll notice a point on the line move up and down as the cursor passes over lighter and darker areas. Pick a spot that you want to lighten, click on it and drag upward, and you'll see the tone curve move to match. Using this awesome feature you can selectively lighten or darken pretty much every tone in the image.

Boosting Contrast

Add two anchor points to the tone curve roughly one-third of the way from either end. Drag the shape of the line into a narrow S-shaped curve, slightly raising the upper half of the curve and lowering the lower half of it, leaving the mid-point and both ends in the same positions. This will brighten the lighter areas of the image, while darkening the darker areas, increasing the contrast while maintaining the same overall exposure. It's an excellent way to make very precise adjustments to contrast. Mid-tone lightness can be adjusted by moving the mid-point on the curve up or down.

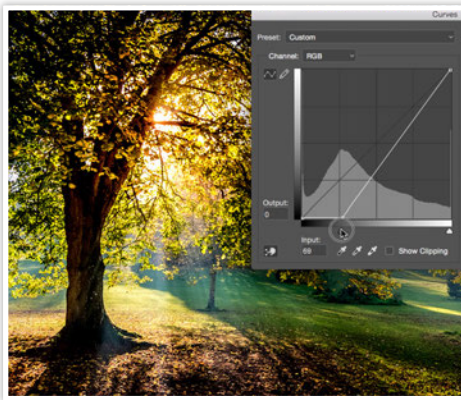


Emphasising Highlights



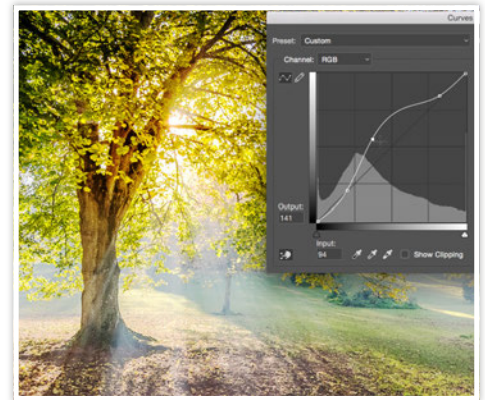
To boost the highlights of an image move the highest point leftwards along the top horizontal axis. This increases the brightness of the lighter pixels, and may cause the brighter highlights to be burned out, but the result can be quite pleasing for the right kind of image. This technique works well in monochrome, producing an ethereal high-key image.

Emphasising Shadows



Moving the lowest point on the curve to the right will darken the shadows, but this will lose both shadow and mid-tone detail. This can be alleviated by moving the mid-point of the curve upwards slightly, flattening the upper part of the curve and brightening the mid-tones. This emphasising of shadows is very similar to boosting contrast, but can create a more extreme result.

Brightening Mid-tones

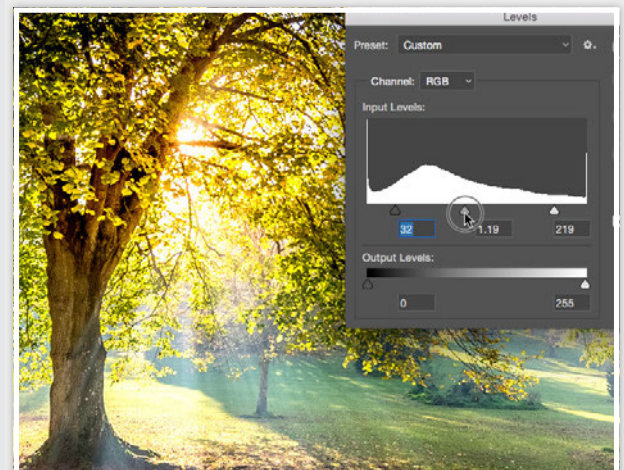


For images with very high contrast sometimes it is necessary to boost the mid-tones to balance the image. To do this, set three points on the tone curve at roughly equal positions along the curve, and then move the middle one upwards to achieve the effect. The other two points act as anchors, keeping the shadows and highlights unchanged. Moving the mid-point downwards has the opposite effect.

Levels

A quick, easy and accurate way to adjust brightness and contrast

In the Image > Adjustments menu you'll also find the Levels function, keyboard shortcut Cmd + L. The Levels function is easier to use than Curves, and lets you quickly adjust the black and white points and overall brightness of your image. It's particularly useful for images that contain a lot of light or dark areas, such as dark objects on a light background, because it provides a method for fixing the lightest and darkest areas of the image, while leaving the mid-tones free to be adjusted upward or downward.

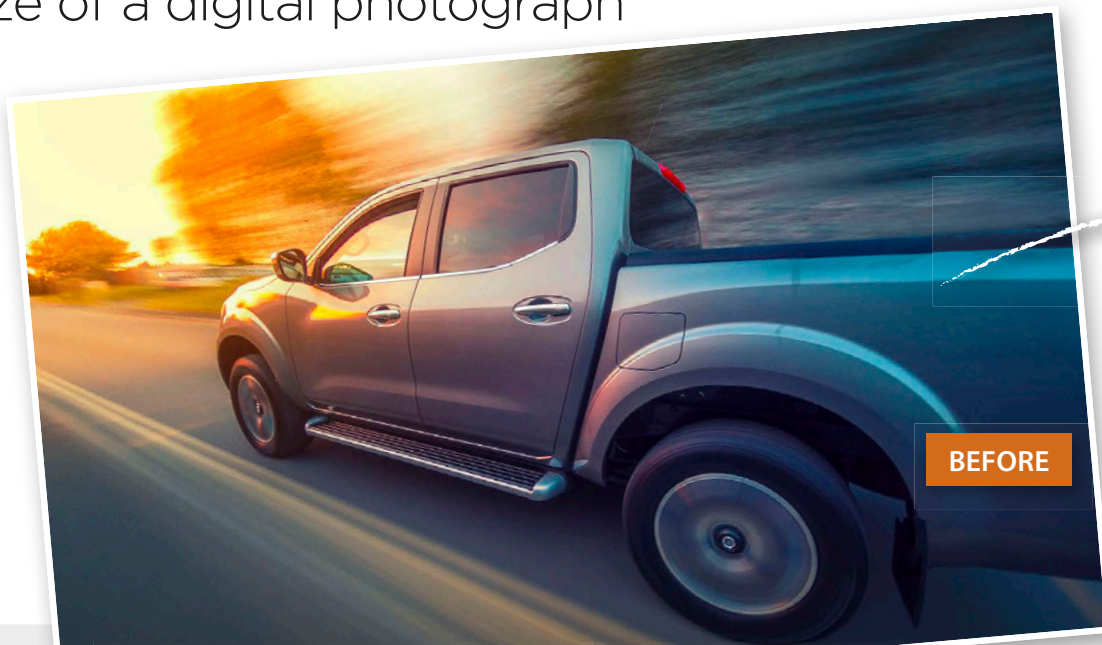


Cropping and Resizing

Changing the size of a digital photograph

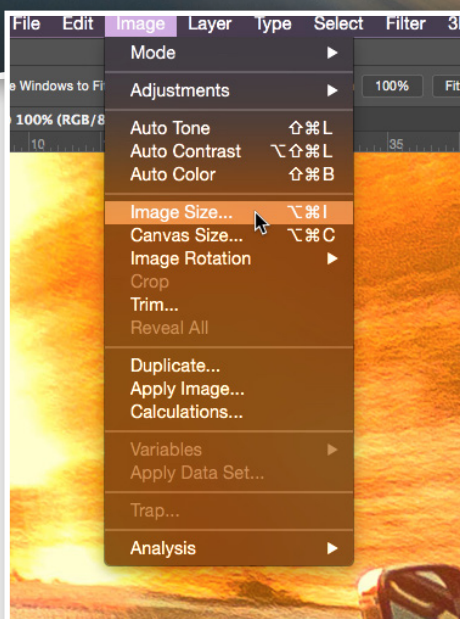
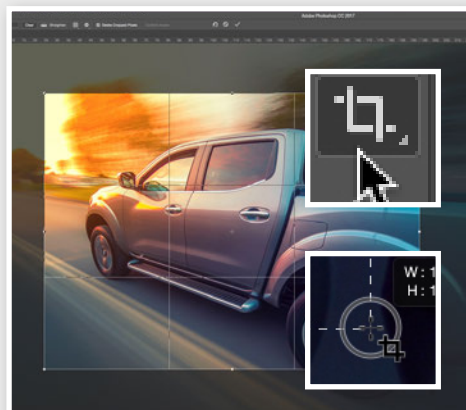
Sometimes a digital photograph can be the wrong size. Maybe you've got too much of the surroundings in the picture, when you wanted to concentrate on just the main subject, or maybe the whole image is too big, and you need to make it smaller to send via email or publish on a website. Doing both of these things is very quick and simple in Photoshop.

We'll use this wide-angle automotive shot as the image to start with. What we want to do first is crop it down so we just have a tighter view of the truck.

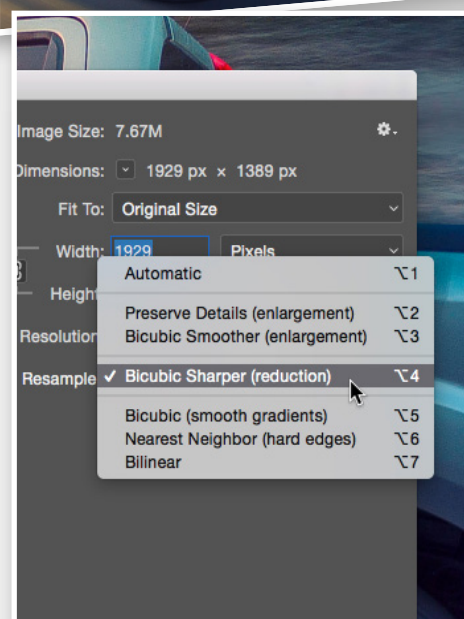


01 The best tool for the job is, not surprisingly, the Crop tool. You'll find it in the tool palette, fourth down from the top. It looks a bit like two set-squares.

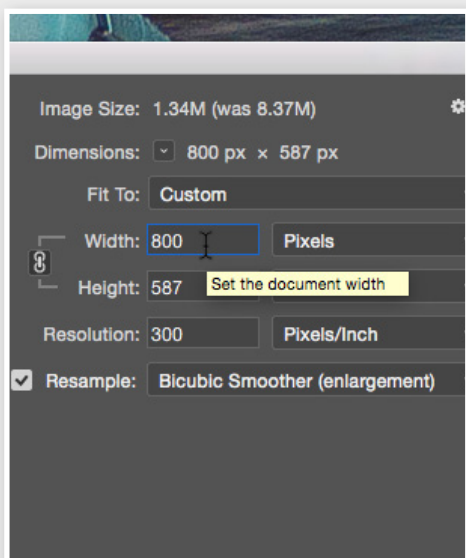
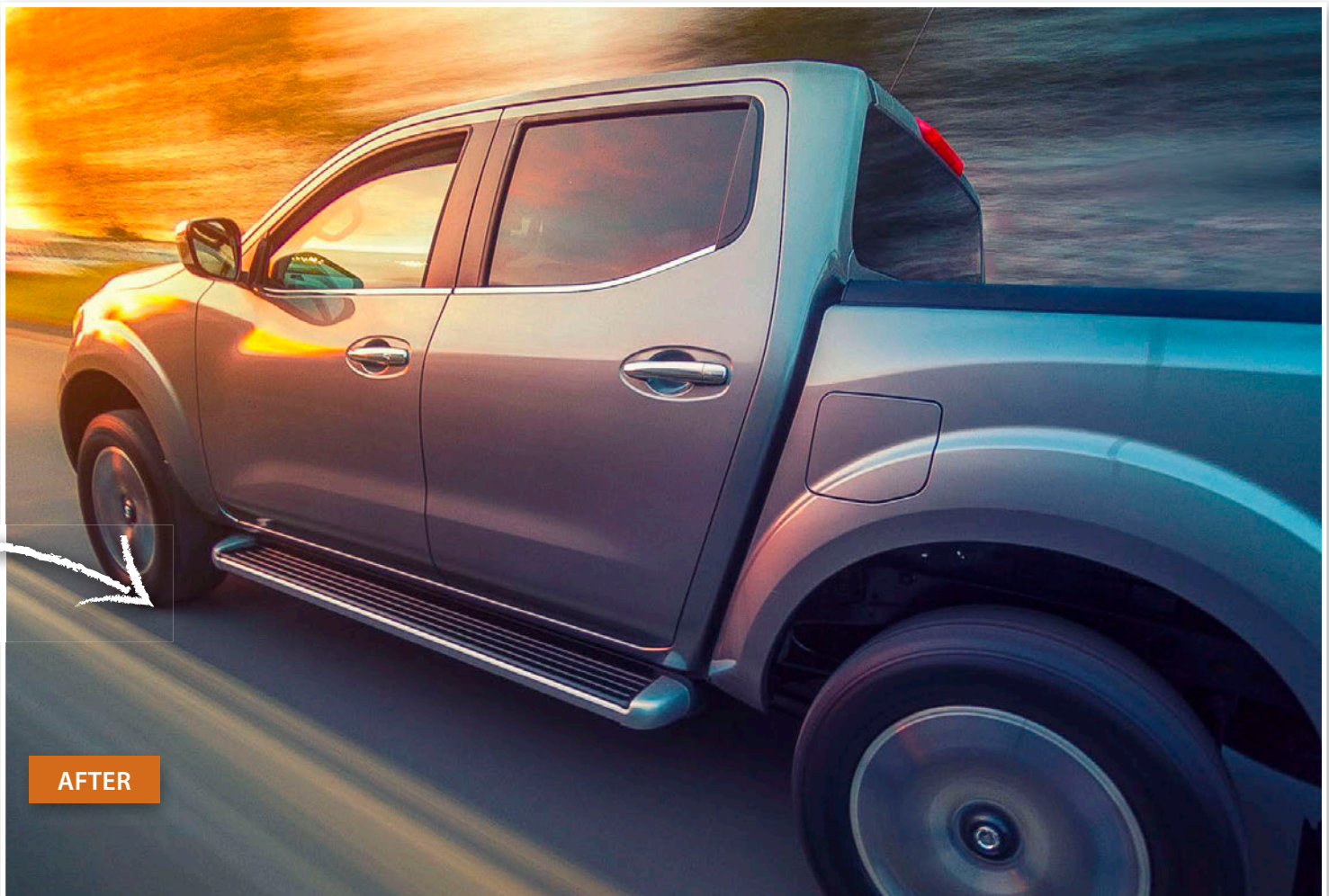
02 The crop tool is very easy to use. Simply click near one corner and then drag a box around the area you want to crop. Don't worry if you don't get the size exactly right first time, because you can adjust the size of the box by using the drag-handles on each side and corner. Press Enter to perform the crop.



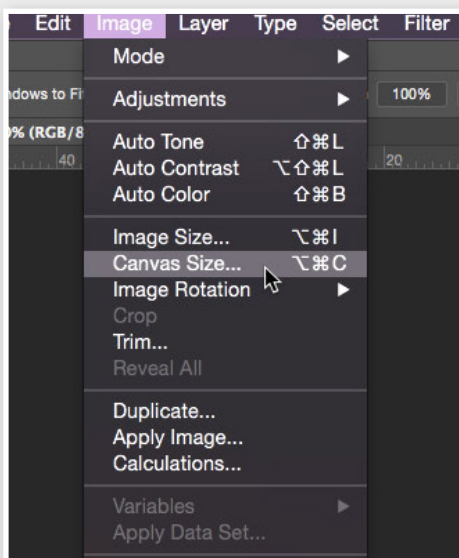
03 Next we'll resize the image. To do this you'll need to get to the Image menu and select Image Size, or use the keyboard shortcut Cmd + Alt + I.



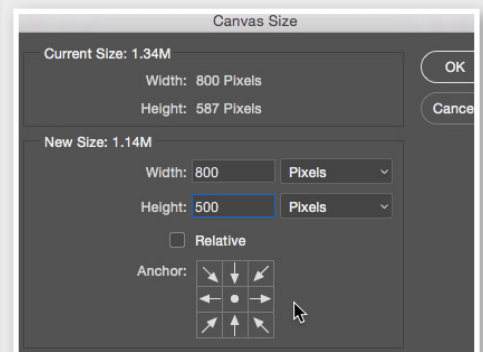
04 In the Image Size dialog box, check the box marked Resample Image, and open the drop-down option panel below it. We're reducing the size of this picture, so select Bicubic Sharper.



05 In the Pixel Dimensions panel, enter the width that you want your image to appear. If we were preparing this picture for a website, a width of 800 pixels would be ideal. The height will change automatically to keep the aspect ratio the same. Press OK to resize the picture.



06 Next, go back to the Image menu, but this time choose Canvas Size, or use the keyboard shortcut **Cmd + Alt + C**. Canvas Size will allow you to be able to extend the dimensions of your current document by adding extra pixels to the image. Bear in mind this is different than simply resizing the image.



07 You'll see the current size in pixels at the top of the panel, with the width as 800 pixels. In the lower window put in a height of 500 pixels. If your main subject is not in the centre of the frame, you can alter the anchor point by clicking on the arrows surrounding the box below. Click OK to perform the resize. You'll get a warning that you're about to chop off part of the image, but just ignore it.

Now we've resized the image to 800 x 500, a convenient size for display on many mobile devices, and ideal for uploading to a website or sending via email.

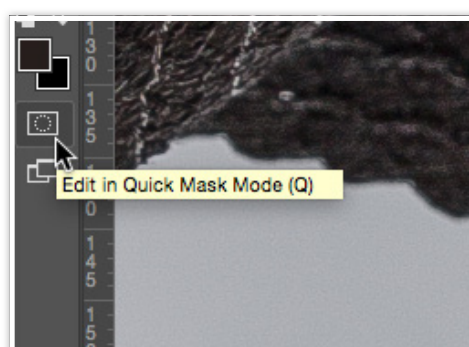
Quick Mask Mode



USEFUL TIP

By varying the transparency of the Quick Mask selection you can alter the effect of the edit you want to perform.

There's a quicker way of editing selections and masks



Often when editing in Photoshop it's useful to be able to block off certain areas that we don't want to be affected. For that we use masks, and there are several ways of creating them, but by far the easiest is Quick Mask, a fantastically useful feature that was first introduced in Photoshop 7. Quick Mask lets you create and edit masks and selections quickly and easily using any of Photoshop's pixel painting tools to apply a brushed mask with freehand strokes of the mouse. It's extremely simple to use, but it can produce a wide and varied range of results. You'll find the Quick Mask mode button near the bottom of the Tool Palette. Clicking it will toggle Quick Mask mode on or off.



The most basic way that Quick Mask is used is with the brush tool. When you switch on Quick Mask, you'll notice that the foreground and background colours change to black and white. Select a normal paint brush and start painting in black. You'll see that instead of black, the colour is a translucent red. Paint this colour over the area you want to mask.

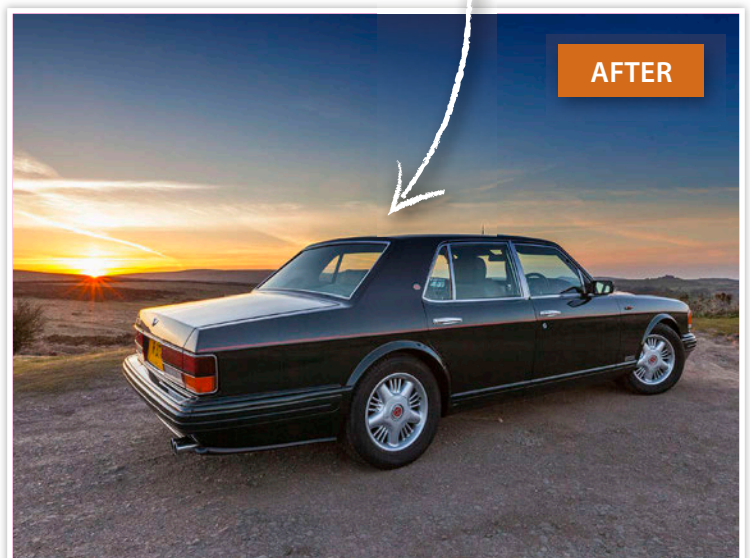
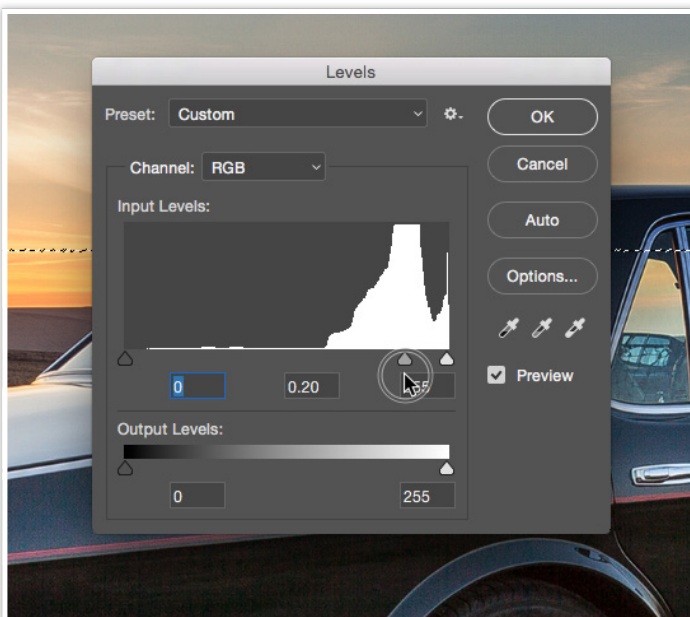
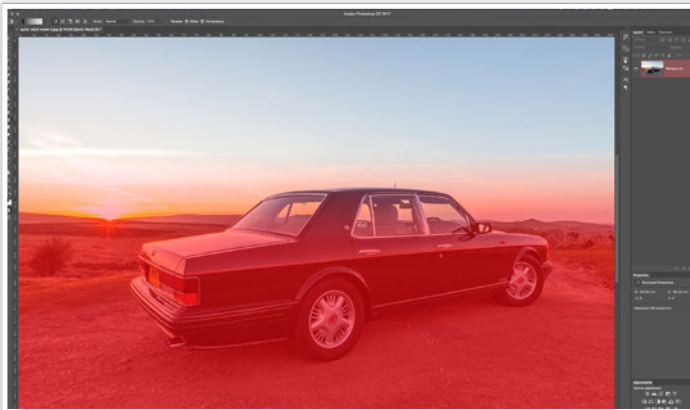
If you make a mistake and overlap your area, simply switch to the white background colour. Painting white will erase the mask.

By using a combination of the two you can mask out even quite complex shapes. If you then toggle out of Quick Mask mode, you'll find that all but the area you've masked will be selected. You can now alter very specific areas of your image, such as just the skin areas on this portrait of our model.



Gradient Mask

There are other ways to apply Quick Mask. For example it can be used with the Gradient Tool to produce gradual mask effects. Simply enter Quick Mask mode, then select the Gradient Tool. Drag a gradient fill over the area you wish to affect, and when you release the mouse button you'll see that the gradient effect is in translucent red, like the painted Quick Mask.

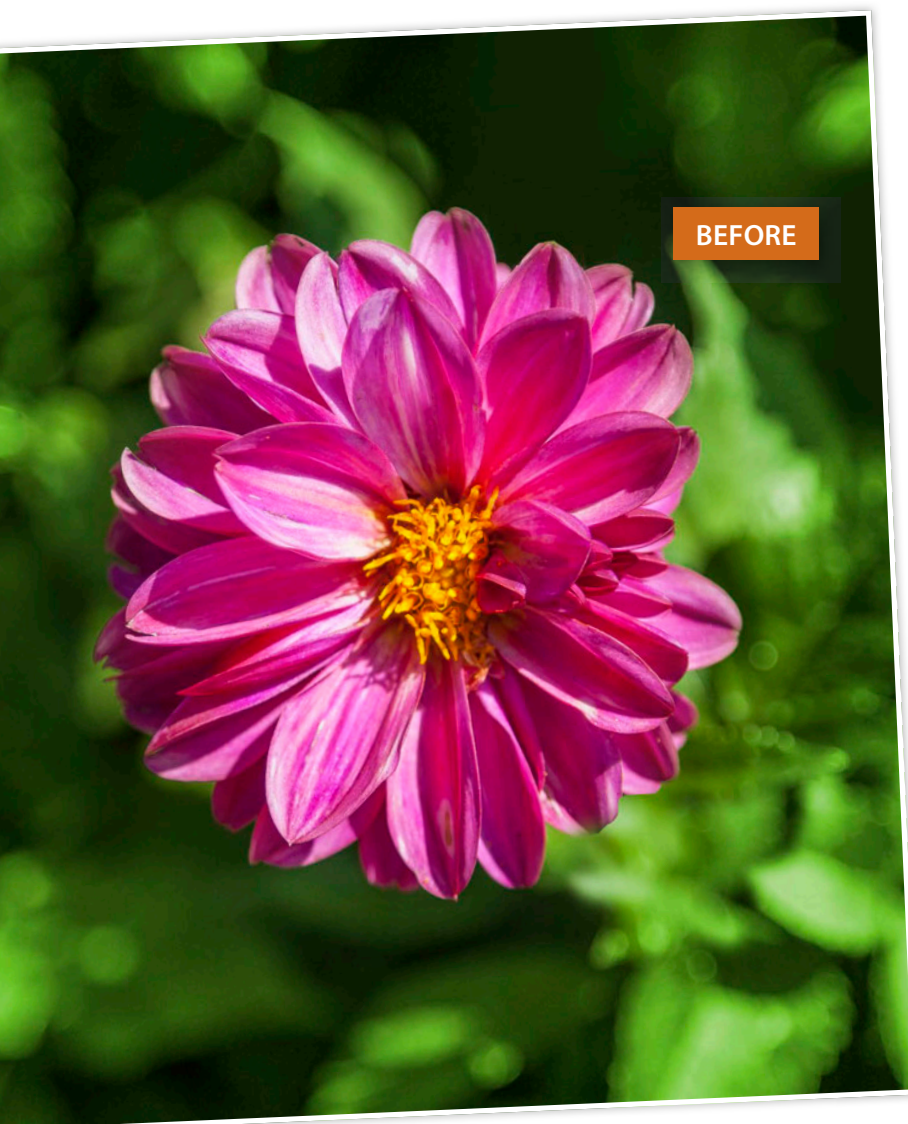


You can now use this gradient mask to produce graduated effects on the image. For instance, on this picture we can darken the sky and leave the foreground as it is by using a graduated Levels function. The gradient mask ensures a smooth transition from the full effect at the upper edge to zero effect at the lower edge of the picture.

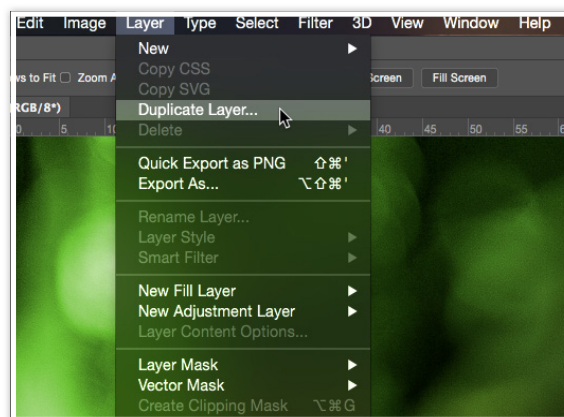
Using Layer Masks

Add effects non-destructively with Layer Masks

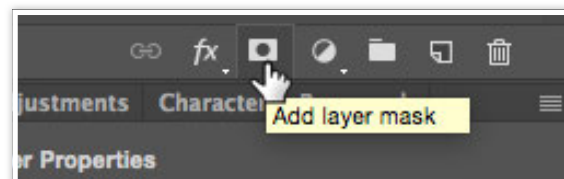
While the Quick Mask function is an easy way to selectively edit your pictures, the more traditional method is to use Layer Masks. The advantage to this method is that it is non-destructive, so if you don't like the results you can just go back and start again. It is also repeatable, because you can use the same mask for multiple effects, saving you time and effort. For this quick tutorial we'll use a Layer Mask to apply a selective monochrome or colour extraction effect. We'll start with this bright image of a flower. The reds and purples will remain in colour while the rest of the picture will be changed to black and white.



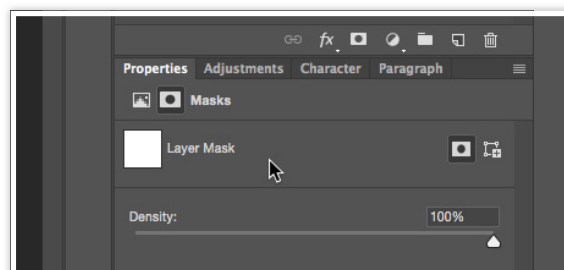
01 To start with, right-click on the thumbnail of the photo in the layer palette and select Duplicate Layer from the menu. Alternatively click and drag the layer thumbnail in the palette onto the New Layer button at the bottom of the palette, which will also duplicate the layer.



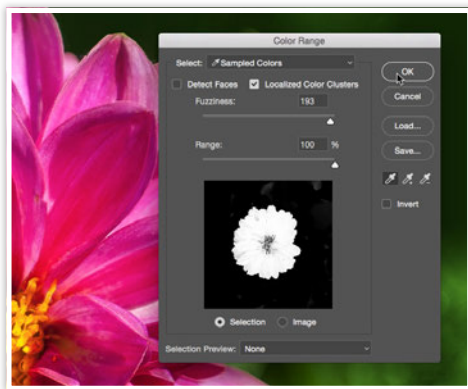
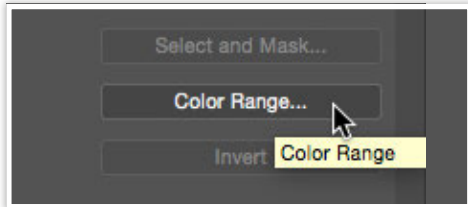
02 Next, activate the new layer by clicking on it in the palette, and then click on the Add Layer Mask button at the bottom of the palette.



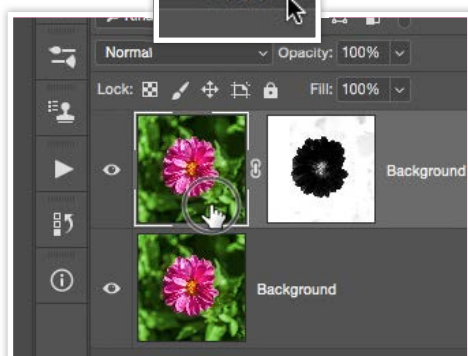
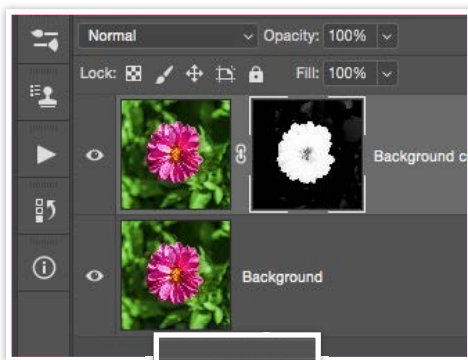
03 A white square will appear in the layer palette representing the new mask. Double-click on this and the Layer Mask palette will fly out. This palette lets you configure the mask in a variety of ways.



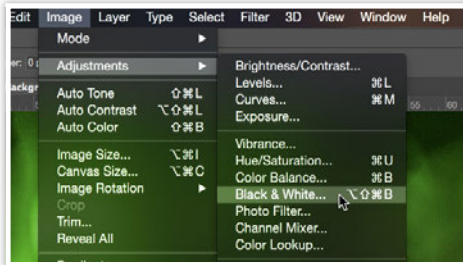
04 Click on the Color Range button and you'll see a new window appear with a colour range picker, and the cursor will change to an eyedropper tool. Click on the red petals of the flower, and adjust the sliders so that as much of the colour as possible is selected, but none of the background. Click OK when you're happy.



05 Now we've got a mask that covers the shape of the flower but what we need is a mask that leaves the chosen colour, but covers everything else, so click on the Invert button that swaps the mask and the background. This effectively creates a hole in the layer through which the background layer will be visible.



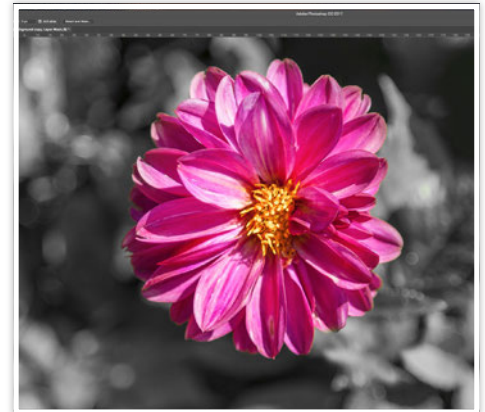
06 Next we can apply the effect to the top layer. For this one we'll use the Black and White menu option, since it's a quick and easy effect. You'll find it in the Image > Adjustments menu.



07 You can adjust the parameters of the Black and White effect with the sliders on the window that appears. The results are a matter of personal taste, so adjust the parameters until you're happy.



08 The Layer Mask can be used to produce any kind of selective effect like this, and the great part of it is that the original image is still intact in the background layer, so if you're unhappy with the finished result you can just delete the effect layer and start again. However as you can see, the effect is just about perfect.



USEFUL TIP

Always remember that layer masks do not erase any of a layer's detail, it just makes certain details invisible without deleting them. This is referred to as non-destructive image editing.



Content-Aware Fill and Scale

Photoshop contains image processing technology so advanced it looks like magic

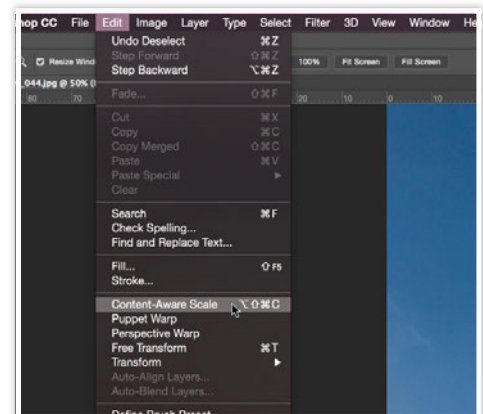
Photoshop CS4 introduced the world to an amazing new technology called Content-Aware Scaling, which can resize an image while preserving the proportions of important image elements. It works by analysing the image and removing lines of pixels that contain relatively little information, so that a plain background will be affected before the main subject. The best way to illustrate the effect is with examples, such as this picture of a clock tower.

Content-Aware Scaling

01 If we resize the image vertically by 75 percent using the standard Photoshop Image Size menu option, the people and cars will end up looking flattened and out of proportion, since their height has also been reduced by 70 percent.

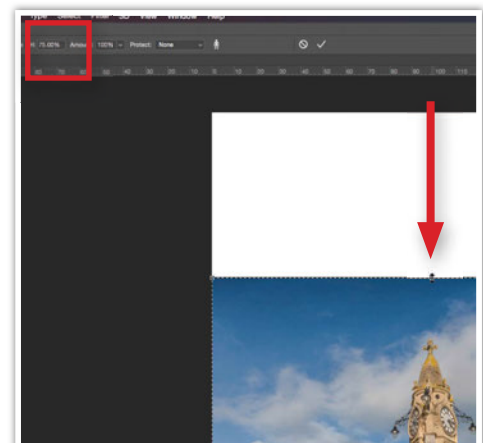


03 You'll find Content-Aware Scaling in the Edit menu, but it will be greyed out unless you've converted the image into a layer.



02 However if we use Content-Aware Scaling, the clever algorithm detects that the areas that are just sky contain relatively little information, and so this time when we re-scale the image it deletes those pixels first, preserving the more information-rich pixels that hold the details including the people. As a result a 75 percent height reduction leaves the scene looking relatively unchanged, although the area of blue sky has been reduced.

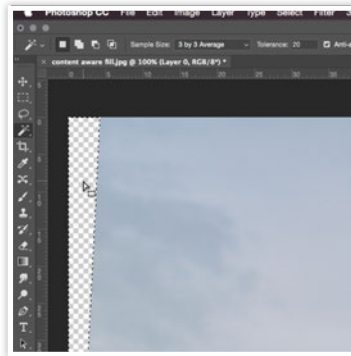
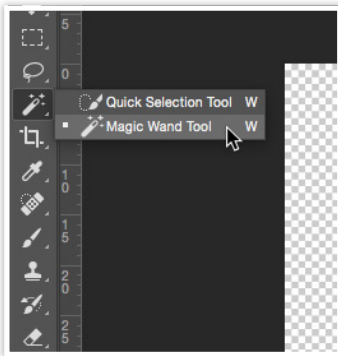
04 You use Content-Aware Scaling in just the same way as the normal Image Size option. Either drag the handles on each edge in the direction you want, or directly enter the proportions into the text boxes on the tool options bar. Content-Aware Scaling works for both height and width, and can also be used to enlarge an image.



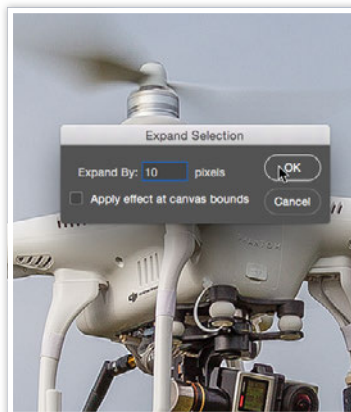
Content-Aware Fill and Move

Photoshop CS5 took the content-aware technology further with the introduction of Content-Aware Fill. This extremely useful function can fill in blank areas of an image with an approximation of the surrounding area, which makes it particularly handy for filling those triangular edges that are left after rotating an image, for example when levelling the horizon line. Again it's relatively easy to use.

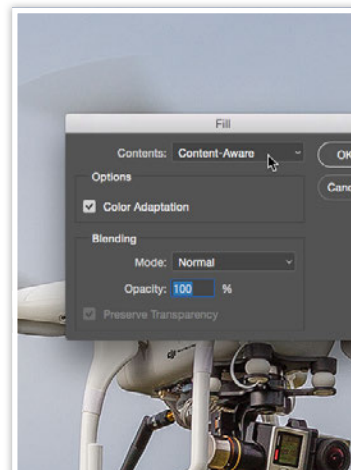
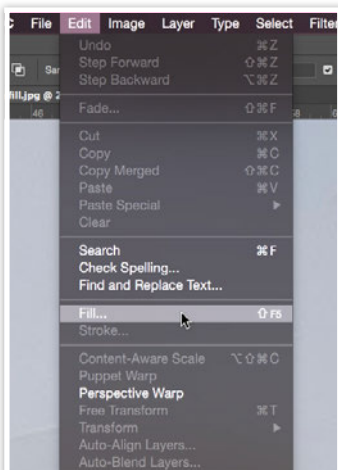
- 01 Starting with an image that has just been rotated, leaving those empty triangles, take the Magic Wand tool and select the plain areas.



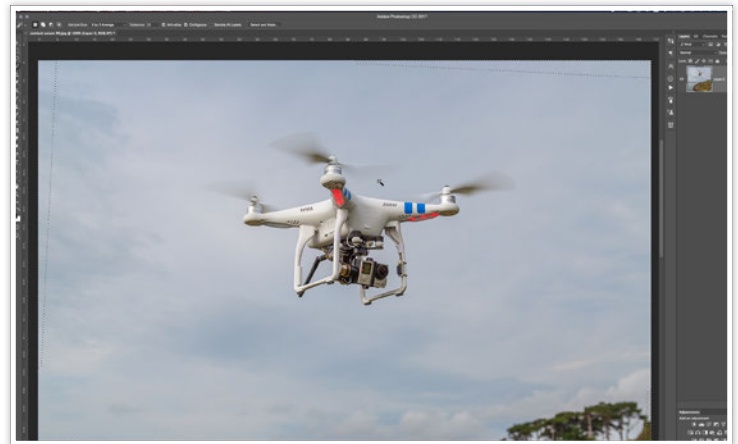
- 02 Next, go to the Select menu and click on Modify > Expand. Increase the selection area by a decent amount; for this picture 10 pixels should do nicely.



- 03 You'll find Fill in the Edit menu. Click on it and you'll see the Fill options window appear. Content-Aware should be selected by default, but if not choose it from the drop-down menu.

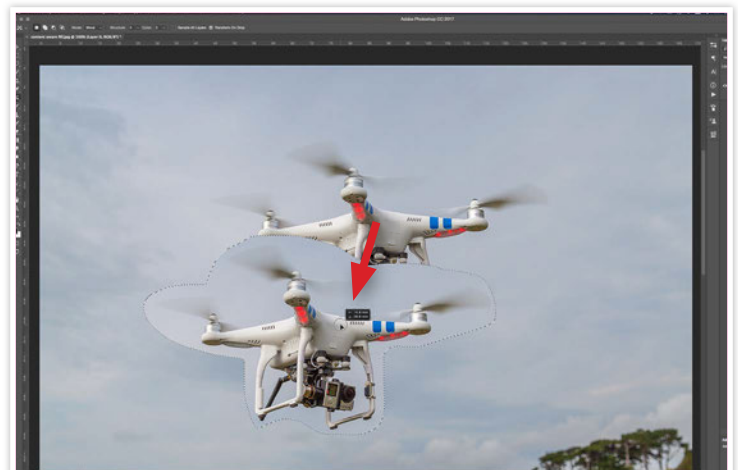
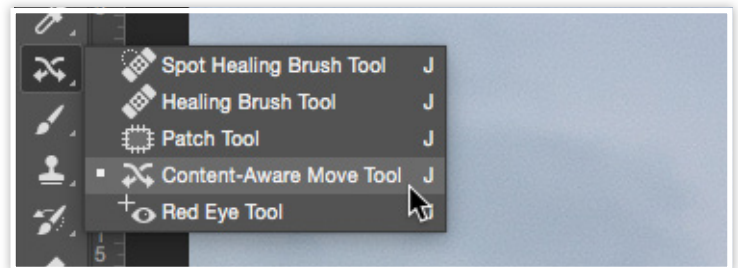


- 04 There will be a short pause while Photoshop analyses the image, but then it will fill in the blank areas with a texture derived from the content of the immediately surrounding area.



- 05 Content-Aware Move is a new feature introduced with Photoshop CS6, and uses the same technology as Content-Aware Fill. The idea is that you can select an object on a background and move it to a new area of the image. The Content-Aware algorithm should automatically fill in the area that you moved from and also blend in the moved object.

In practice it's not actually much use unless the object to be moved is on a virtually plain background, in which case it's often simpler to use the Clone Stamp anyway, but some people may find it useful.





Building Your Editing Skills

Photoshop has become extremely popular among photographers, digital artists and designers the world over due to its creative power. It has all the tools you could ever need to get the job done. We're going to take the techniques developed in the last section and add some more to your growing skill set.

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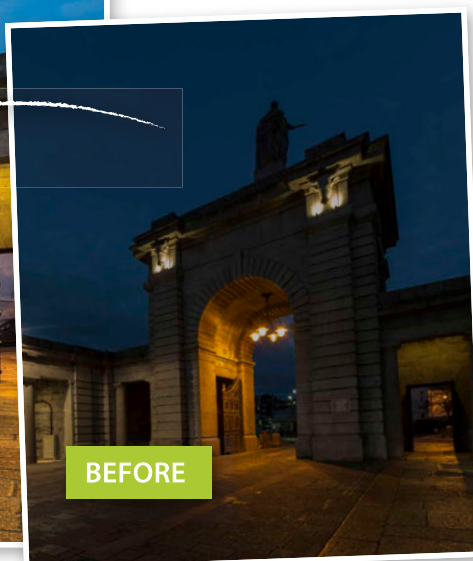
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Adjusting Exposure

Correcting your exposure mistakes is easy with Photoshop



Even with the sophisticated technology found in the light metering systems of modern digital cameras, they are not infallible. Some lighting conditions can confuse them, resulting in pictures that are over or under-exposed.

All cameras have a limited dynamic range, levels of illumination at which they record featureless pure white or featureless pure black. The tonal variation available between those two extremes depends on the quality of the lens, sensor and image processor that captured it, and the bit-depth of the file type used to record it. For maximum bit-depth it's always best to use Raw mode, since this will usually store images in 42-bit or even 48-bit form, capturing greater dynamic range. We'll look at improving the exposure of the more common JPEG images from a compact camera. JPEG images are usually only 24-bit, so have less latitude for any exposure recovery.

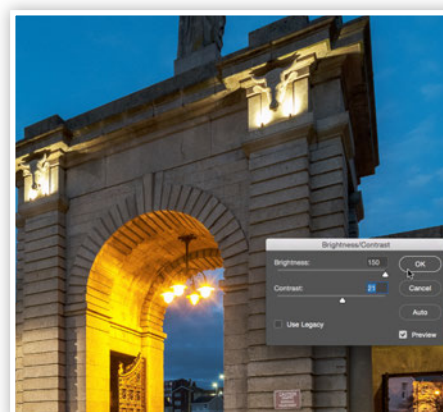
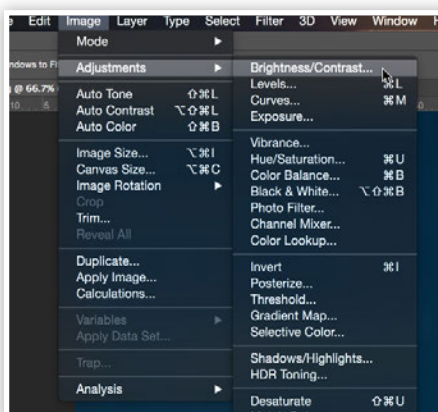
Over-exposure tends to be more of a problem than under-exposure, since burned-out highlights contain no detail, but the JPEG format is surprisingly good capturing detail in areas that might initially look like featureless black. As a result it's often possible to rescue shots that are quite badly under-exposed, although this will also amplify any noise in the image, there is a trade-off for image quality.

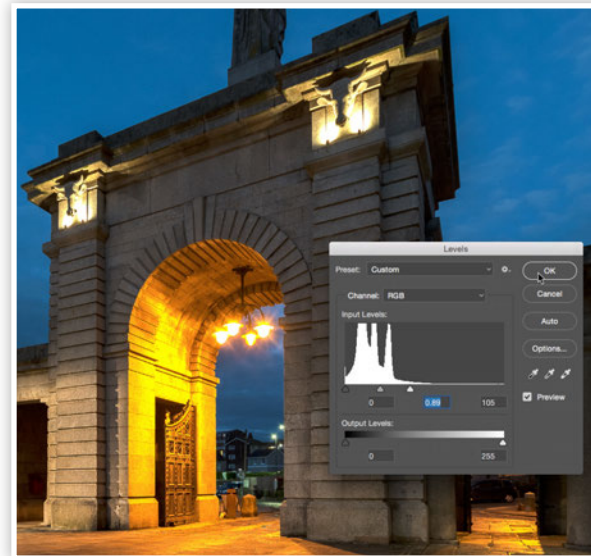
Take a look at this shot. It was a partial spot meter reading taken from the lights under the arch. The rest of the shot is in darker shadow and under-exposed. It would have been a better idea to use an average metering, but we can still rescue this it using an image editing program.

Brightness/Contrast

The quickest and easiest way to brighten the photo is to simply turn up the brightness. You'll find Brightness/Contrast as an adjustment layer in the palette on the right, or in the Image > Adjustment menu. The Brightness/Contrast function in recent versions of Photoshop has been changed to improve contrast and tonal balance when adjusting the brightness of your images.

By moving the Brightness slider to the right, the overall brightness of the entire photo is increased, but the new algorithm retains a reasonable balance in shadow tones. You can tweak the effect with the Contrast slider, the result is reasonably acceptable.





Levels

Photoshop offers another way of altering brightness and contrast, but this time with more subtlety and control, by adjusting the Levels histogram. You'll find Levels in the same Image > Adjustment sub-menu as Brightness/Contrast. The Levels histogram is basically a graph showing the proportion of pixels in the image at each colour intensity. The far left-hand end of the graph represents black, and the right-hand end is white, with every tone in

between represented by a spike on the graph. On the bottom axis of the graph are three points, the left representing the black cut-off point, the right the white cut-off point, and the one in the middle representing the midtone point.

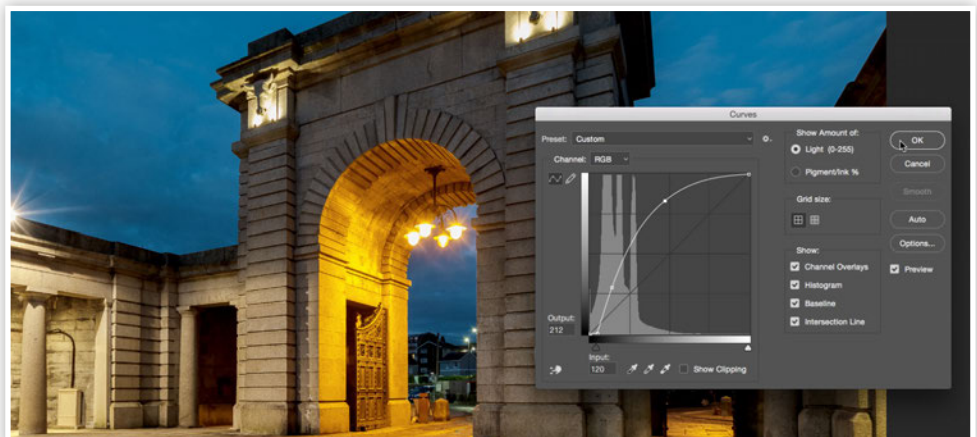
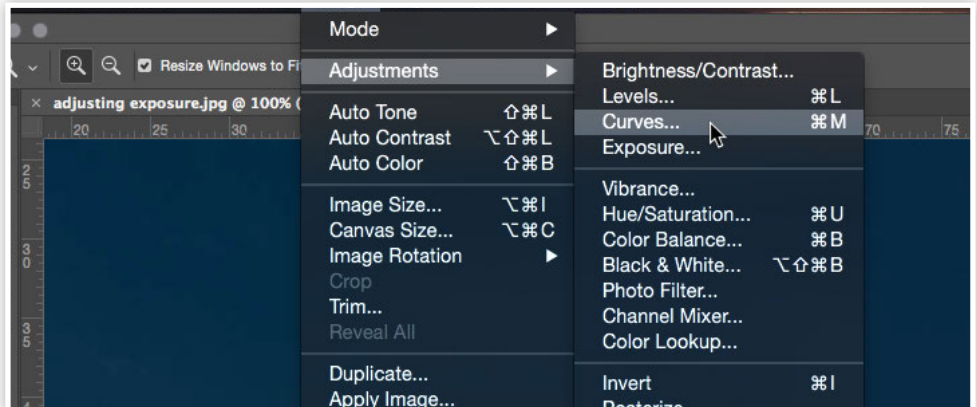
As you can see from the graph our image is mostly shadows and midtones, with little highlights, so we need to brighten some of those shadows into mid-tones. The way we do this is by moving the mid-tone

and highlights points left towards the shadows. This has the effect of bringing out a lot of the detail from the shadow areas without burning out any more highlights. It also leaves the deeper shadow areas intact. It is a far better way of adjusting the exposure of a photograph than simply altering the Brightness/Contrast, however it isn't quite the best way. Adjusting the Levels mid-point is still strictly linear in its adjustment.

Curves

The Curves adjustment option, again found in the Image > Adjustment menu and as an adjustment layer option, is a method of changing the relative brightness of specific tones and ranges of tones within an image, giving precise control over exposure. Learning to use it properly is a core skill in image editing, and will enable you to make precise and subtle changes to brightness and relative contrast not just of the image as a whole, but also of individual colour channels.

Drag the Curves output line around by clicking at any point, then moving the handle that appears. To improve this picture we need to brighten the shadows and mid-tones, while simultaneously darkening the highlights, so we should drag the lower side of the curve upwards, and the upper part of the curve downwards, creating an inverted S-shaped curve. As with many Photoshop techniques, the key here is subtlety. Push the curve too far and you'll ruin the picture, so keep an eye on it as you progress.



USEFUL TIP

As with most Photoshop editing techniques, subtlety is the key. If you push the curves too far you'll lose detail.

Contrast and Saturation

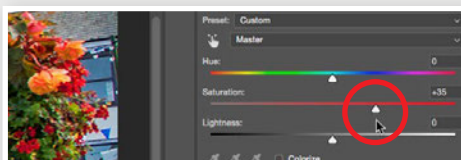
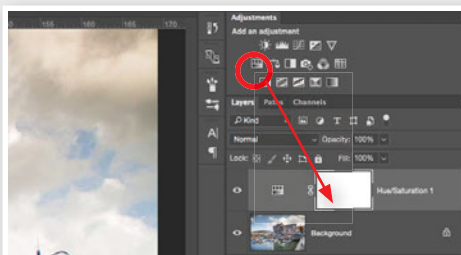
Using curves and blend modes to improve colour saturation and contrast in your digital photos



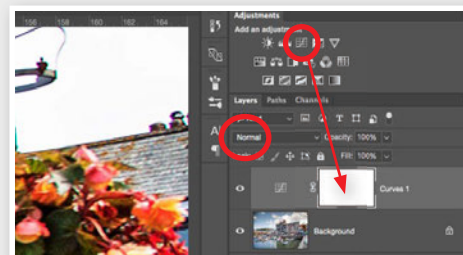
When you take a digital photo of a scene, you are relying on your camera to be able to capture all the colours and tones that you see. Unfortunately most digital cameras simply aren't capable of recording the full range of colours and shades that the human eye can see, so your photo of what was a bright and colourful scene may prove to be a bit of a disappointment when you see it on your monitor. Fortunately there are many different ways to improve both contrast and colour saturation, which might help to restore some of the sparkle to your photos. Let's take a look at some of the alternatives.



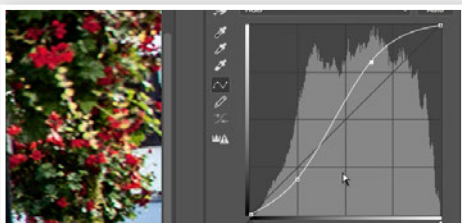
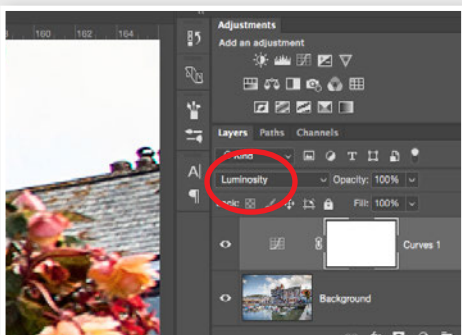
01 As an example we'll use this snapshot of Dartmouth. In reality the colour of the scene is much more intense than it looks here, but the digital camera that was used to take the photo was set to a neutral and flat colour mode to capture as much dynamic range as possible. This mode generally leaves images looking a bit pale and lacking contrast and vibrant colour. This shouldn't be a problem as the shot is well exposed and contains plenty of detail that will suit the increase in saturation.



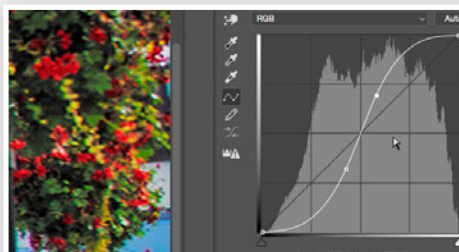
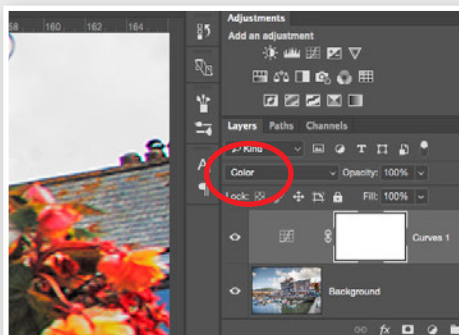
02 The simplest way to improve the saturation is by adding a Hue/Saturation adjustment layer. Like many other parts of the program, Hue/Saturation has been improved in Photoshop, producing a smoother result than previous versions. If you were to boost the saturation by about +45, you'd restore some of the missing colour, but it's a scattergun approach and doesn't offer much fine control. It can also increase noise in shadow areas in JPEG images. Let's look at more options.



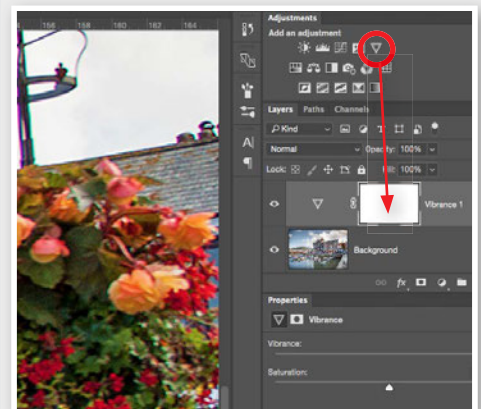
03 A much more controllable way to adjust both saturation and contrast is to use a Curves adjustment layer. We've already looked at Curves in the section on adjusting exposure, but by using Blend Modes we can also use Curves to enhance saturation. In Normal blend mode the curve will change both contrast and saturation. We're using the same S-shaped curve, which boosts brightness at the upper end of the scale and darkens shadows at the lower end.



04 By changing the blend mode to Luminosity, the curve will only affect brightness, so the same S-shaped enhancement curve will improve contrast, lightening highlights and darkening shadows without affecting colour saturation.



05 Conversely, by using a Color blend mode, the S-shaped curve will alter colour saturation without affecting brightness, so shadows and highlights are unaffected. This is great to keep noise under control.



06 Another way to improve saturation is a Photoshop function called Vibrance, which can also be applied as an adjustment layer. Vibrance is a difficult thing to quantify. It is a saturation function, but it works on a graph, affecting the least saturated areas most, and the most saturated areas least. On a picture like this it can help, but it has to be used with contrast enhancement for best effect, which may again cause an increase in noise. This option is less intense than using Saturation. Vibrance is best used when processing a Raw image file.

Adding a Graduated Filter

Graduated filters can improve photos by adding depth and colour to the sky



Photographers use graduated filters placed in front of the camera lens to selectively change the exposure and sometimes the colour of part of a picture, usually to darken the sky to bring out details in the clouds and balance the exposure with the landscape in the foreground. They come in many different shapes, sizes and colours to fit all types of camera system.

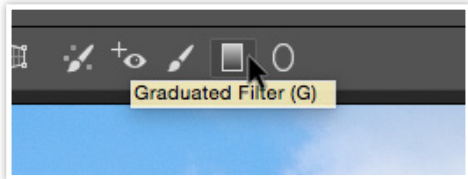
As with most photographic techniques, it's possible to duplicate the effect of graduated filters using Adobe Photoshop, and as usual there are several ways to accomplish this. For this example we'll use an image of a sunny day on the island of Tresco.



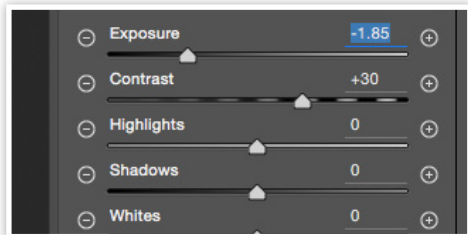
Graduated Filter in Camera Raw

Since this photo was taken using Raw mode, we can use the Graduated Filter tool in Adobe Camera Raw (ACR). ACR is the Raw processing application supplied with each version of Photoshop, and allows you to add the effect during processing. This is by far the best way to do it, since it preserves the maximum amount of detail in the photograph.

01 When you open the image in Adobe Camera Raw, you'll see a row of tool icons across the top of the main image window. The Graduated Filter icon is to the right.



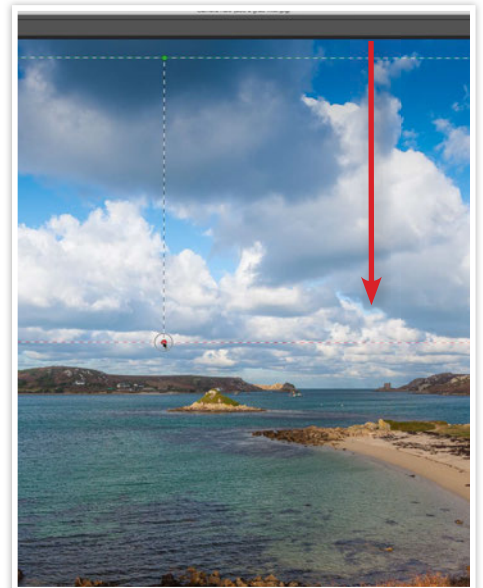
02 When you click on the Graduated Filter icon, you'll see the control panel on the right of the screen change. The filter can apply many different effects, but the one we want to use is a reduction in exposure and extra contrast. An Exposure of -1.85 and Contrast +30 should produce a suitable effect for this picture.



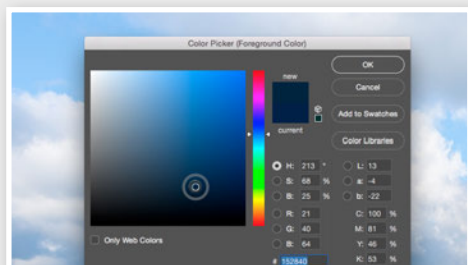
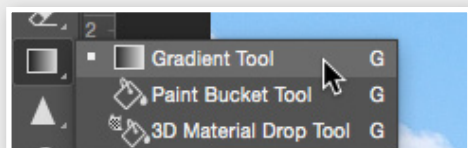
03 To apply the filter, drag a line down from the top of the screen to the horizon line. You'll see a horizontal and vertical dotted line like an inverted T. You'll also notice that you can change the angle of the line by moving the cursor left and right. To constrain the line to the vertical, hold down the Shift key while dragging.



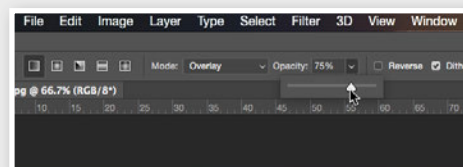
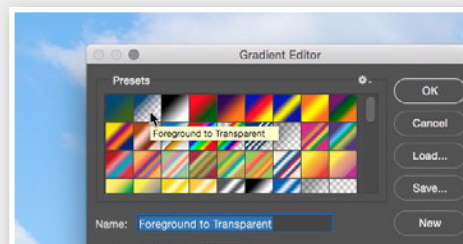
04 The red dotted line marks the lower, least saturated edge of the gradient effect, but there is also a green line at the top of the frame. This marks the top or most saturated edge of the effect, with a smooth gradient between the two lines. If you drag this green line down, more of the image will be at maximum effect and the gradient will be shorter.



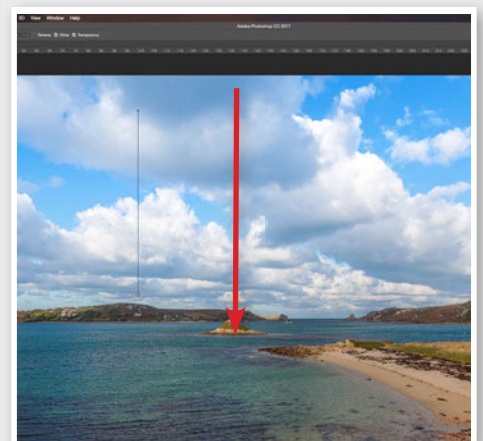
Graduated Filter in Photoshop



01 If your photo wasn't taken in Raw mode, you can apply a graduated filter using the Gradient Tool. To set up the graduated filter, first select the Gradient Tool, then set the foreground colour to blue by clicking on the foreground square and then using the colour picker.



02 Next, in the tool options bar, click on the gradient editor and select Foreground to Transparent, click on the button for Linear Gradient, set the Blending mode to Multiply, and the Opacity to 85 percent. Make sure the boxes for Dither and Transparency are checked.



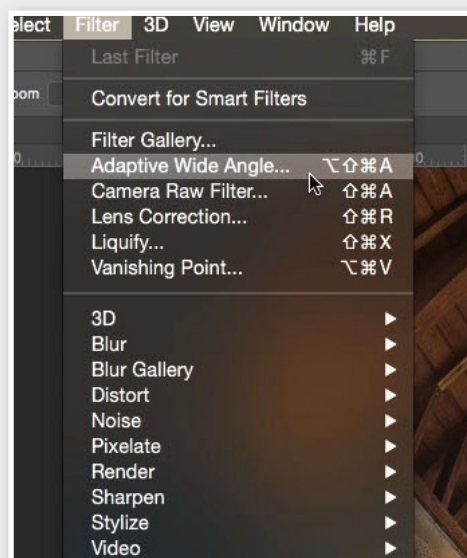
03 To apply the gradient to the picture, start at the top of the frame, click and drag down to the horizon line. If you hold down the shift key it will constrain the line to the vertical. The blue is blended into the clouds making them darker. It's always a good idea to tailor the blend colour to match the sky.

Correcting Lens Distortion

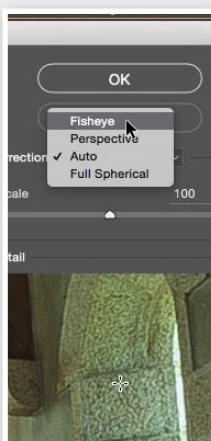
Correct the optical distortion of ultra-wide lenses with Photoshop's Adaptive Wide Angle



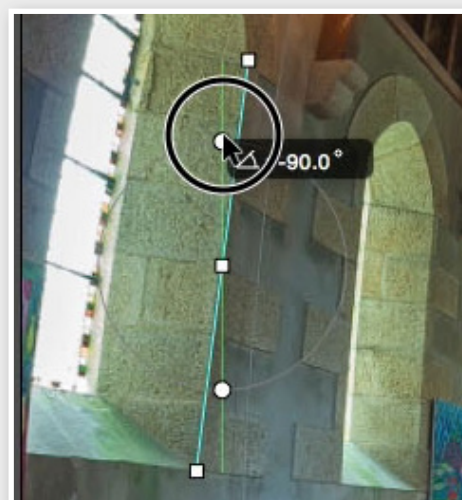
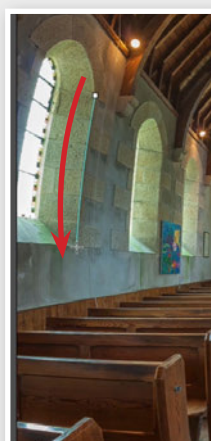
One of the new features introduced with Photoshop CS6 is called Adaptive Wide Angle; this can warp and bend an image to undo the optical distortion common to all very wide angle lenses. We've all seen photographs taken with "fish-eye" lenses. These lenses are called ultra-wide-angle, because the angle of view that they can capture can be as much as 180 degrees. Naturally the ability to squeeze half a room into the same shot comes at a price, and that is extreme optical distortion. Straight and parallel lines appear to be bent, perspective is massively shortened and familiar objects take on almost unrecognisable proportions. In the photo opposite, the straight uprights of the window alcoves and bench seats seem to curve inwards, the walls seem to bulge outwards and the whole effect is quite disconcerting.



01 Adaptive Wide Angle attempts to correct at least some of these problems, and can warp the picture to undo most of the optical distortion. Remarkably it can do all this while still preserving most of the detail in the picture. You'll find Adaptive Wide Angle in the Filters menu.



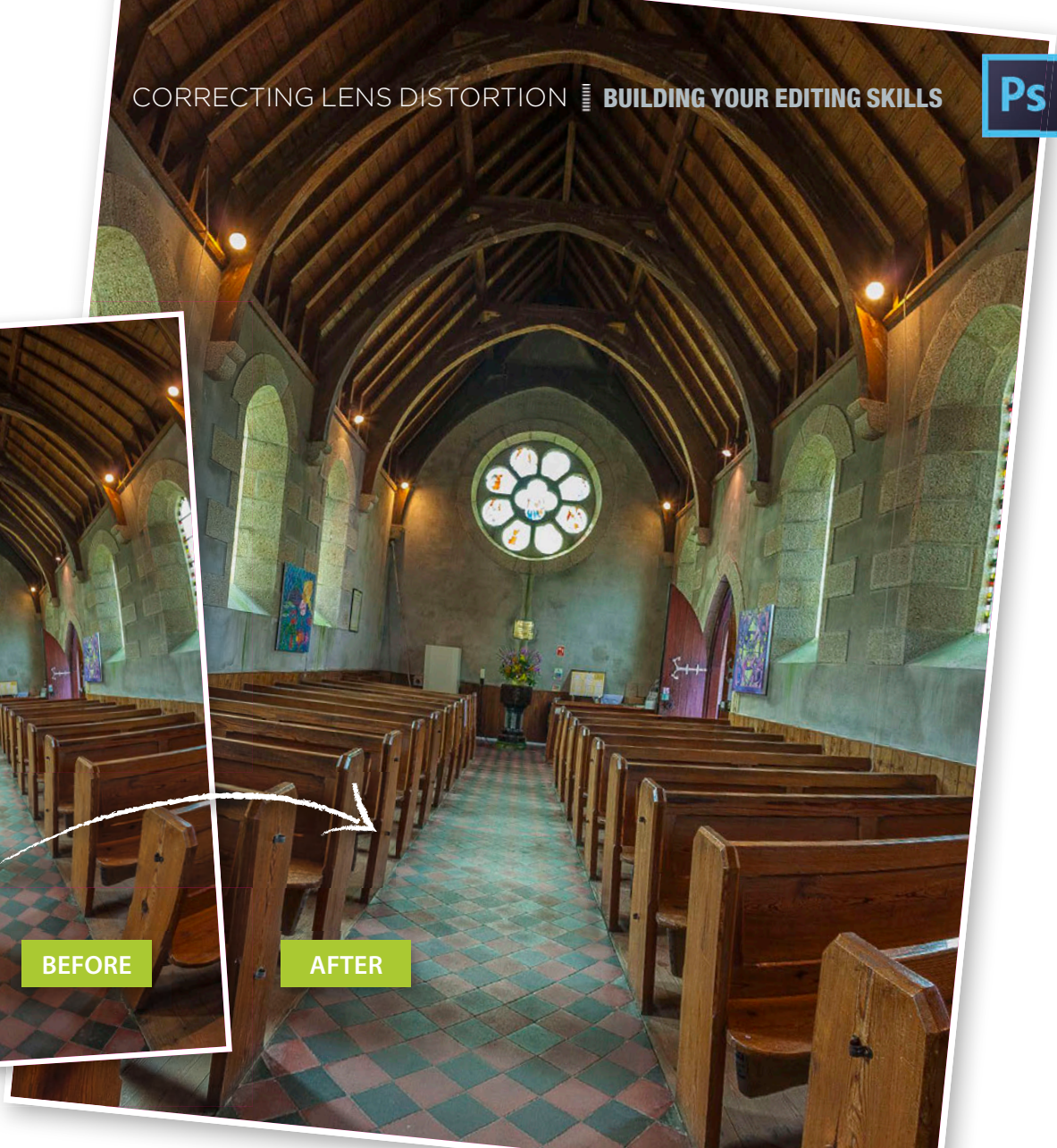
02 In the Adaptive Wide Angle interface, first select the Constraint tool from the panel on the upper left of the main screen, and select Fisheye from the Correction drop-down menu. Pick one of the vertical lines, in this case one of the stone window alcoves, click near the top of it and drag a line down the length of it. You should find that the line will automatically curve to follow the line, but you can drag the control handle in the mid-point of the line to match it up to the curvature.



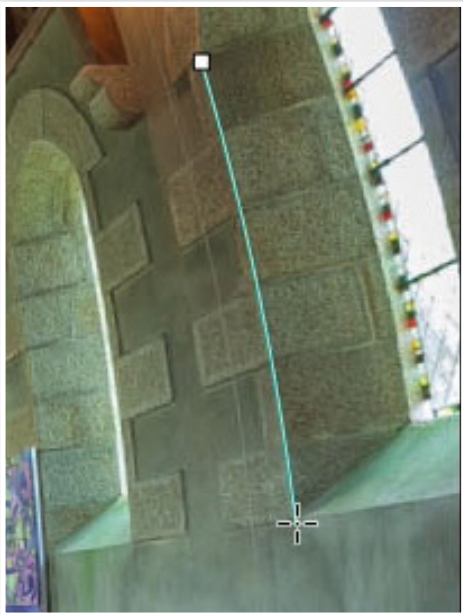
03 The line will automatically warp the picture to make the curved line straight. You'll see that there is a circle overlaid on the line, with two more control handles where they intersect. You can drag these handles, rotating the line to bring it into a vertical position. If you hold down the shift key it will automatically snap to vertical right away.



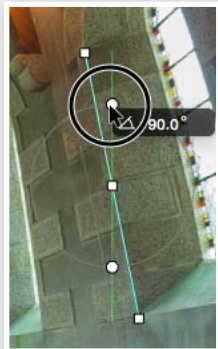
BEFORE



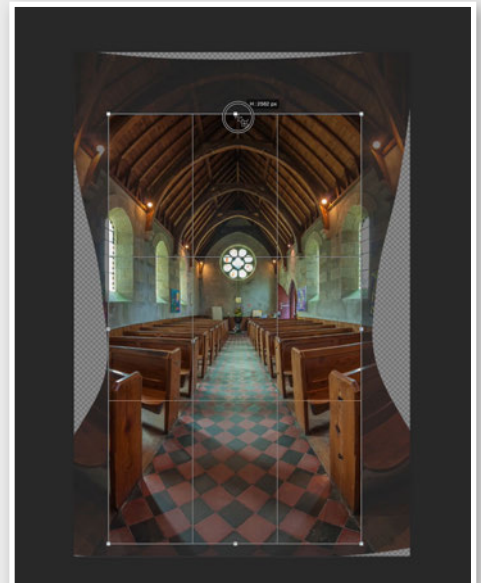
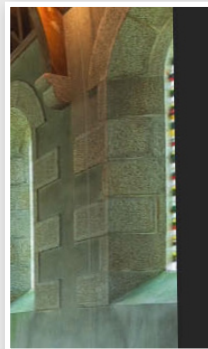
AFTER



04 Pick a line on the opposite side of the picture and repeat the process, dragging a line down the upright of the stone wall. This too will automatically straighten up the line.



05 Again, drag the handle on the circular line to move the upright into a vertical position. If you've done it right the vertical curvature distortion of the image should now be looking better. You may notice that the correction isn't quite perfect; there may still be some slight curvature of the various uprights and horizontals, but it's certainly a great improvement, and the vertical structures are much straighter. You can carry on and try to correct more of the curvature, but be aware of how much warping is being applied to the image to straighten everything out. Click OK when you're done to finalise the correction.



06 The process will have left some empty spaces at the edges of the image, so it will be necessary to crop the image to remove these. This does mean losing some of the original photograph, but the result is much less distorted than it was at the start.

Panorama Stitching

Get the whole of the landscape into one ultra-wide picture

Many digital cameras have a feature known as “Panorama Stitching” or “Panorama Assist” mode. It’s there to help with a particular type of photograph, or rather series of photographs, in which successive shots are taken as the camera is panned across a scene. After you take the first shot, the camera shows the edge of that shot superimposed on the monitor so you can match up the position of features in successive shots, producing a long continuous photo showing an entire panoramic scene. You can also shoot your pan sequence manually, especially if you have a tripod handy to keep the camera level. When it’s done well the results can be breathtaking, but getting a satisfactory result isn’t as easy as it looks.

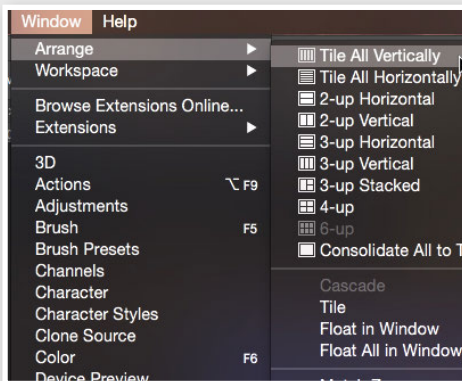
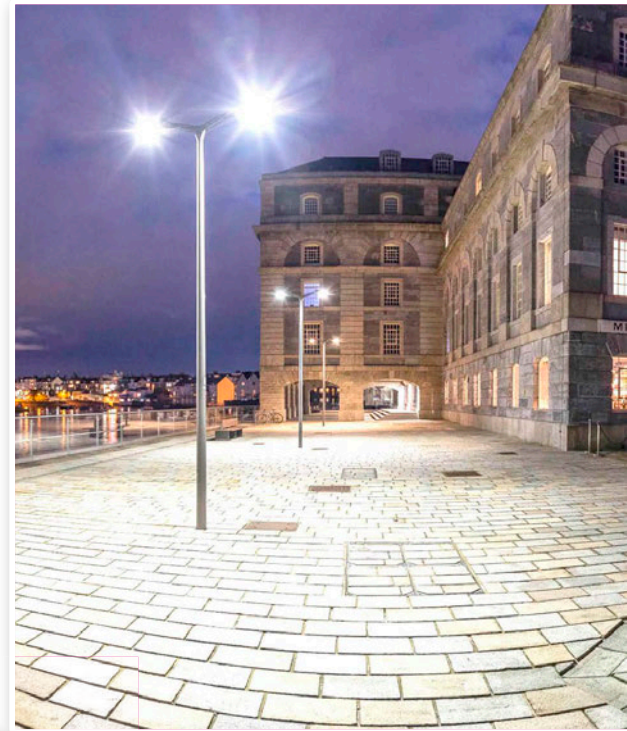
BEFORE

For the purposes of this tutorial we’ll use this example of a five-shot sequence taken down in Plymouth.

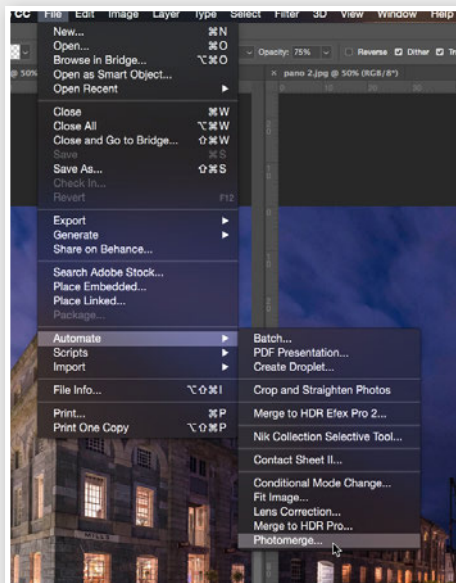


USEFUL TIP

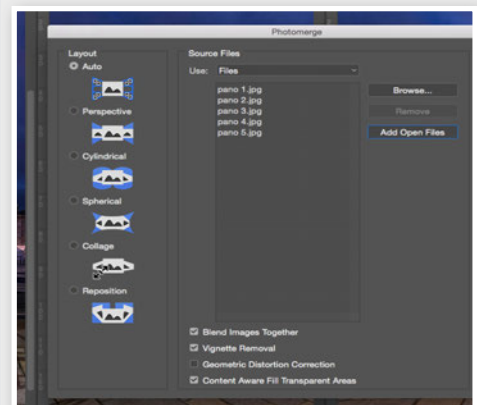
If shooting a panoramic sequence manually, always make sure that you have a large enough overlap between each shot you take. For best results, it is advisable to have about 25% of the previous frame visible each time.



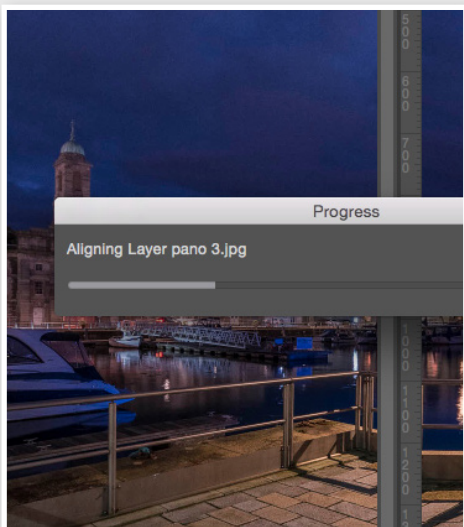
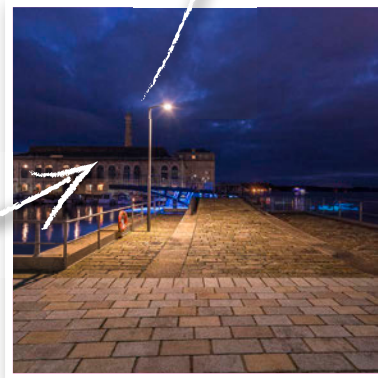
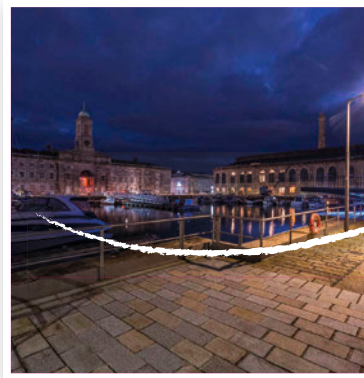
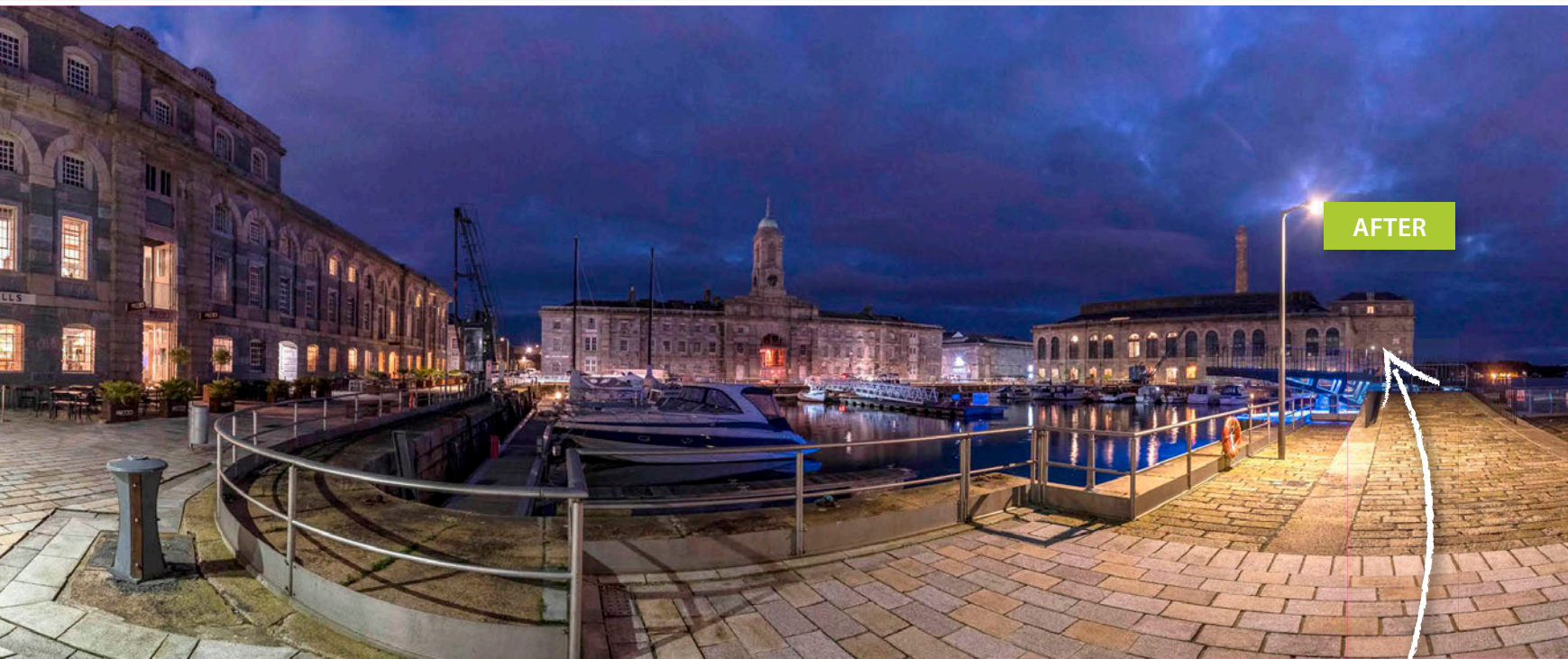
01 Having downloaded our panorama pictures from the camera into a folder on the PC, it’s time to fire up Photoshop and stitch them together into a panorama. Locate the files on your hard drive and open all of them in Photoshop. If you go to the Window > Arrange menu you can view them all at once by tiling them vertically. Not essential, but it gives you a chance to make a last-minute exposure check.



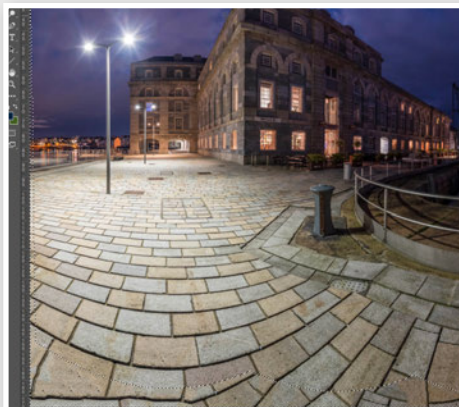
02 In Photoshop you’ll find Photomerge in the File menu under Automate, along with several other automatic processes.



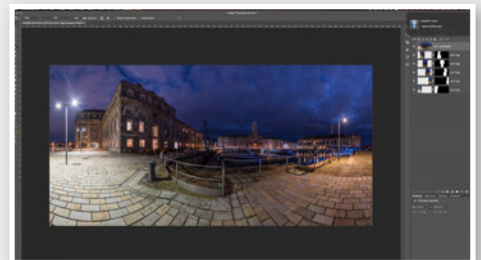
03 The Photomerge window offers a number of options for arranging your panoramic shots. For a simple landscape panorama like this the Auto option should work fine. Click on the Add Open Files button to add the three shots to the Photomerge list, and check the top two options and the bottom option to attempt to fill blank areas with the Content Aware tool.



04 Once you click OK the merging process starts, and it is completely automatic. It will take a while to complete, possibly quite a long while if you have a slow computer and/or very large image files.



05 Once the Panorama has been rendered, you'll see that there are areas where the program has had to warp the pictures to correct for perspective. This is where the Content Aware Fill tool will have attempted to add something that looks a bit like sky and fields. Depending on how well the fill works, you can always crop out these areas.



06 You can also use the crop tool to straighten out any slight tilt in your horizon, but hopefully you won't need it. The finished result should look something like this.

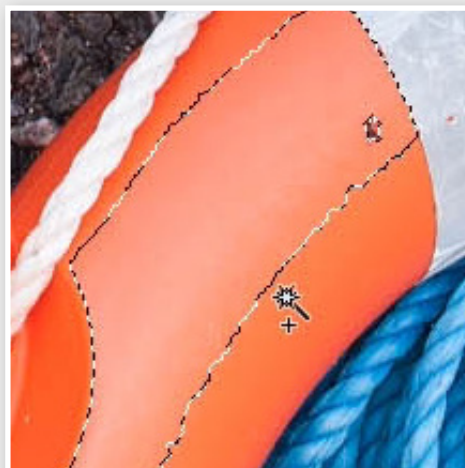
Colour Replacement

Swapping one colour for another

One relatively simple operation that you can do in Photoshop is to replace one colour with another. By using some of the selection tools we looked at earlier, along with the Hue/Saturation controls, we can change the colour of individual objects in our photos, such as replacing the colour of the lifebuoy in this shot.

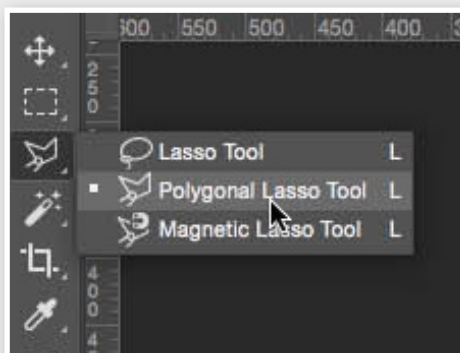


01 Selecting large areas of the same colour is one of those few occasions where the Magic Wand tool is actually useful, so we'll use it as a starting point here. With a tolerance setting of 20 it should be able to pick out the buoy ring without too much trouble.



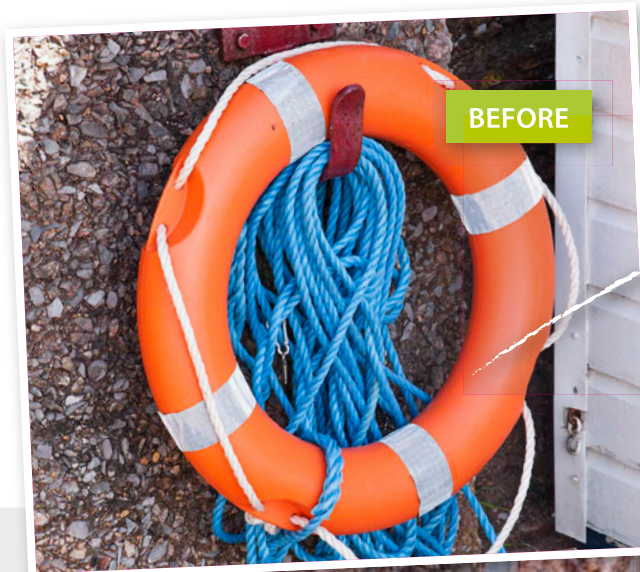
02 With the Magic Wand, it's best to add a bit at a time.

Click on an area that's a mid-tone for the total area you want to select, and you'll find that the wand tool will select an area around it. The size of the selection will depend on the tolerance setting. By holding down the Shift key and carefully clicking on areas around your starting selection, you can add more areas. If the wand selects part of the background, use Cmd+Z to undo that step, and try again more carefully, possibly adjusting the tolerance downwards if it keeps happening.

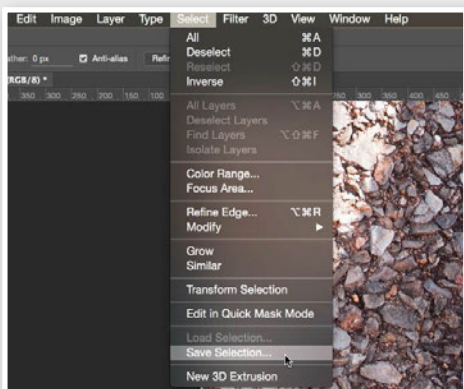


03 When you've reached the limit of what you can usefully select using the Magic Wand tool, you can finish your selection using the Polygonal Lasso tool. By setting the Feather to zero you can produce a sharp-edges selection. Alternatively, use the Selection Brush tool.

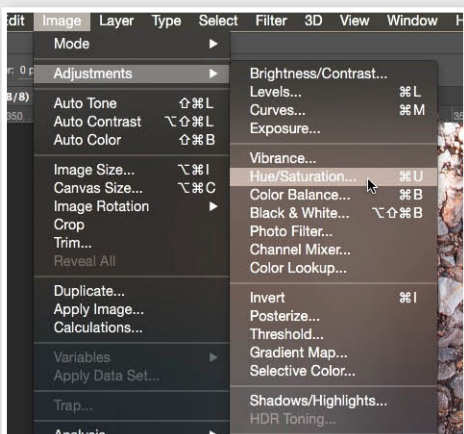
04 Again hold down the Shift key to add more areas to your selection. If you need to remove any areas from the selection, such as the rope and metal hook, you can subtract by holding down the Alt key and going around them with the Lasso.



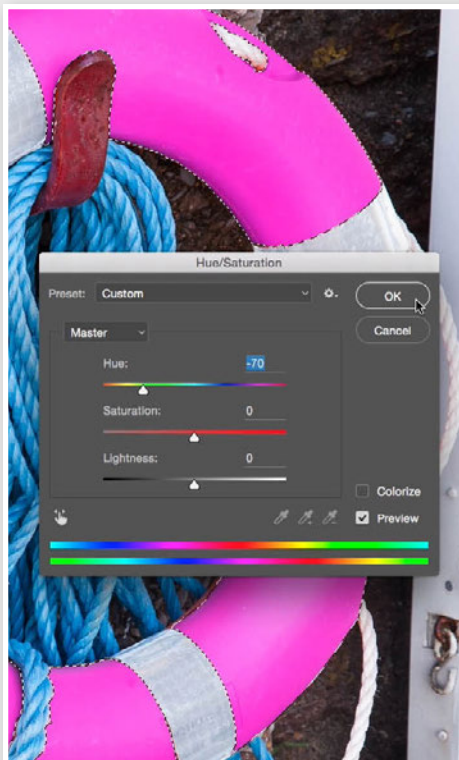
AFTER



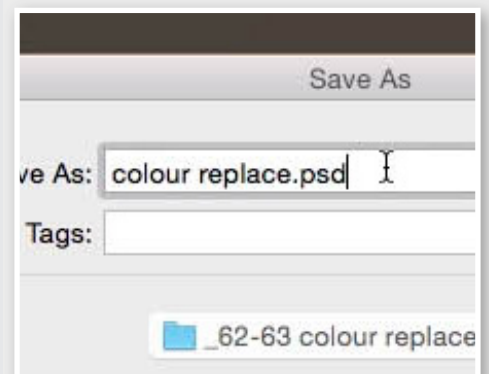
05 When you've selected all the bits you want to repaint, you can save the selection for later use, to save you doing all that work again if you change your mind.



06 Although there are several filters we could use at this point, the most versatile way to change the colour of the selected area is the Hue/Saturation/Lightness option. This is common to most editing programs. In Elements you'll find it in the Enhance menu.



07 You have three options under the Hue/Saturation setting. Leave the Lightness slider in the middle position to preserve the overall brightness of the object, but you can experiment by moving the Saturation and Hue sliders around. As you move the Hue slider, the colour will start to shift through the spectrum of colours, or you can produce subtle colour changes with lower saturation settings, or say to hell with subtlety and go for broke with full saturation.



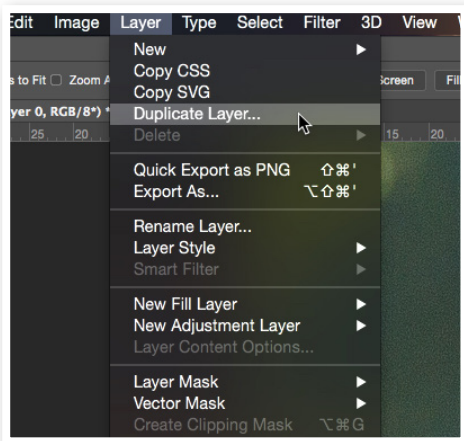
08 When you're happy with the result, or when your eyes start bleeding, you can clear the selection by using the keyboard shortcut Cmd+D, and then save the result. When you save the final image as a .PSD file in Photoshop or Elements, the selections are saved as well, embedded in the file.

Soft Focus Technique

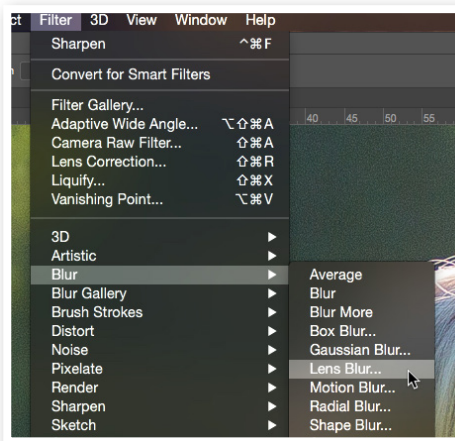
Adding a soft focus effect gives your portraits a romantic feel

Soft focus is an effect used widely in television and in the movies, as well as in many commercial and advertising photographs, for producing a dreamy romantic look. It's also a big favourite with wedding photographers. In traditional photography the effect is achieved with a special filter fitted over the camera lens. Many digital cameras now include soft focus as a digital effect, but we can produce the same results in Photoshop with ease using Gaussian blur and layer transparency.

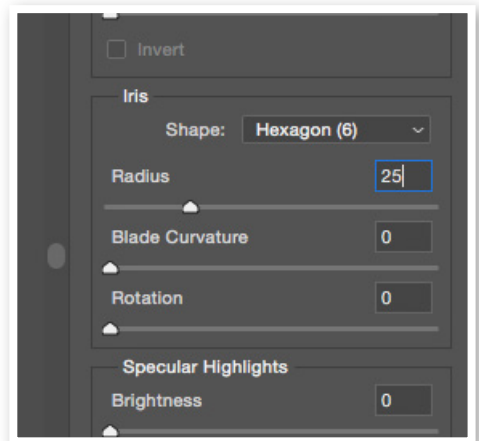




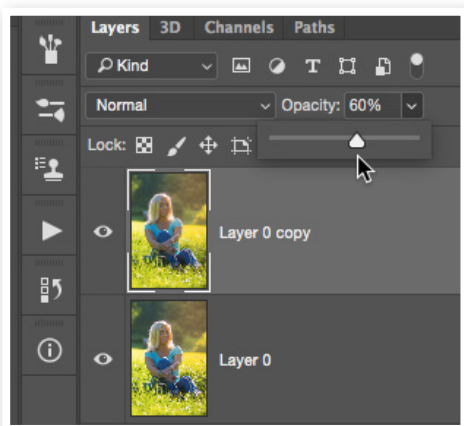
01 The first step is to turn the picture into two identical layers. To do this, go to the Layer menu, and select Duplicate Layer. Don't worry about naming this layer, it's the only one we're going to make.



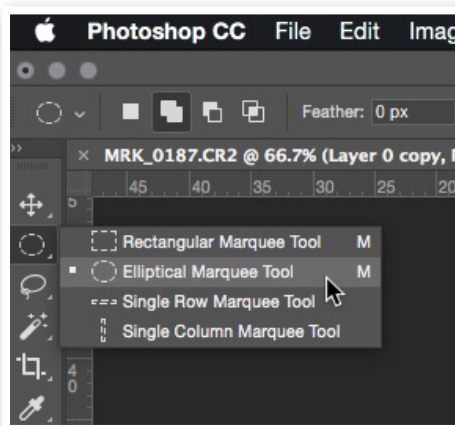
02 Next, go to the Filter menu, move down to Blur, and select Gaussian Blur. This is a special type of blurring that can be adjusted to produce certain effects.



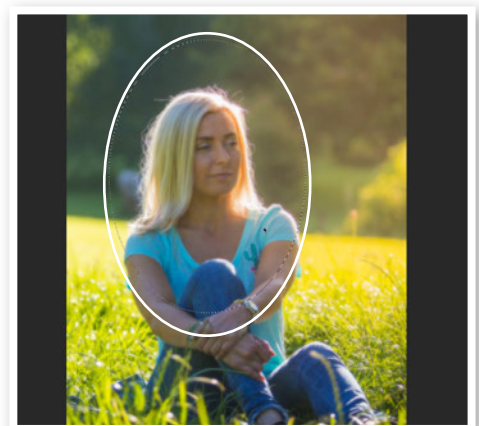
03 We don't need very much blurring to produce the soft-focus effect, so for this portrait shot, set a radius of 25 pixels. You may need a smaller radius for smaller images, but keep it subtle.



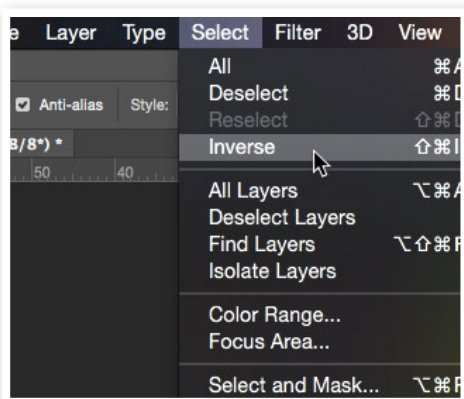
04 In the Layers palette, set the transparency of the blurred layer to around 60 percent. This lets the still-sharp lower layer to show through, mitigating the effects of the Gaussian blur. If you feel it is too blurred, you can drop the Opacity down to about 40% if you like.



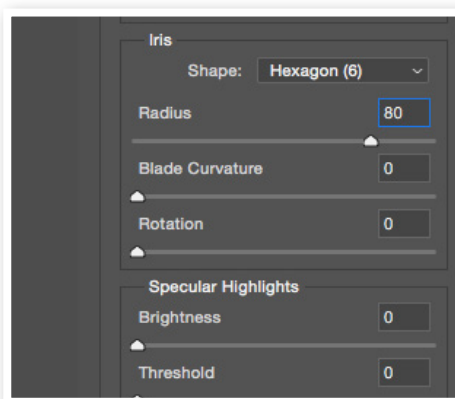
05 We can further enhance the look of the picture by adding an elliptical vignette of further blurring around the subject. This is a technique that portrait photographers have been using almost since the invention of photography. First, select the Elliptical Marquee tool.



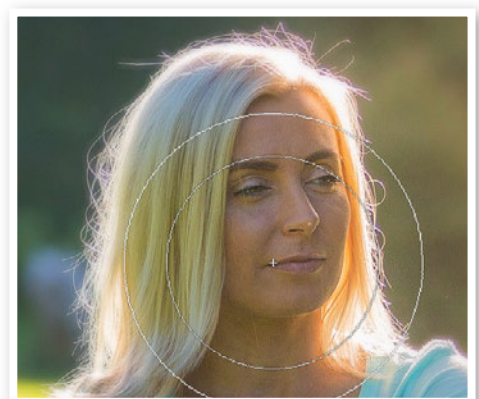
06 Drag an elliptical marquee selection around the portrait subject. This may take a few tries to get right, so use Cmd+D to de-select if you get it wrong. When you're happy with it, go to the Select menu and click on Feather. Set a radius of about 50-60 pixels.



07 Next, select Inverse from the Select menu to change the selection so that everything outside the ellipse is selected.



08 Now add a Lens blur filter to the selection, giving it a much bigger radius than before; around 80 pixels should do the job.



09 One final option is to use a soft eraser and erase areas of the blurred layer around your subject's face to keep it sharp if you prefer.



What is Raw Mode?

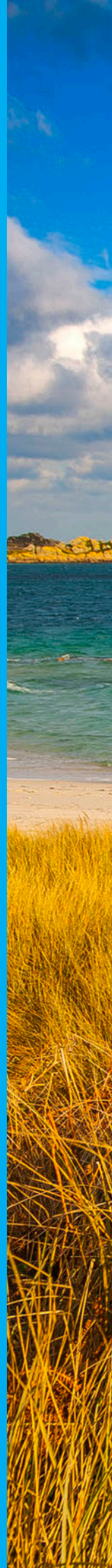
Digital cameras take away the need for chemical processing; if you shoot in Raw mode though, there is a digital equivalent to chemical processing. Raw mode is a digital readout straight off the sensor which offers great scope for processing your shots. It's time to step inside your very own digital darkroom.

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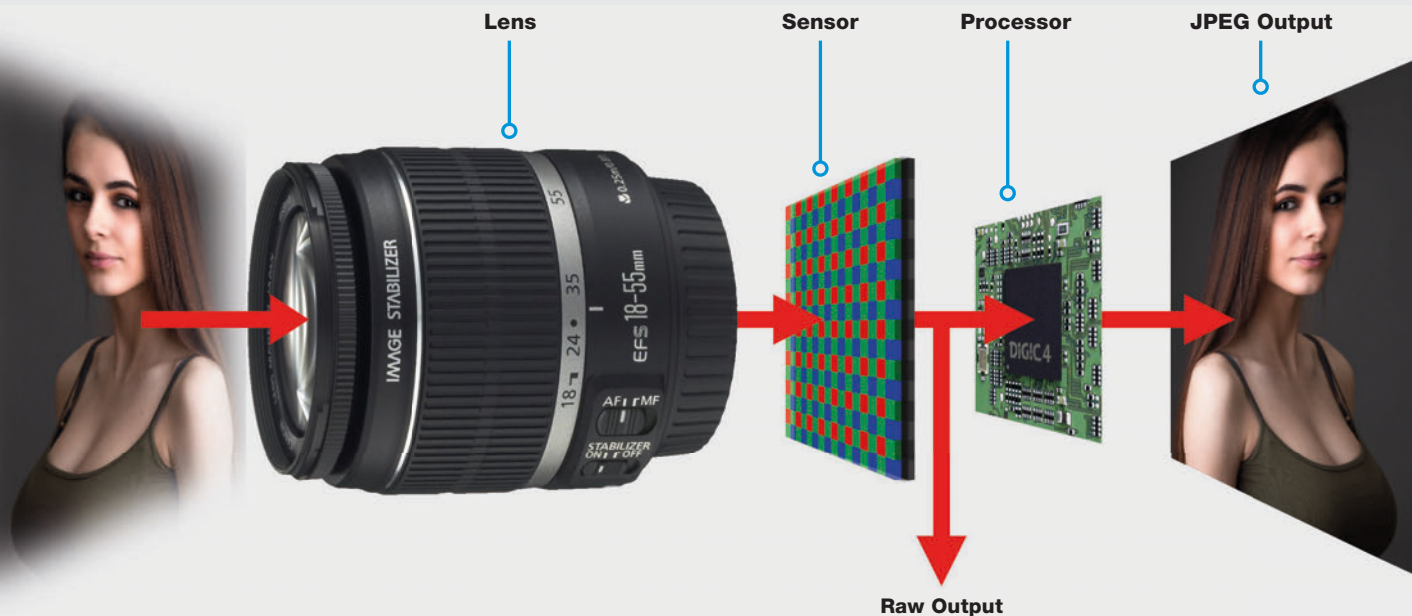
Processing Raw Files

For the best possible quality, shoot in Raw mode

All digital SLRs and Compact System Cameras, and most of the better compact cameras, have a shooting option called Raw mode. You'll usually find it in the menu as an option under image quality. Raw mode offers greatly improved image quality over the usual JPEG image file format, and is recommended for all serious photographers. Let's take a closer look at Raw mode, find out how it works and see how it can help you produce better photographs.



What is Raw Mode?



Raw mode is a special image recording option that is available on digital SLRs, Compact System Cameras, and other high-quality digital cameras. If your camera has this option, you have access to much higher image quality than the standard JPEG file format.

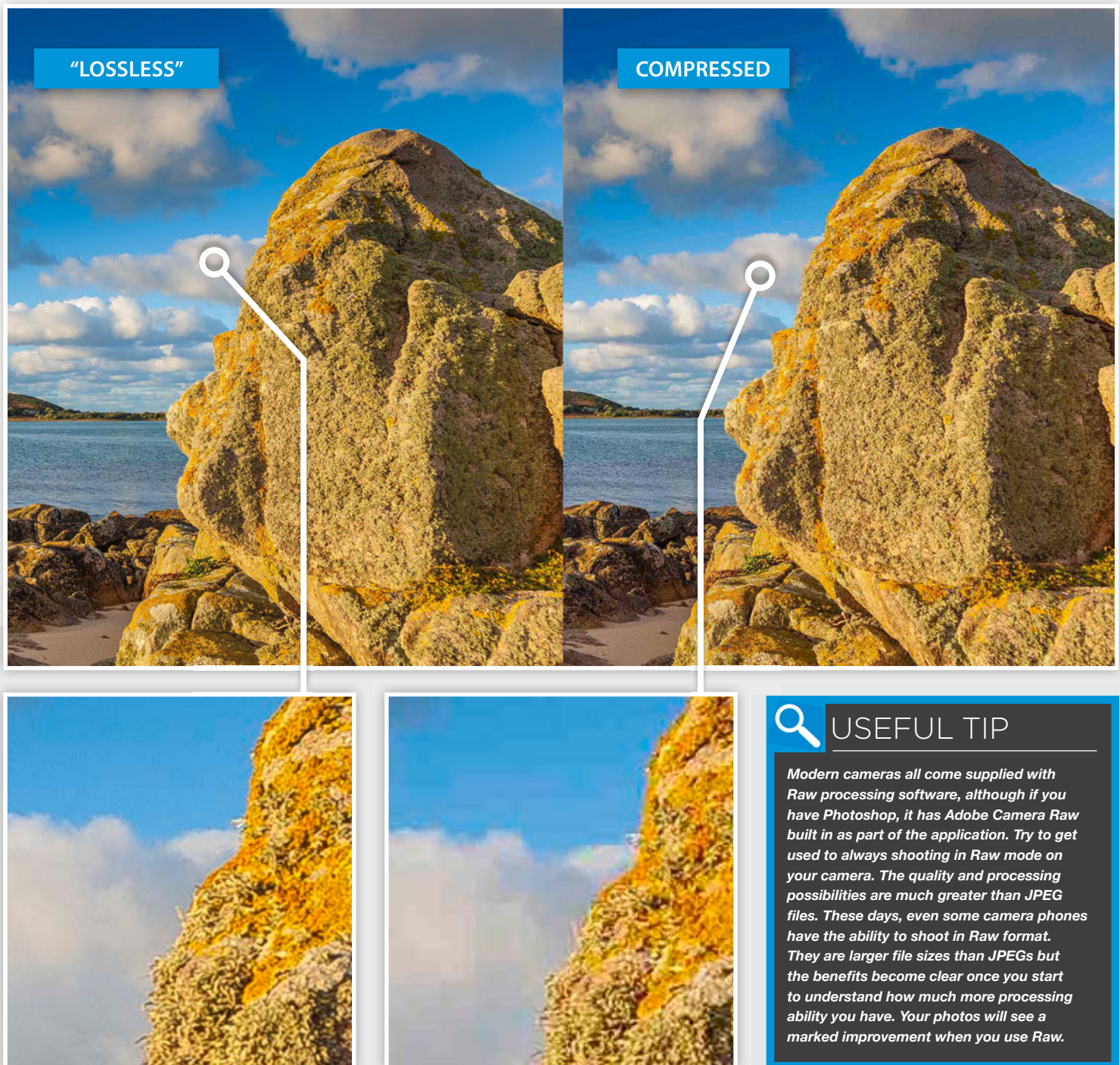
Essentially, Raw mode is just what it sounds like. It's the raw data pretty much straight from the camera's sensor. In a digital camera the photographic image is, as I'm sure you're aware,

captured by an electronic image sensor. This sensor has millions of tiny photocells that produce a charge when they are exposed to light; the brighter the light, the higher the charge. Digital camera sensors don't record the colour of the light hitting them, just the brightness, so a special mosaic of coloured filters is placed in front of the sensor, called a Bayer filter.

Naturally, the image generated by the sensor and filter wouldn't make much sense to the unaided

eye, so the signal from the sensor feeds into the camera's image processor, a combination of computer electronics and software which turns the brightness data from the sensor, adjusted for the colours in the Bayer filter, into a full colour digital image that you can view and print.

Part of that process includes reducing the bit-depth of the basic image data (the amount of 1s and 0s used by a computer to describe each pixel), usually from 36-bit (12 bits per channel)



or even 48-bit (16 bits per channel) to 24-bit (8 bits per channel), which makes a smaller and more easily processed file, but loses some colour depth because of the smaller palette that can be represented by that many bits. Other adjustments to the colour balance, such as unusual white balance settings, can also reduce image quality, as will heavy noise reduction.

In order to save space on the memory card, produce faster transfers and make it easier to display and print the photograph on a computer, the image is usually converted to a compressed JPEG file. Unfortunately JPEG compression also reduces the image quality, and can introduce

artefacts into some areas of the image.

The main advantage of Raw shooting, apart from the improvement in overall image quality, is that it bypasses the in-camera image processing, such as white balance, saturation, sharpness etc. This sounds illogical, but it's not really. The processing that takes place in the camera is pre-set before the shot is taken, and irreversible once the image has been converted to a JPEG file. By shooting in Raw mode, you can make the processing adjustments after the shot has been taken, and if you need to change them you can do so as long as you have the original Raw file.

The downside to Raw file recording is of course

that the saved files are much larger, so they take a lot longer to save to the memory card, and you can fit fewer of them on there. For a typical 16MP DSLR, a high quality JPEG file will be around 8MB, while a Raw file will be around 25MB, over three times the size.

Many of the more recent DSLRs have the ability to record Raw and JPEG image files simultaneously. This has the advantage of the convenience of JPEG with the versatility and quality of Raw, but takes up even more space on your memory card. Fortunately the price of very large memory cards is falling almost daily, so this needn't be much of a problem.

ACR Interface

Adobe Camera Raw isn't as difficult as it looks

Photoshop comes with Adobe Camera Raw, usually shortened to ACR. It offers a range of processing options that enable you to get the best out of your photos, including exposure adjustment, sharpening, noise reduction, colour correction and automatic correction for lens distortion. It is regularly updated to maintain compatibility with all the latest cameras and lenses. Like the rest of Photoshop, it's easy to get started. Let's take a look at the interface and see what it has to offer.

Toolbar

This holds all the main selectable tools, most of which are similar to tools in the main Photoshop interface, including Zoom, Hand, Crop, Straighten, Spot Removal, Red Eye Removal, and a newly-added feature that can add a graduated filter to your picture.

Control Palette

This is the main dialog palette, which contains the controls for each tabbed section. Most of the controls are sliders, and you can see the results of each adjustment both in real-time on the histogram and in the main image window.

Image Window

This is the main window displaying the image you're currently working on. All changes that you make during Raw editing will be visible here. You can zoom into the image using the magnification controls at the bottom left, or use the usual CTRL + and CTRL - shortcuts. You can see what effect your editing has had by checking and unchecking the preview option at the top right.

Output Options

At the bottom of the screen you'll find the controls for when you've finished your editing. If you click on the blue link you'll see a range of output options, since Adobe Camera Raw can process your pictures in a range of sizes. You can also save your edits back into the Raw file to keep them for later.



Control Tabs

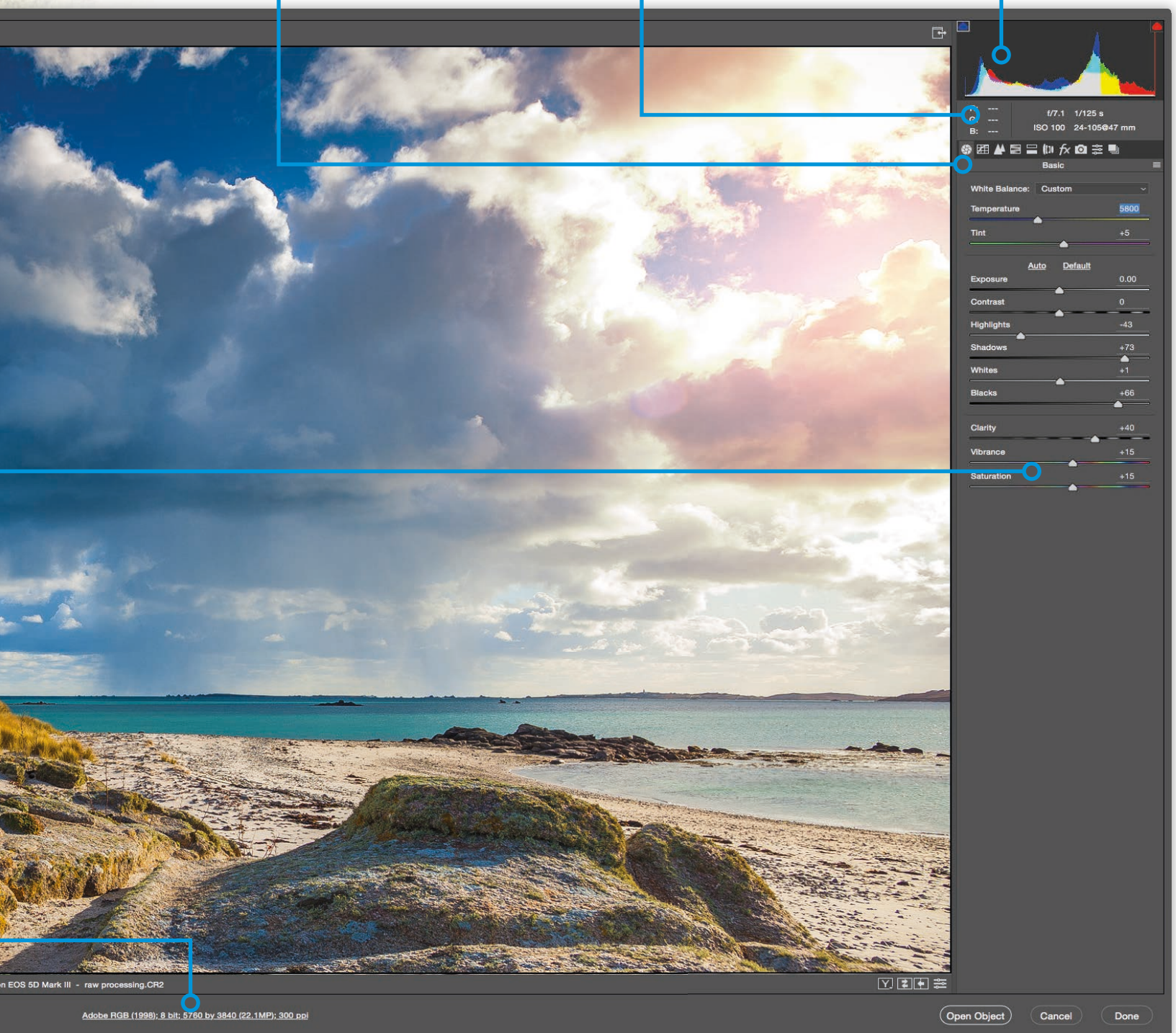
Camera Raw breaks the workflow down into discrete sections, each with its own tabbed palette, and you can switch between them by clicking here. The tabs are, from left to right: Basic, Tone Curve, Detail, HSL/Greyscale, Split Toning, Lens Correction, Effects, Camera Calibration, Presets and Snapshots.

Information Palette

The left side of this panel shows the RGB colour values at the cursor position. The larger right side of the area displays the exposure information for the image, including the aperture, shutter speed, ISO setting and focal length of the lens.

Histogram

The Histogram shows you the number of pixels of each tone in your image and changes as you make exposure and colour balance adjustments. The graph represents the colour in digital form, with levels from 0 to 255, with the darkest on the left and the brightest on the right. The white area represents the combined colours, but you can also look at each colour channel individually.



ACR Workflow

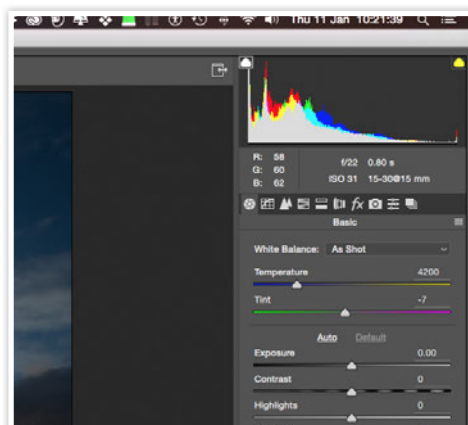
Getting the most out of your Raw files

Ask any five professional photographers about the process they use to create their pictures, you'll get five different answers. The amount of processing and adjustment used will vary, depending on the job at hand and

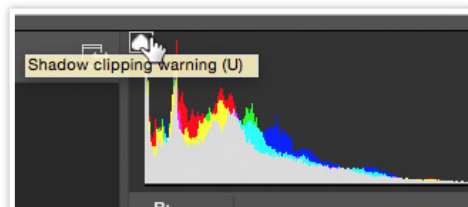
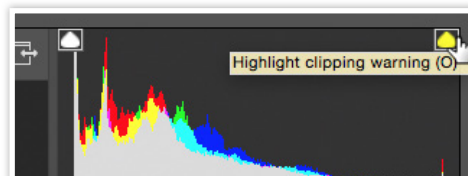
the type of final image required, as well as the type of camera used to take the photo and the use to which the photo will be put. There are certain operations that will be common to most photos that you'll want to process,

so we'll take a look at a common general purpose workflow that will be suitable for most types of photo. We'll be using a coastal sunrise photo of Paignton beach shot with a Nikon D810 and a Tamron 15-30mm lens.

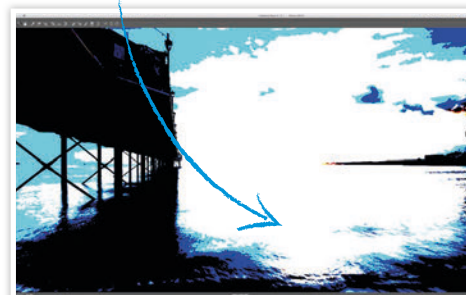
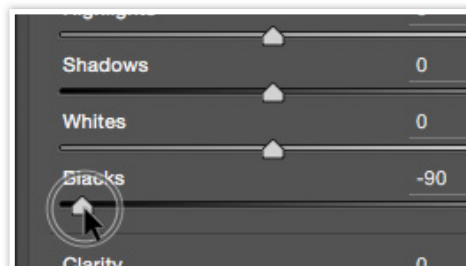
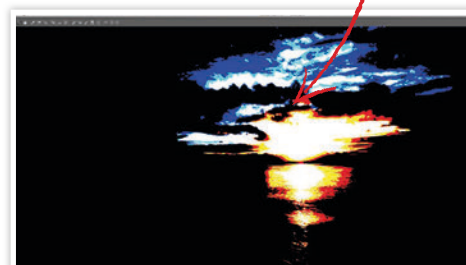
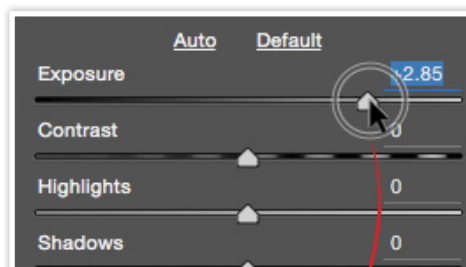
01 If you look at the histogram at the top right of the screen you'll notice that the line at the right (brightest) end of the graph is relatively flat compared to the peaks on the left. Ideally the graph should fill the area between the lightest and darkest ends of the range, so we need to slightly boost the lighter end of the graph without causing over-exposure.



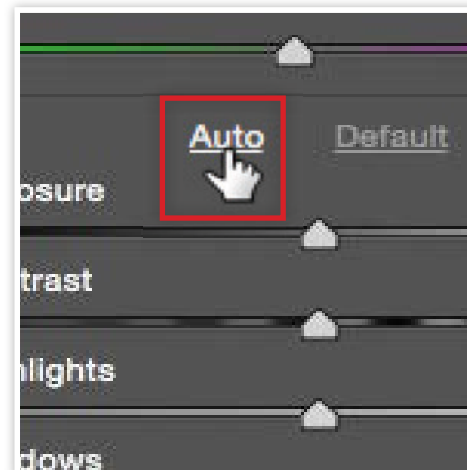
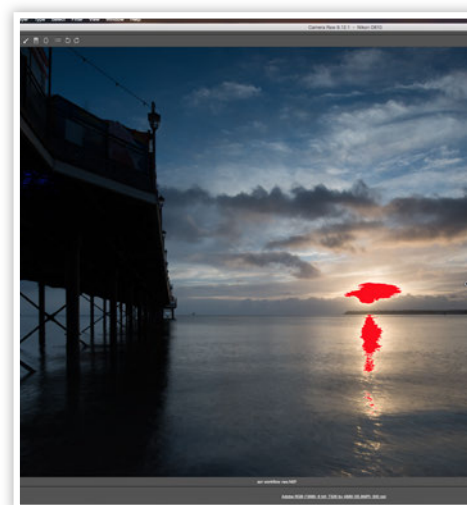
02 To ensure that we don't lose too much detail to highlight clipping, click on the arrow in the top right corner of the histogram window. This turns on the highlight clipping warning. Any over-exposed areas will turn bright red in the image window. Clicking on the left button turns on the shadow clipping warning.



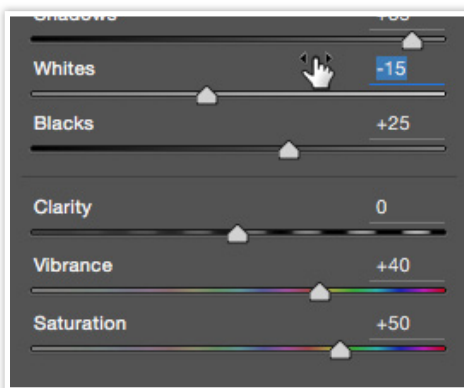
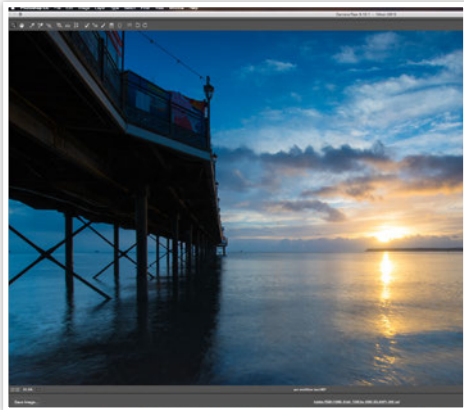
03 While holding down the Alt key (Option on Mac), move the exposure slider to the right. With the key held down, all you'll see will be the over-exposed areas. You can do this with any of the first six sliders, and it's a good way to make adjustments without going too far.



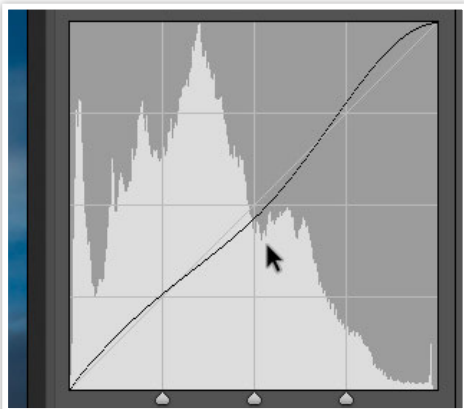
04 We can spend a while carefully adjusting the various sliders by hand to try and equalise the histogram, but the quickest way to get close to the optimum result is to let Camera Raw do the hard work. If you click on Auto the software will automatically adjust the image to produce a good approximation to a perfect exposure. It's probably not going to be ideal, but it will give us a good starting point. You'll notice that the sun on the horizon and the clouds around it are over-exposed, but that's OK. We're looking for a good spread of tones, and that includes white.



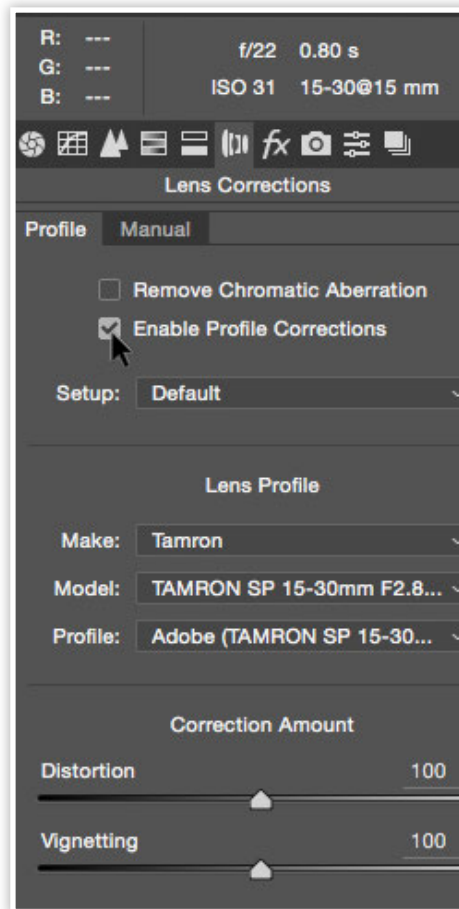
05 The Auto adjustment has made a good job of this particular picture, but for landscape shots a little bit of extra saturation usually looks good, so we'll boost the vibrance by about +40 and the saturation slider by +50 to get the colours of the sunlight, sea and sky to really pop out.



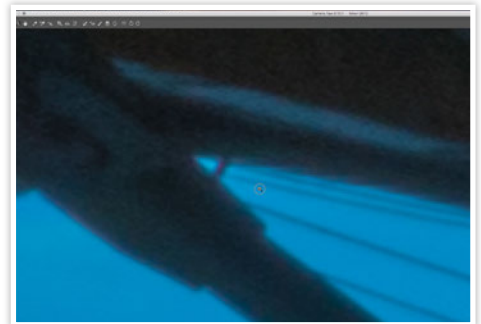
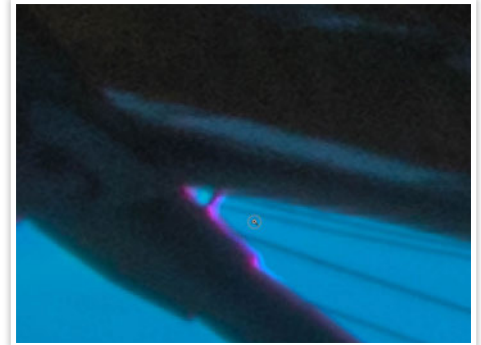
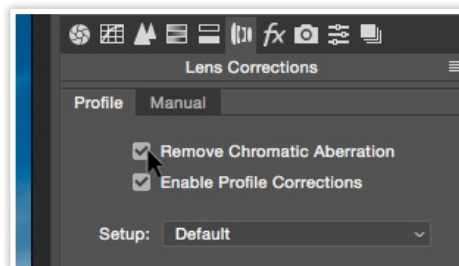
06 Adobe Camera Raw also provides a second method of adjusting contrast, by altering the tone curve. Although it's no more accurate than using the sliders many people will prefer it because it's nice and simple and gives a good visual representation of what we're doing. It's also a lot harder to burn out the highlights using curves. By boosting the highlights a lot, and then boosting the other sliders in decreasing amounts we can quickly equalise the histogram without losing too much quality.



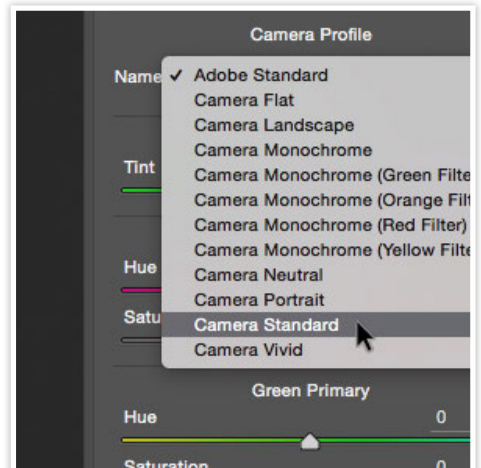
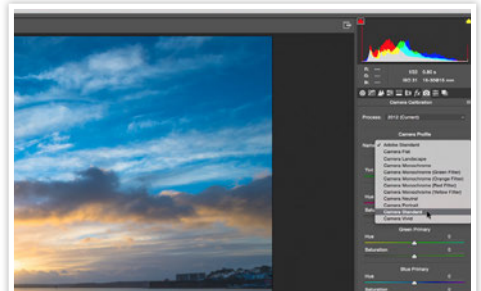
07 One of the best things about Adobe Camera Raw is its lens correction feature. The Tamron f/2.8 lens used to take this picture is a nice bit of glass, but it's not perfect. Although it's hard to see at a glance, this wide-angle shot does suffer from some pincushion distortion and slight chromatic aberration. Fortunately Camera Raw comes pre-loaded with correction profiles for a huge list of popular lenses, including this one. All you need to do to automatically correct the optical distortion caused by the lens is to check the box Enable Lens Profile Corrections. You'll see the change happen to your image immediately.



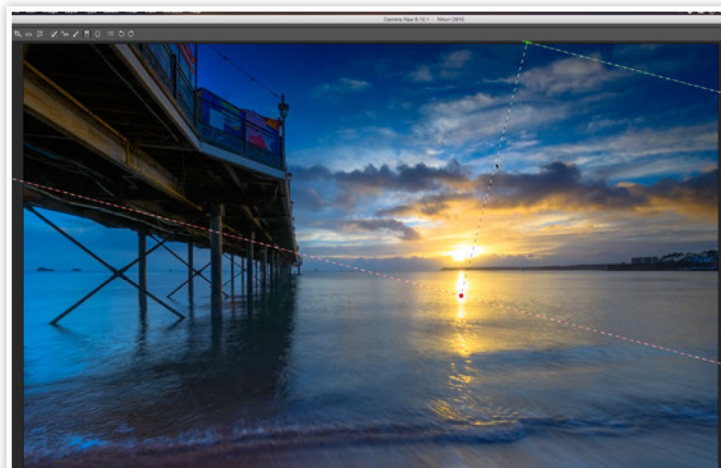
08 The chromatic aberration is just as easy to fix. Click on the Color tab in the Lens Correction palette and simply check the box Remove Chromatic Aberration. You'll need to zoom in near the edge of the frame to see the difference, but you'll notice the effects at once.



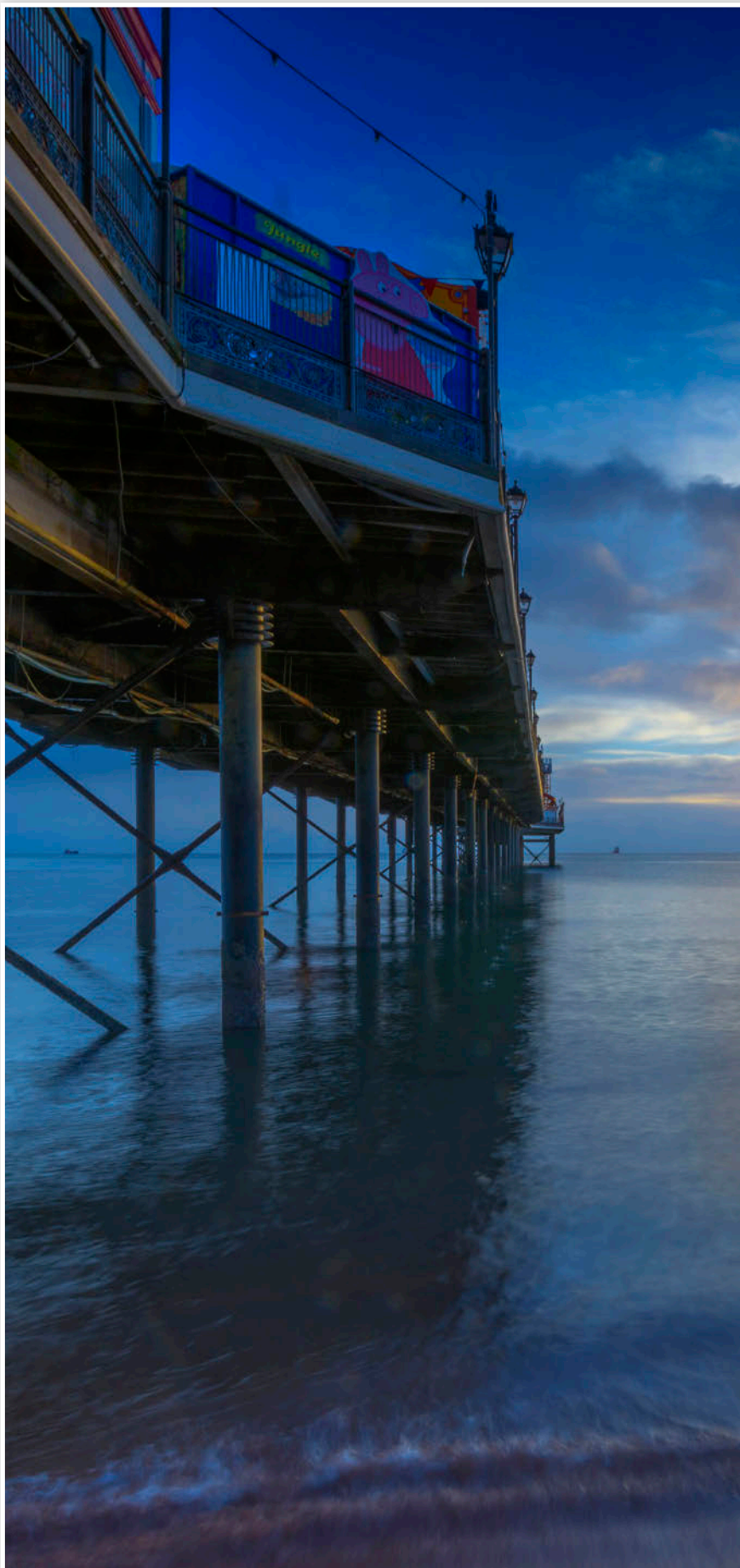
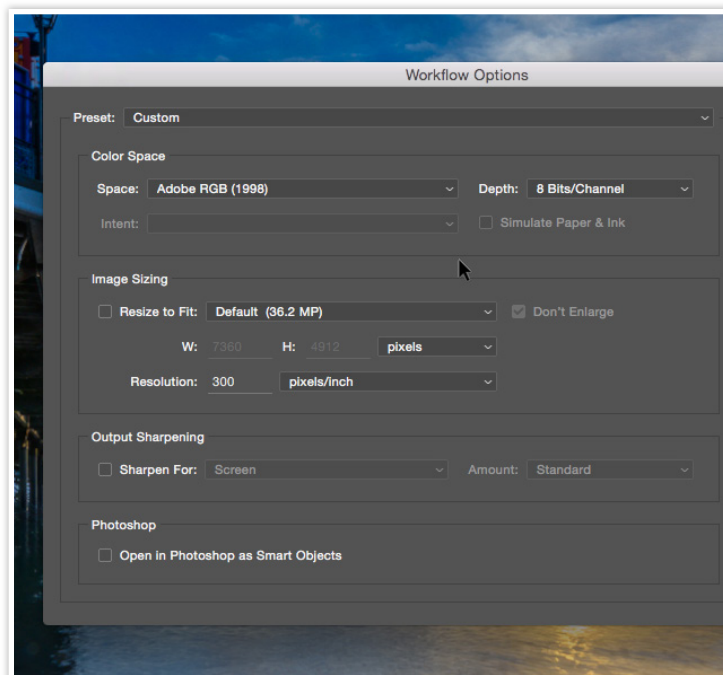
09 The next step is largely a matter of personal taste, but you can also choose to use a camera profile for the colour calibration too. In the Camera Calibration tab, click on the Camera Profile button, and from the drop-down menu select Camera Standard. This sets the colour rendering profile to the embedded profile recorded by the camera. The D810 does produce some really great colours, so for this shot we'll use the camera profile.



10 For this particular image, the sky is a bit lighter than it needs to be, but we can easily darken it down a bit by adding a high quality digital graduated filter in Camera Raw. Click on the Graduated Filter button at the top of the screen, and you'll see the filter control palette appear. Set the exposure slider to about -1.5 or -2, then in the image window drag down from the top of the picture to just below the horizon line to apply the filter. If you hold down the shift key while dragging it will stay parallel with the top of the frame.



11 Finally we have the output options. Camera Raw gives you the option to output the processed image in a number of different ways, but which one you use will depend on what you want to do with the finished image. For most purposes the default settings will be ideal, but you may need to select a different colour space, and for maximum colour fidelity you can output in 16-bit format. You can also choose an image size different from the native resolution of your camera, but be aware that choosing a larger size doesn't magically create new pixels; the image will be enlarged using Photoshop's bicubic resampling algorithm. If you're planning to print the picture you might also want to look at the sharpening options. When you're happy with your choice, click OK, and then Open Image. The picture will now open in Photoshop, from where you can either carry out more editing, or save the picture in JPEG or TIFF format.





USEFUL TIP

Any adjustments you make to your image do not directly affect the Raw file. They are added to an XMP file that is used to keep a record of all your image modifications. When you finally save your final image, to preserve as much detail as possible, try saving your photos as TIFF files instead of JPEG, since it uses lossless compression and keeps all that detail in your images.





Photo Editing Projects

We can move on now to tutorials that use multiple techniques to create new images and modify existing photos, sometimes combining elements from two or more pictures. Here, we'll take you through the processes that creative digital artists and professional photographers use every day.

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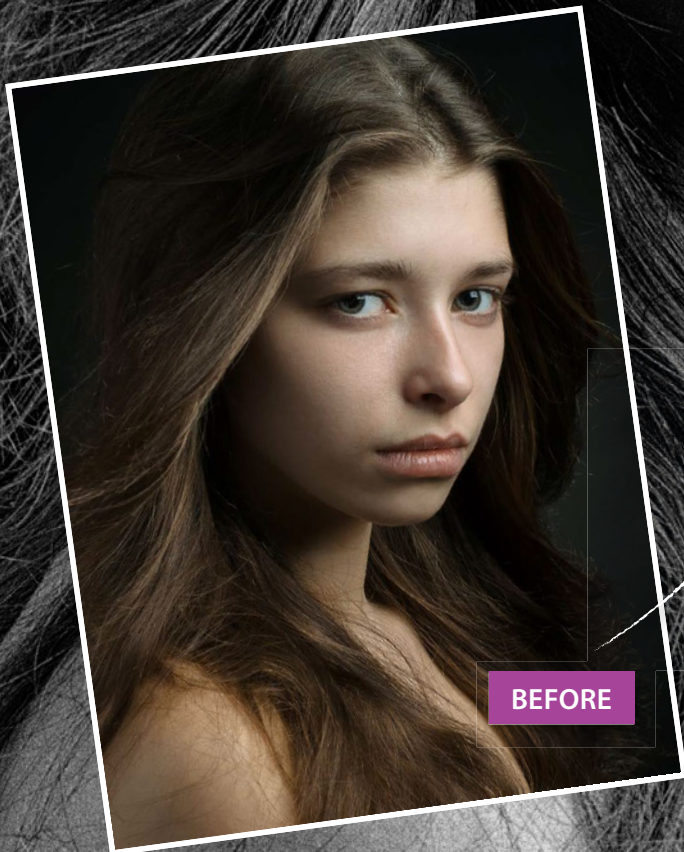
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Pierrot Portrait Effect

Create an abstract pantomime character with a digital makeover

Pierrot is an Italian Pantomime Character whose origin dates back to the 17th century. A sad and sensitive clown who is said to have lost his love to the Harlequin and then went on to live his life as a naive and lonely isolated character whose only friend was the moon. His character being one of sadness and heart break has been illustrated in the arts

by many: photographers, painters, actors, and even musicians such as David Bowie have depicted the symbol of Pierrot in their art, to represent emotions, sadness and loss.

In this tutorial you will create an abstract portrait using white layers and strong black markings that have become synonymous

with the character of Pierrot. By combining creative brush strokes with Adjustment Masks and bold shapes, we will show you how to create an artistic portrait that can be applied to almost any portrait.

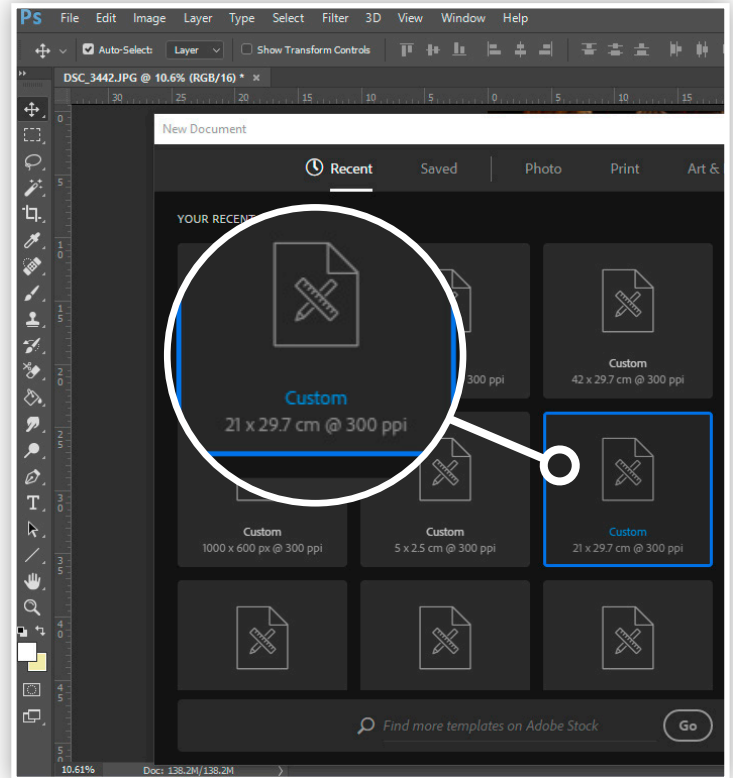
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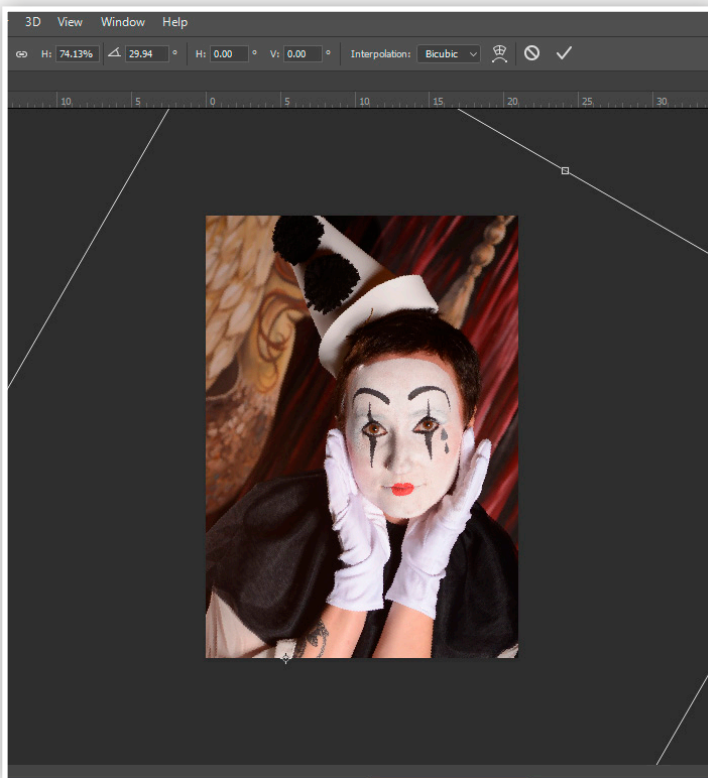




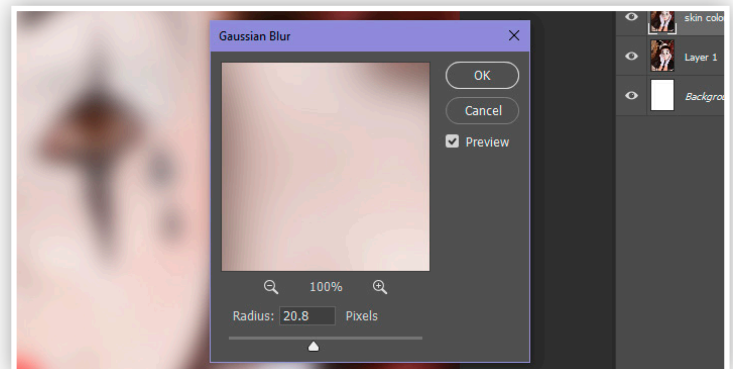
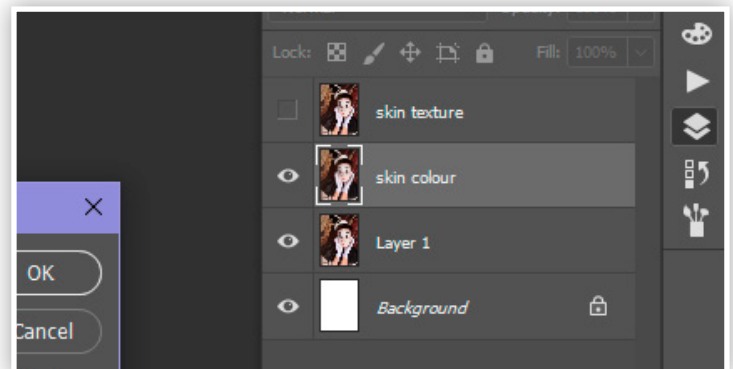
01 Open the image 'Pierrot Original.jpg'. In this image our model is seen holding her face in a mime style pose. Wearing a white flouncy outfit and a short Pixie hairstyle, Emma delivers all the characteristics of our sad clown Pierrot.



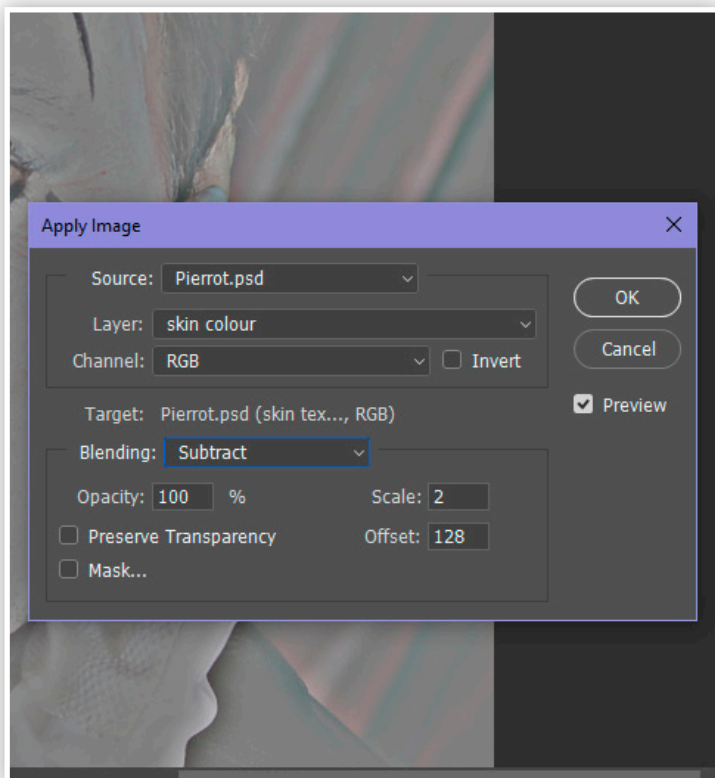
02 For the purpose of this tutorial we have created an A4 page (297 x 210mm) set at 300dpi. You also need to change the mode from 8 bit to 16 bit; this can be done by going to Image > Mode > 16 bit. The reason for doing this is to allow you more colours within the tones you choose to use.



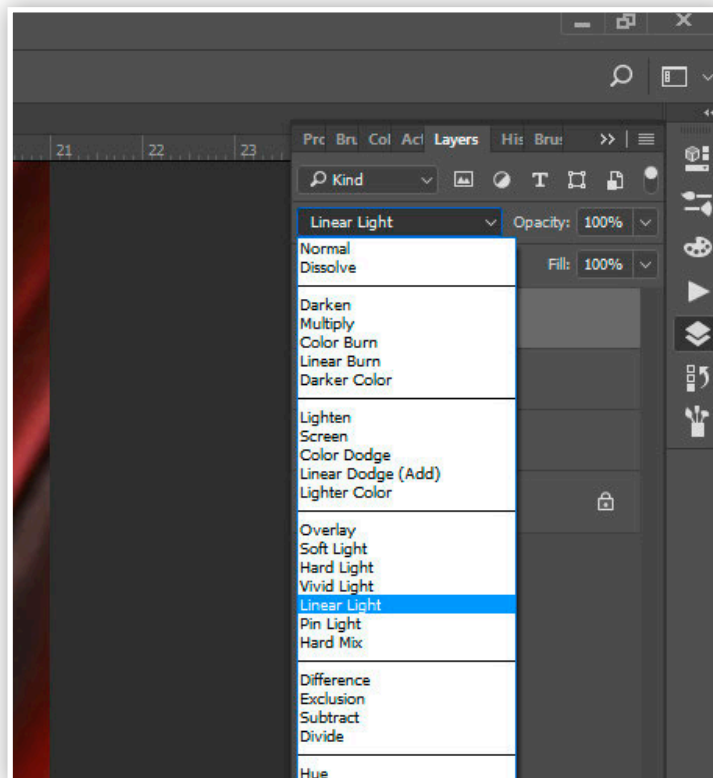
03 Place the Pierrot image on to your new page, and adjust the size and angle so that the face fills the majority of the page. You are creating a portrait, and concentrating more on the facial features for this tutorial, so the background will not be needed.



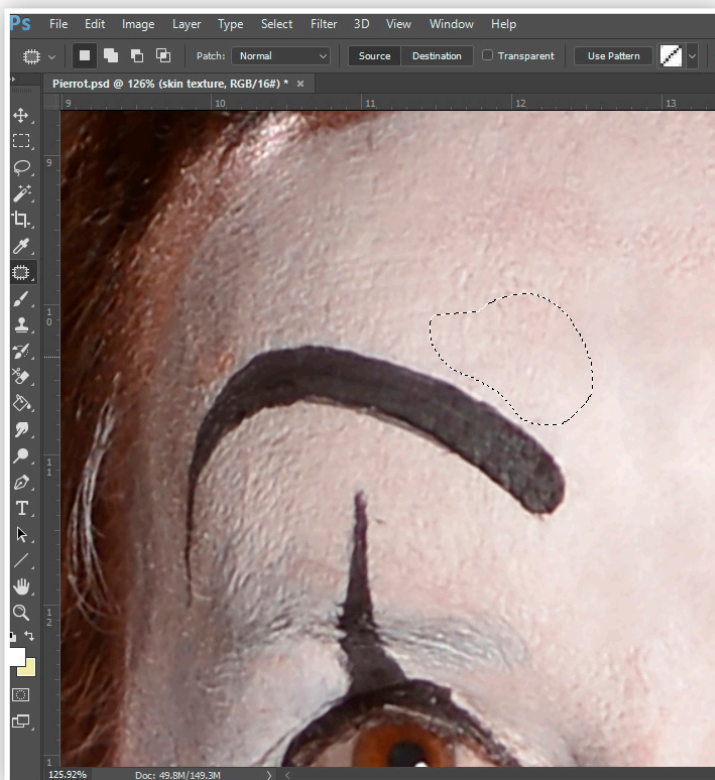
04 Copy layer 1 twice, calling the middle layer 'colour' and the top layer 'texture'. Click on the eye of 'textures' to switch that layer off. Making sure the colour layer is selected go to Blur > Gaussian Blur, and adjust the slider so that your image is blurred.



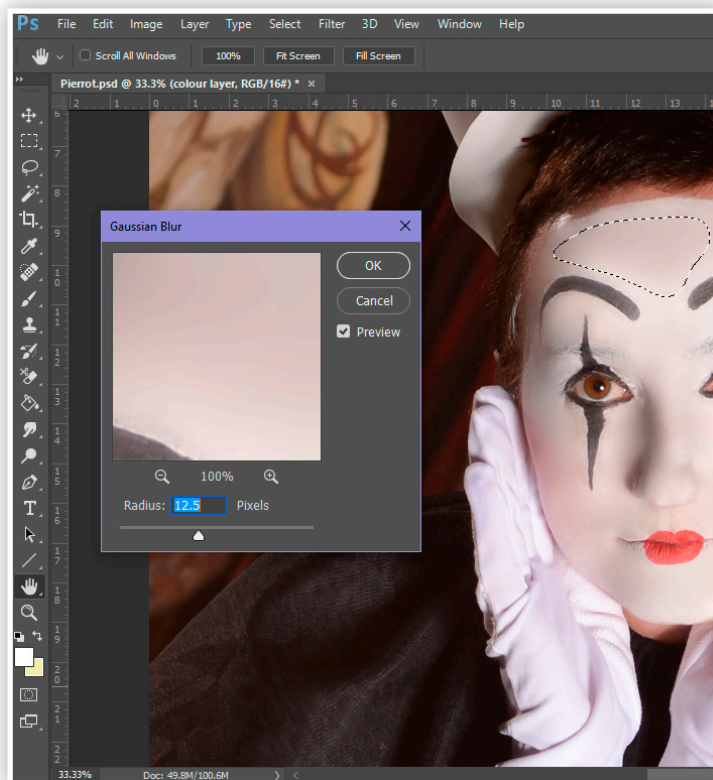
05 Turn your 'textures' layer back on and make sure this layer is selected. Go to Image > Apply Image, and set as shown above. You can use this to separate our colour and textures layers, so that you can work on them independently; this process is often referred to as frequency separation.



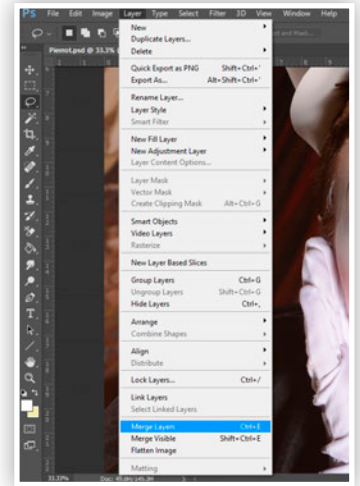
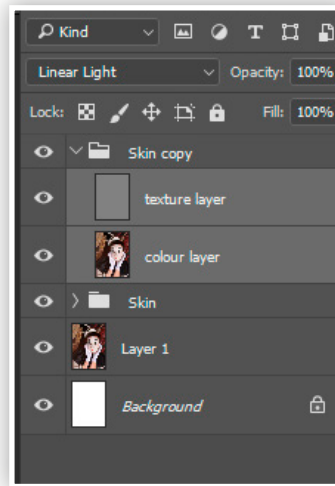
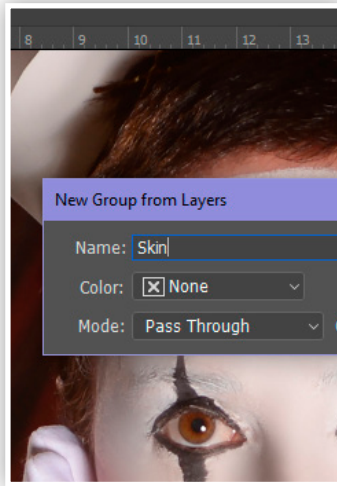
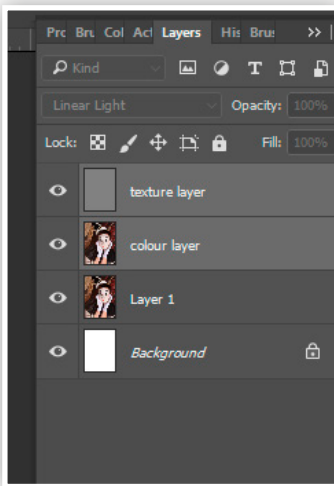
06 Keeping the 'textures' layer selected, change the blending mode to Linear Light. This will enable you to see our image again, so that you are able to work on it.



07 Whilst the textures layer is selected, use the patch tool to get rid of any uneven skin textures or marks. This will correct the textures of the skin without making changes to the colours below. Go around the face until you are happy with the skin textures.

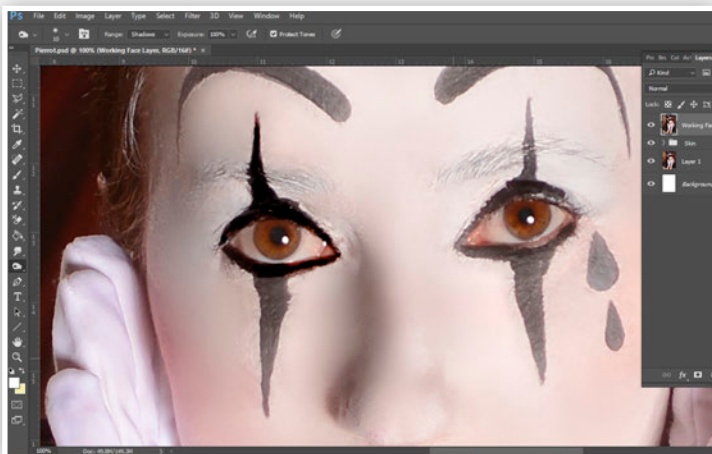


08 When happy with the textures, select the colours layer and adjust to suit. In this instance we have used the lasso tool and feathered the area by 50 by going to Select > Modify > Feather, and then used Gaussian Blur to blend the colours in the face without making changes to our textures.

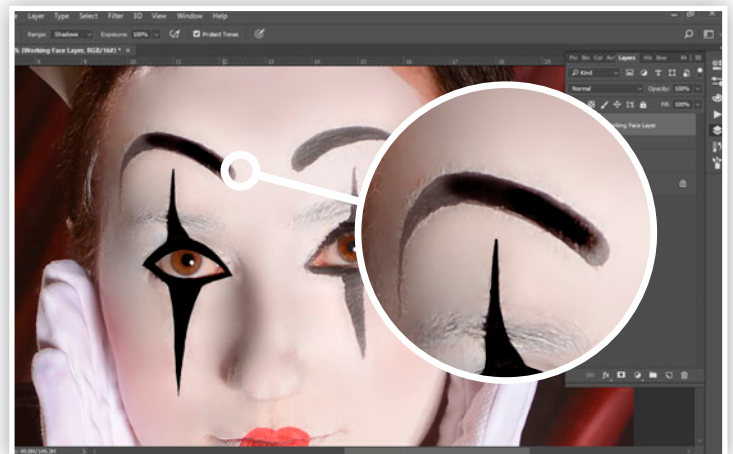


09 Select both the colour and textures layers and right click, select 'Group From Layers' and name this group 'Skin'. Should you wish to go back and make further adjustments to the skin later, you will find your skin layers here.

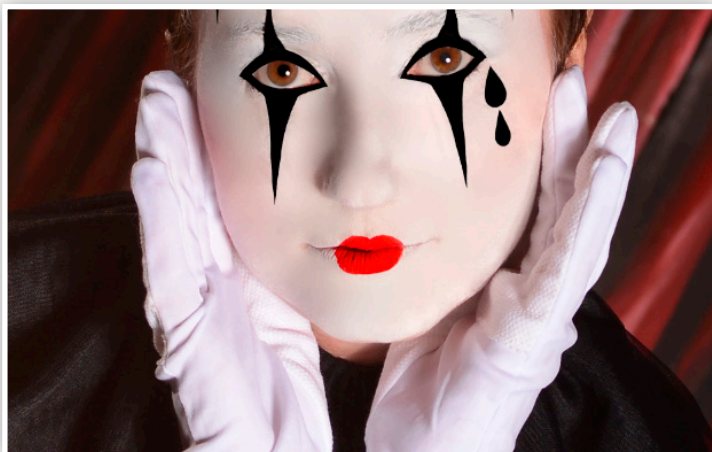
10 To continue working on a flattened face layer, make a copy of the group 'skin' and merge the components, leaving the original group untouched. You can call this 'Working Face Layer'.



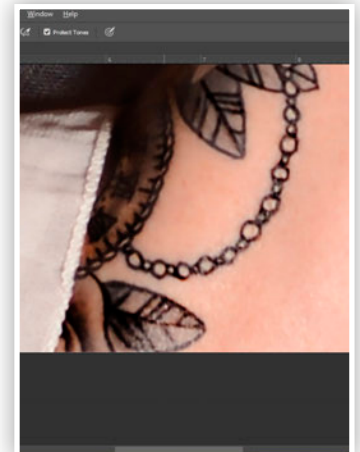
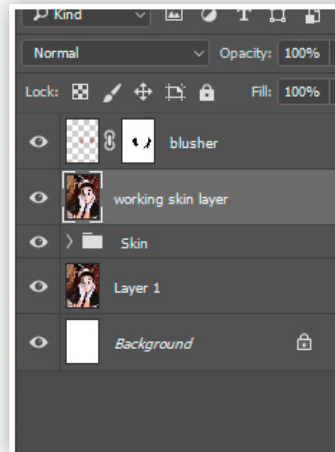
11 Using the burn tool and making sure 'shadows' is selected in the range box on the top bar, darken the black areas of the eyes to cause drama and higher contrasts.



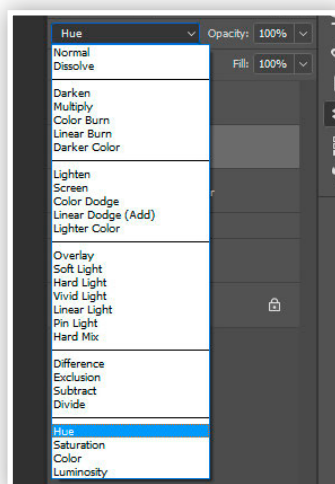
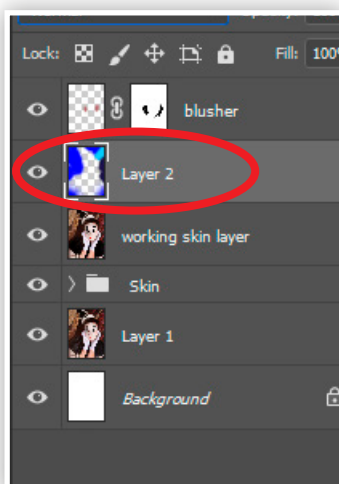
12 Use a very small brush to make smooth edges to the black details; a larger brush will leave the edges of the details looking softer.



13 To enhance the colour and shape of the lipstick repeat stages 11 & 12. If you want to adjust the colour of the lips a little, go to Image > Adjust > Hue/Saturation and change the 'Master' drop down menu to Red. Now using the Hue slider, adjust the lip colour to your needs.

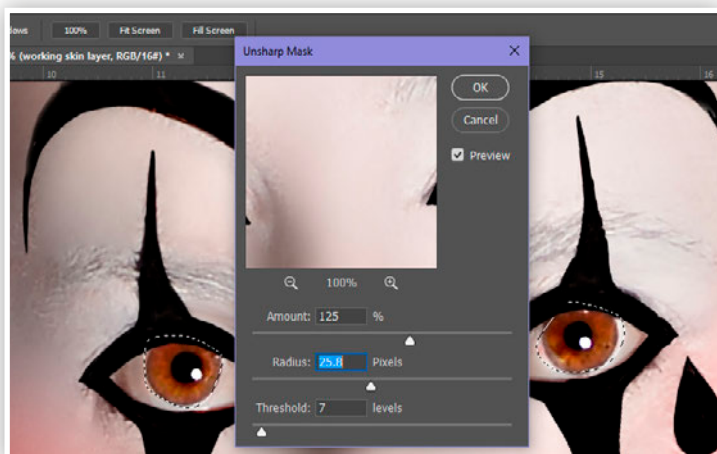


14 Repeat stages 12 and 13 on other areas of the image, where deeper blacks and a higher contrast is preferred. Then create a new layer to enhance the blusher, a rose pink can be selected in your colour picture, and gently brush on to the cheeks of your clown with a large flat brush.

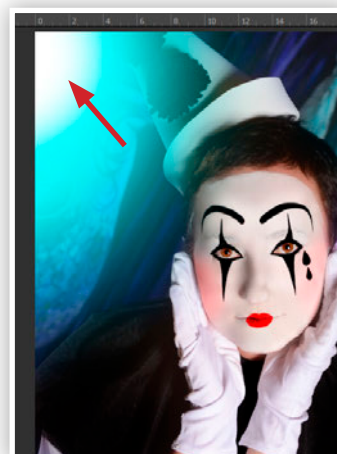
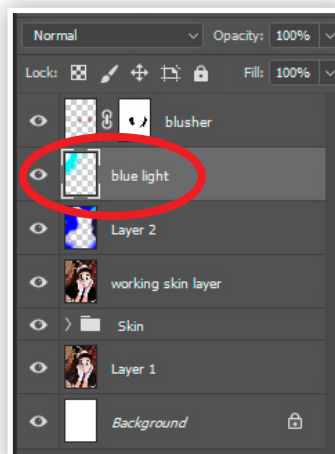


15 Creating a new layer above your working skin layer, paint in areas of the background using blue shades, and a large soft brush.

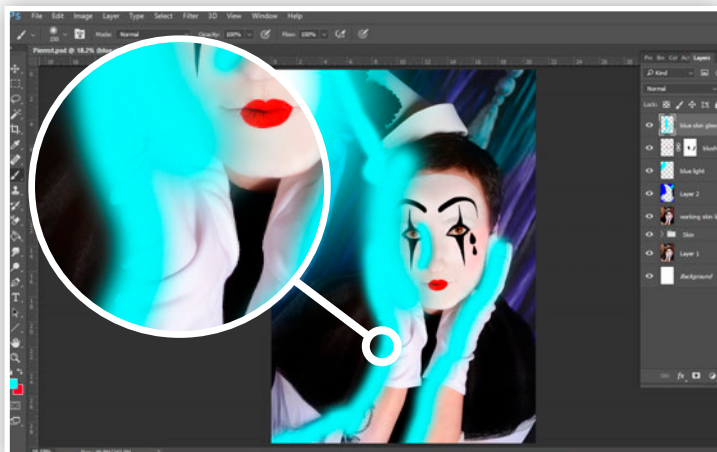
16 To give the background a more uniform blue tint, change the blending mode to Hue. By trying various different blending modes the blue tones will react differently to the background image below it, which will enhance the background of your image based on the overlaid colour.



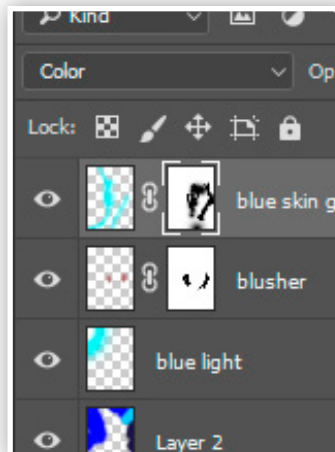
17 To sharpen up, and make the eyes pop just slightly, select your working skin layer and use the lasso tool to go carefully round the iris area of the eyes. Then go to Image > Filter > Unsharp mask.



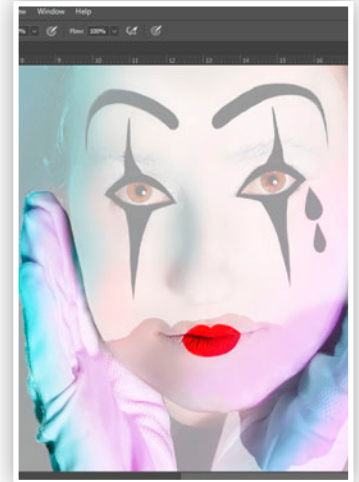
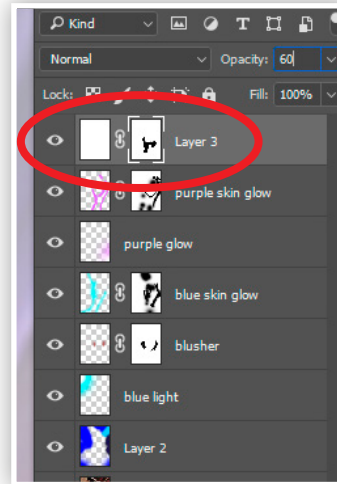
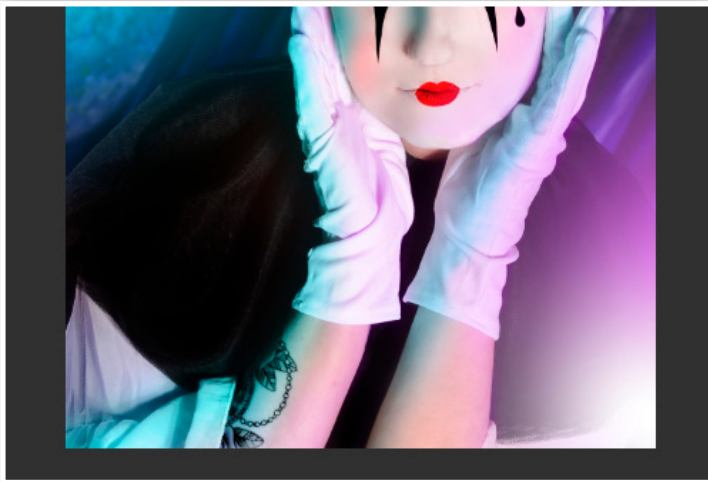
18 Create a new layer above the previous blue layer and select a very large flat brush. Use a cyan colour and make a large soft brush mark to create a lens glow. Make sure it overlaps the side of the hat. Then select a white colour and make a glow at the source of your cyan light flare.



19 Now that you have created a coloured light, you are going to create the illusion of the light hitting the side of our Pierrot, by using the same cyan colour but a smaller brush, drawing lines along the sides where the coloured light hits.

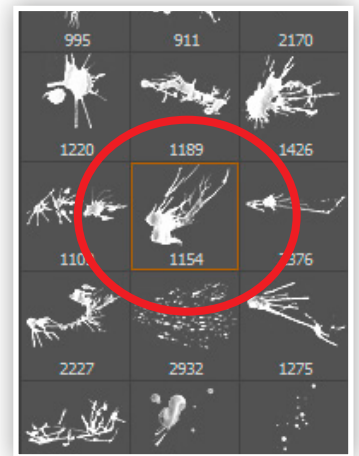
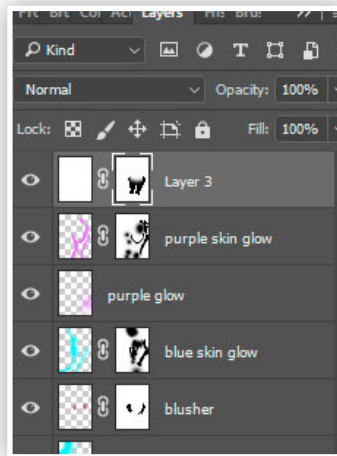


20 Change the blending mode to 'colour'. This will soften the edges of the marks you have just made and merge them in to the image. Then add a layer mask, and with black selected use a small soft brush to remove any unwanted light glow.



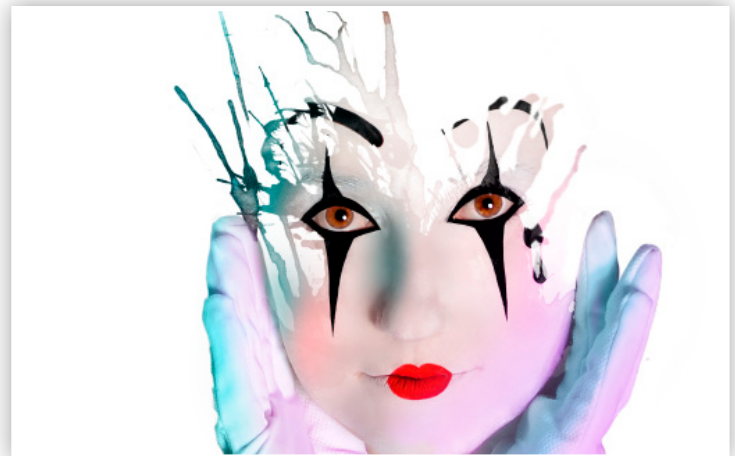
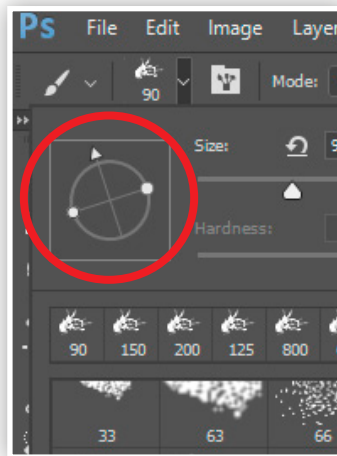
21 Repeat stages 18, 19 and 20 but this time in the bottom right of your image. Use a colour for this light glow which will compliment your image and tie in colours from your subject. In this case we have used lilac tones picked out from the subjects gloves.

22 Create a new layer and fill the page with white. Adjust the opacity of this layer to 60, so that you can see your image below, and add a layer mask. Using a black brush gently use the layer mask to erase the white layer around the area at the bottom of the face.



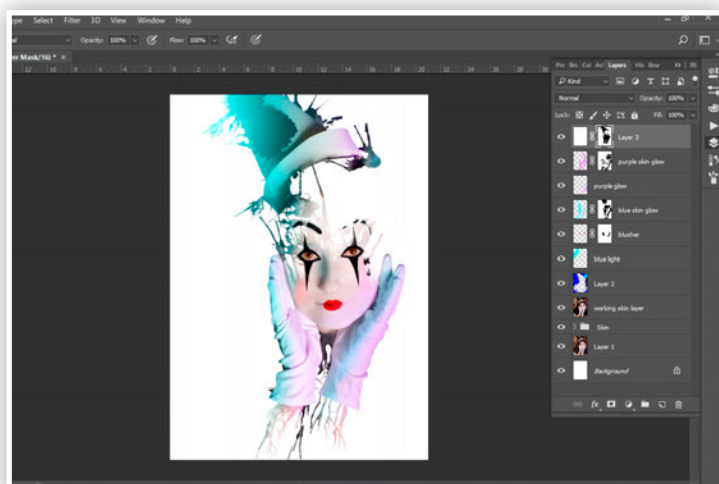
23 Continue to adjust the layer mask in stage 22, by using a black brush to remove the white layer, and a white brush to replace the removed areas, until only the bottom part of the face and the gloves are exposed. Setting the layer mask opacity back to 100% shows you how it's all looking.

24 Load brushes 'pierrot brushes' and select the brush in the diagram. This brush has been designed to create a splatter effect, and works well to create the illusion of roots, veins and liquid splatters, which is the look you're aiming to achieve.



25 Using the brush selected, continue to erase areas of your white layer using the layer mask (black selected). The angle of the brush can be altered by swivelling the wheel at the top of the brushes palette.

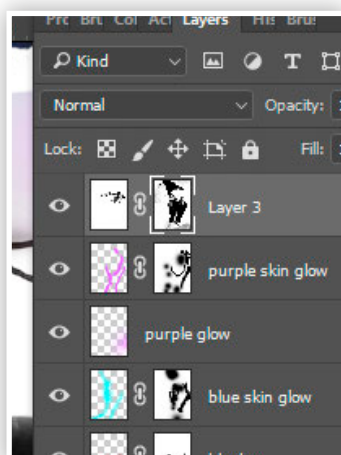
26 Continue to use the set of brushes provided to reveal more of the model's face. Make sure that the eyes, make-up and eyebrows are fully revealed but without exposing any of the hair or hat.



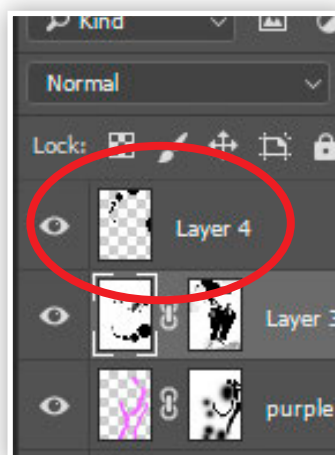
27 Once you have the face looking how you want it, continue using this method to expose some of the hat and some of the arms and gloves. By turning these brushes around you can create the illusion of the arms dripping downwards, from where the gloves finish.



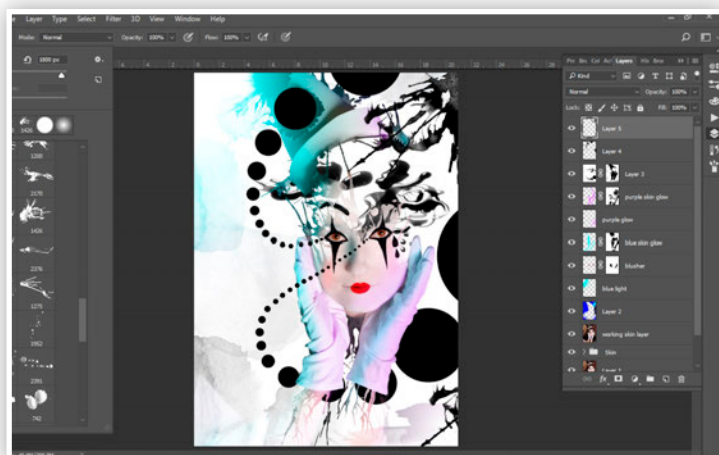
28 Using some of the coffee stain brushes expose areas of the background to reveal some of the colours you added earlier. You can be as subtle as you wish, for a more minimalist result which is what you are doing in this tutorial.



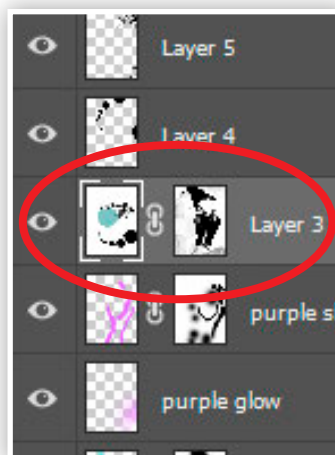
29 Now using a hard black brush draw on to your white layer (not the layer mask this time) to make some bold abstract shapes.



30 To make further black marks which will sit over the top of your image create a new layer. By creating a new layer for these, should you wish to make adjustments or change the blending modes to create new effects, you can do so without these marks affecting the rest of your artwork.



31 Continue to add bold black marks until you have the desired effect. Besides painting on to your new layer, you can paint on to your original white layer which has the layer mask adjustments, to create new shapes at different layers.

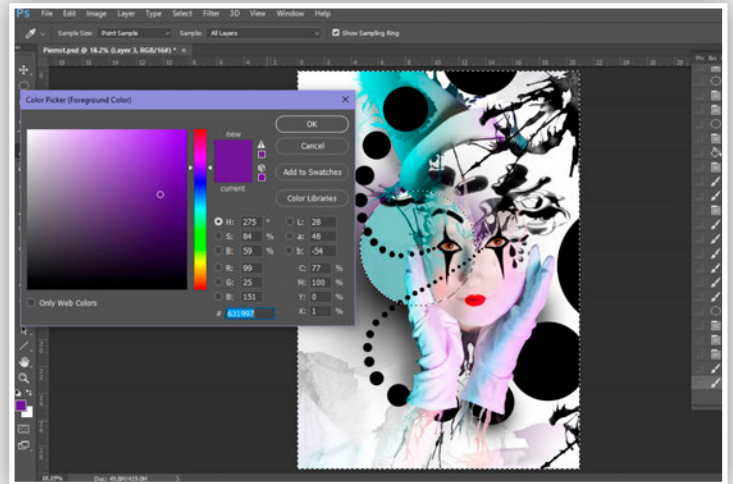


32 Going back to your white layer and the circular marquee tool, make a large circle around the models eye, and fill it with a colour - we have used a blue tone selected from the hat area.





33 Go to Select > Modify > Invert and using a soft large black brush create a mark on the side of the circle which looks like a shadow, to create more depth.



34 Select a pale purple colour from your image and gently brush in some soft colours to the surrounding white areas. Then deselect your marquee tool and your Pierrot portrait is complete.



Create amazing abstract portraits

Get artistic with layers, brushes and masks.

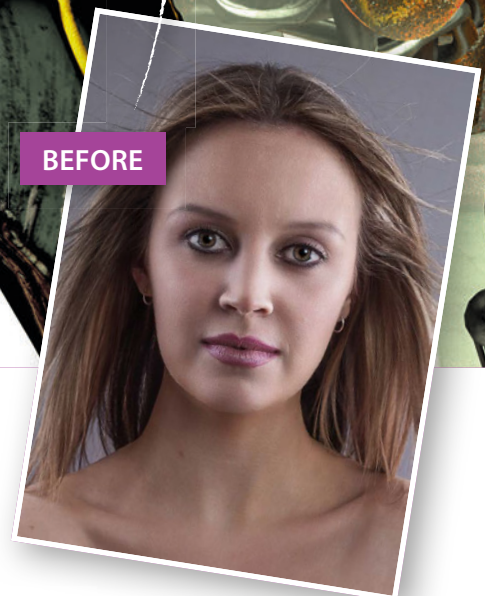


Science Fiction Art

Turn friends and loved ones into mechanical beings

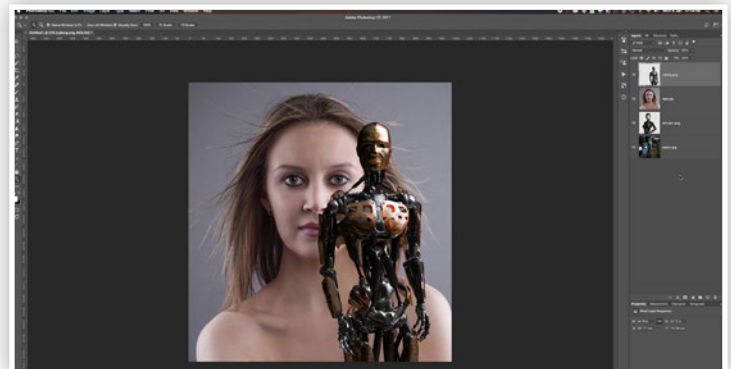
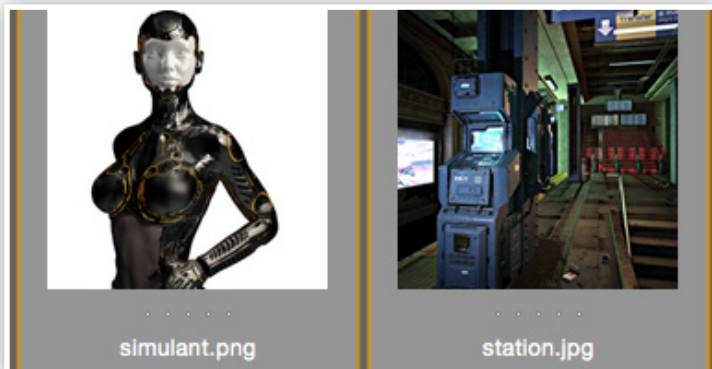
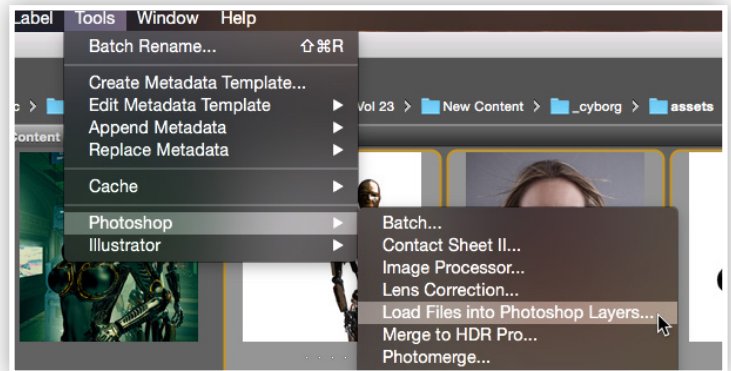
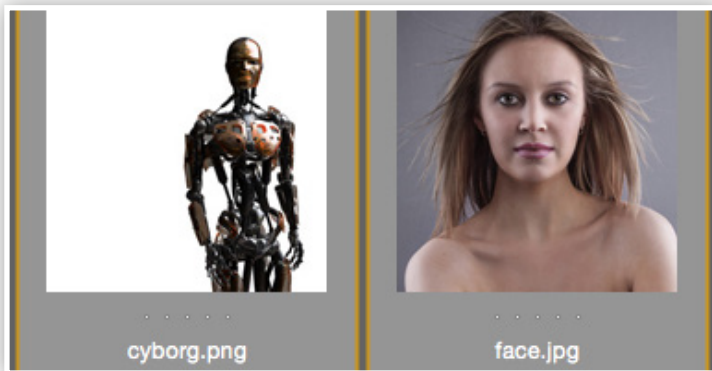
It is often the case that as a digital graphic artist, you sometimes have to work with a number of image components and bring them together to make one final image. This means working with your multiple images over many layers with adjustments and masks; it is a good exercise in being able to manage a larger than usual document. Our example uses a collection of foreground and background images as well as

some assets to be used to create a human/cyborg hybrid. This tutorial also helps you understand a little more about working with masks and how the order of the various components work as well as masking and adjusting colour, exposure, saturation and layer styles. At the end, you will have a neat little sci-fi image and hopefully learn a few interesting creative tricks along the way.



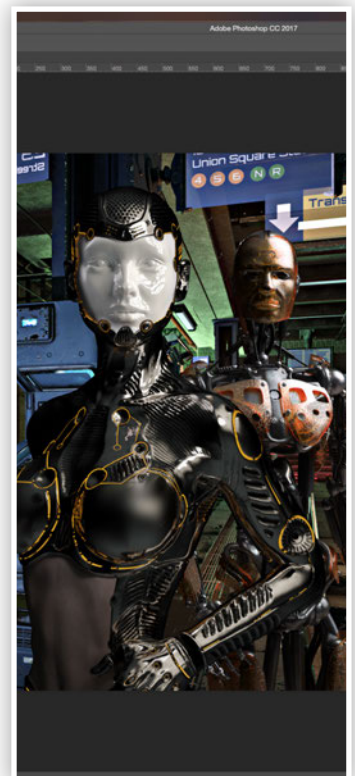
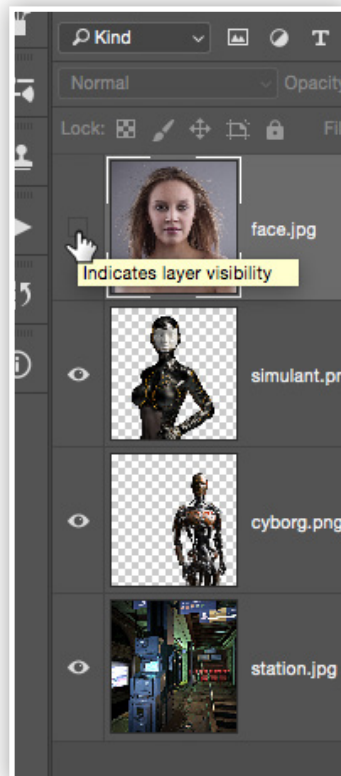
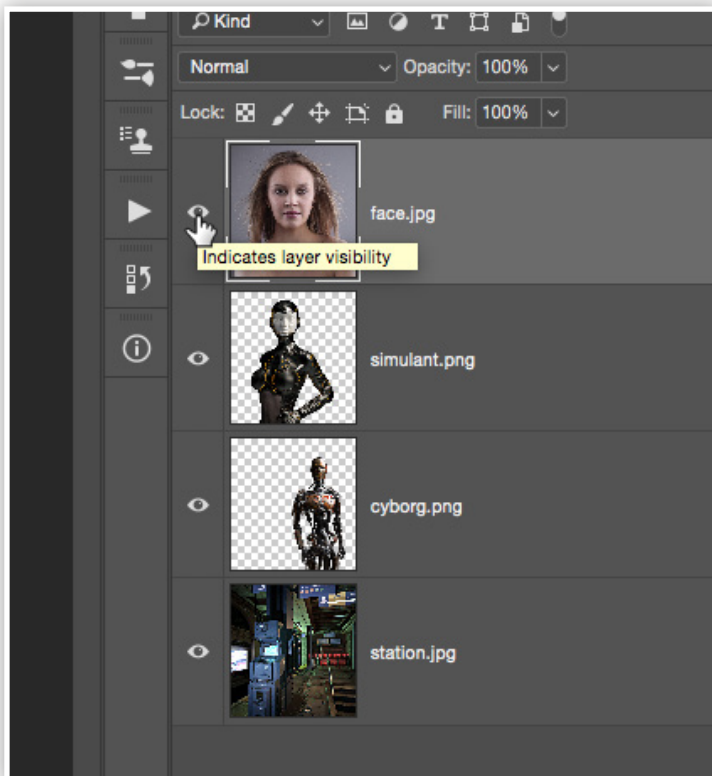
AFTER

BEFORE



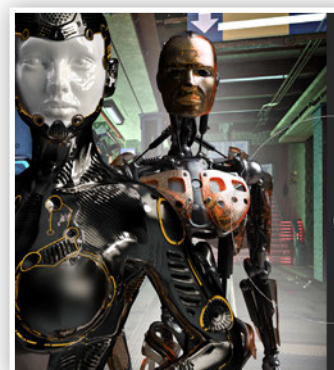
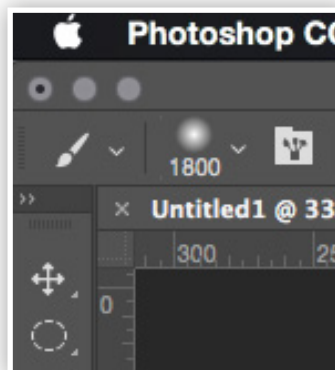
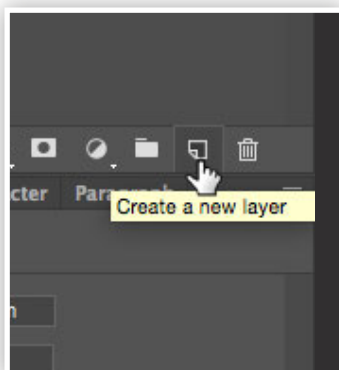
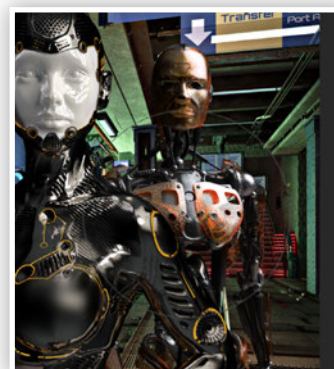
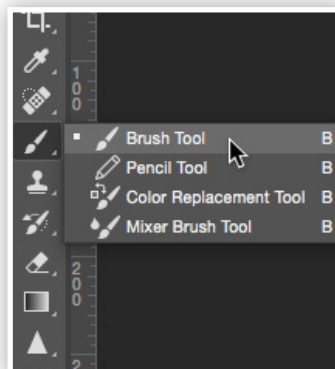
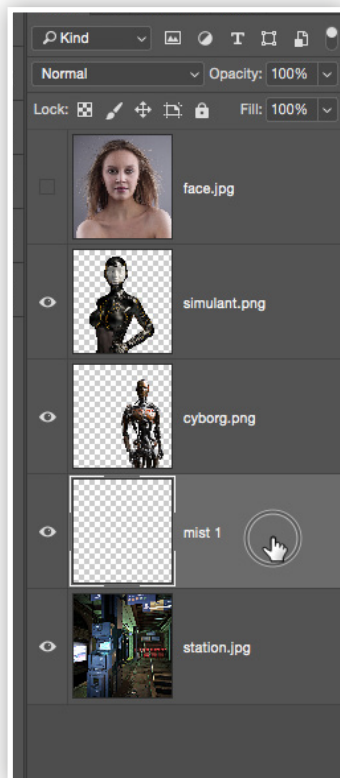
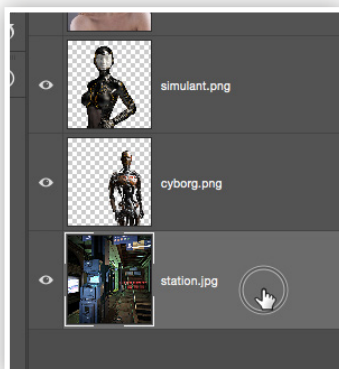
01 There are four main components that will be assembled to create the final piece of art. There is our main character base, a secondary character element, a backdrop and a human portrait that you can use to create your human simulant character.

02 We're using Adobe Bridge to navigate to the folder where the four images are kept. Highlight all four and then go to Tools > Photoshop > Load Files into Photoshop Layers. They will be put into a new Photoshop document in alphabetical order.



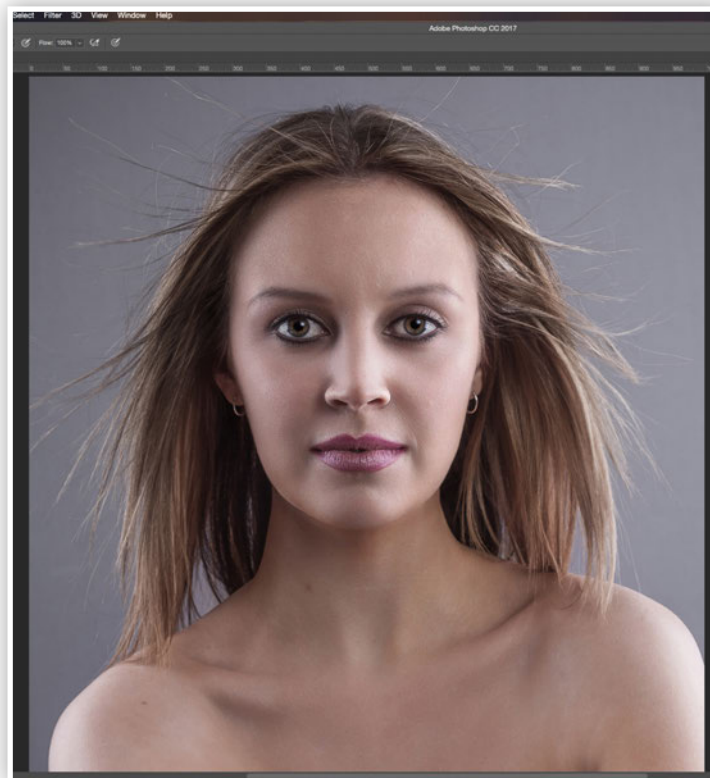
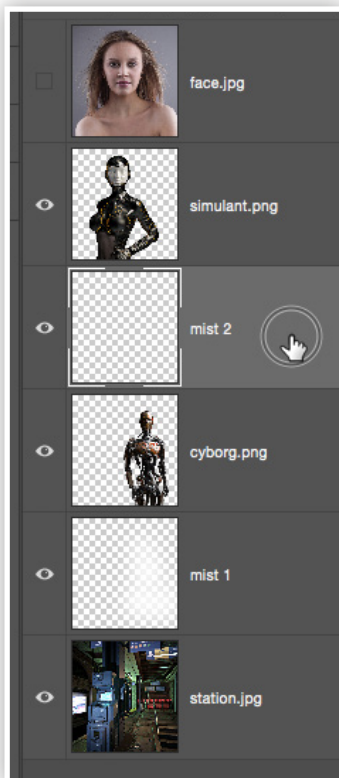
03 At the moment of course, the order of elements is incorrect. In the layers palette, click and drag the layers to reorder them with 'face' at the top and 'simulant' below that, then 'cyborg' and finally 'station' at the bottom of the stack.

04 For the moment, you don't need to see the 'face' layer yet. Click on the visibility icon to the left of the thumbnail image to turn it off. Now you should see the other three components in their correct order.



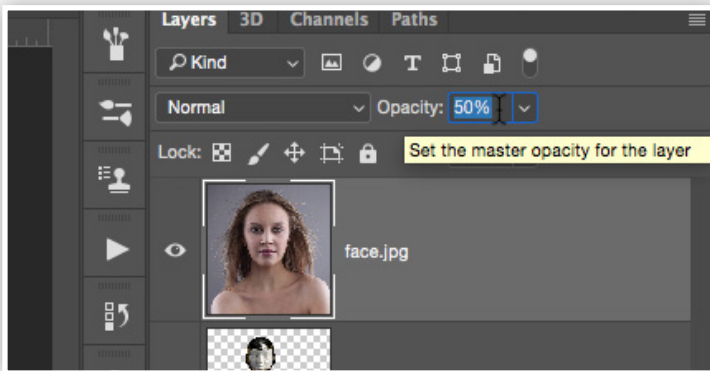
05 First, click on the 'station' layer and then go to the bottom of the layers palette and click on the Create A New Layer button. The new layer will be added above the 'station' layer you just clicked. Name it 'mist 1' and make sure it is active.

06 Go to the toolbar and select the Brush Tool (B). Use a large soft brush of about 1800 pixels and make sure the foreground colour is white and Opacity is about 50%. Paint white around the cyborg character to create a little mist that separates him from the background.

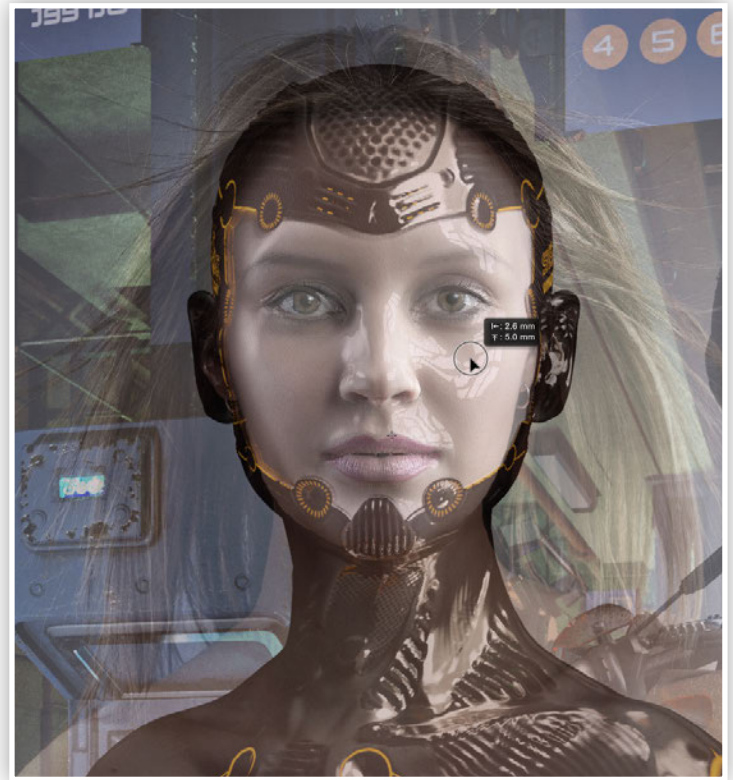


07 Add a second new layer called 'mist 2' and place this one between the 'simulant' and 'cyborg' layers. Using the same large white brush, paint around the main character to create some additional separation between the simulant and cyborg characters.

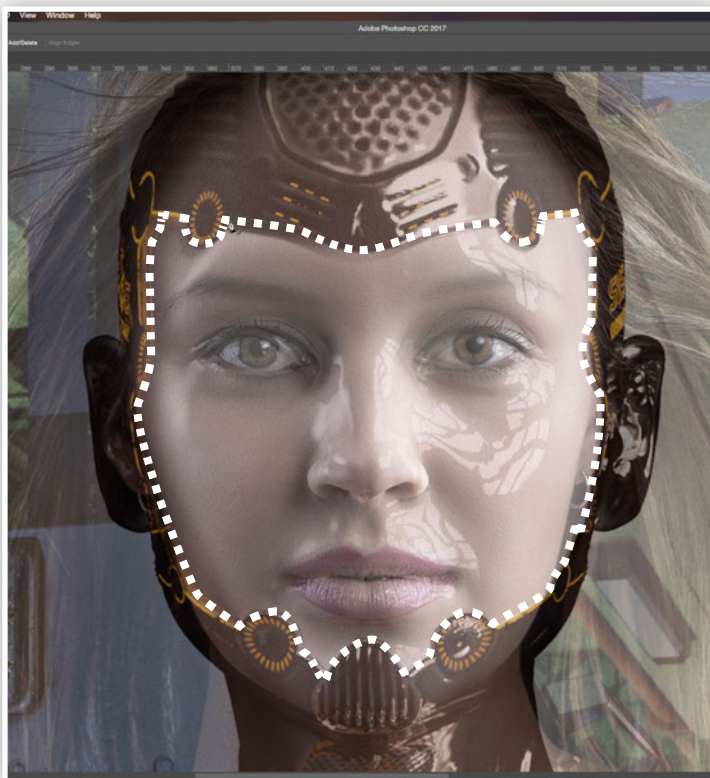
08 Next you need to create our human/simulant and add a human face to the character on the 'simulant' layer. Go back to the 'face' layer and click its visibility icon once more to make it visible again.



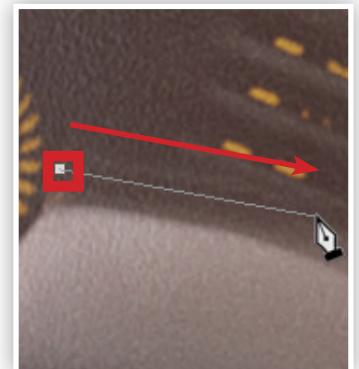
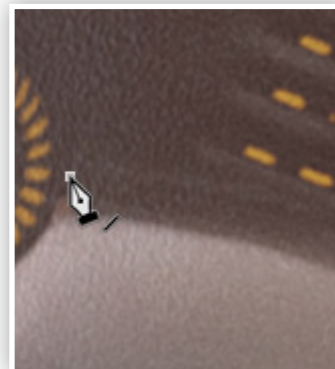
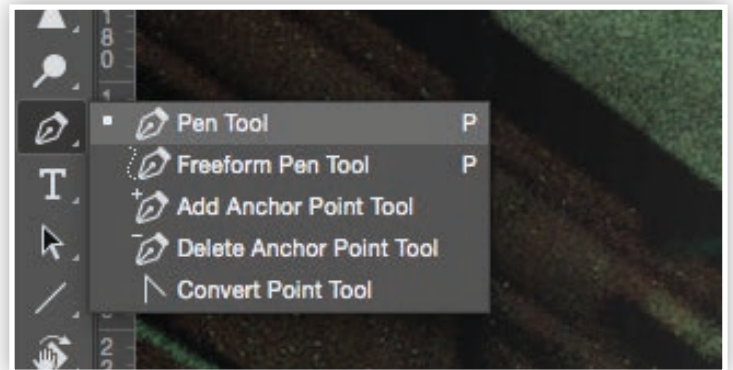
09 In order to be able to match the size and positioning of the human face to the simulant character image, reduce the Opacity of the 'face' layer to 50%. You will now be able to see the rest of the image below it.



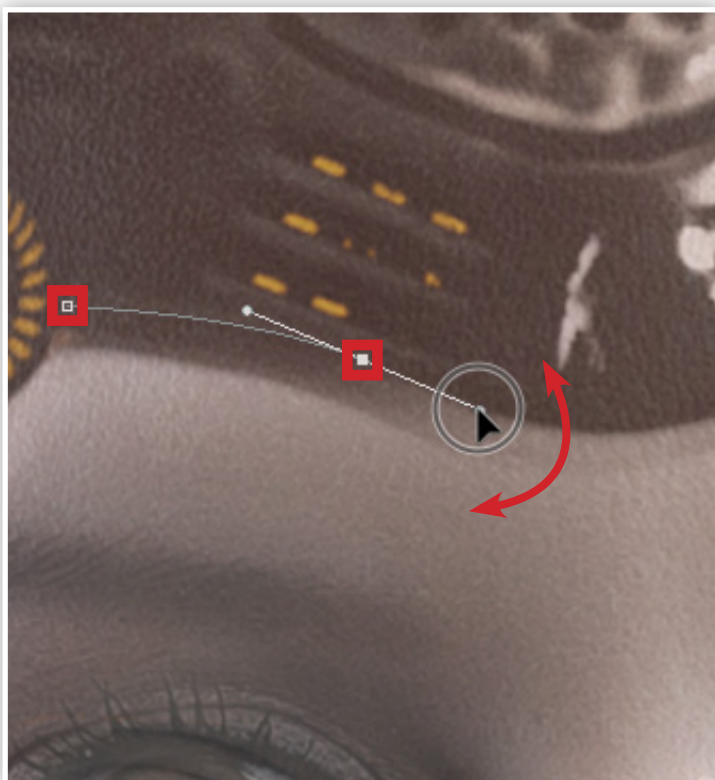
10 Press Cmd + T to use the Free Transform Tool and move and scale the 'face' layer image so the main features such as eyes, nose and mouth roughly match the existing features of the simulant character beneath it. Press Enter to commit the changes you've made.



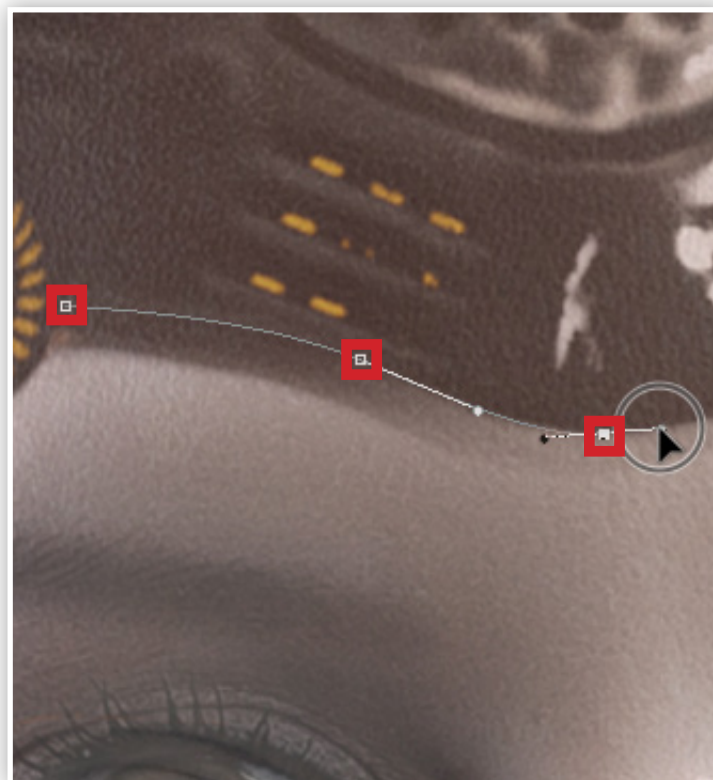
11 Now you need to make a mask to conceal areas of the human face so it appears to fit exactly over the face of the character on the 'simulant' layer. Since the facial aperture has some interesting curves, you need to use the Pen Tool and make a path that can then be turned into a selection.



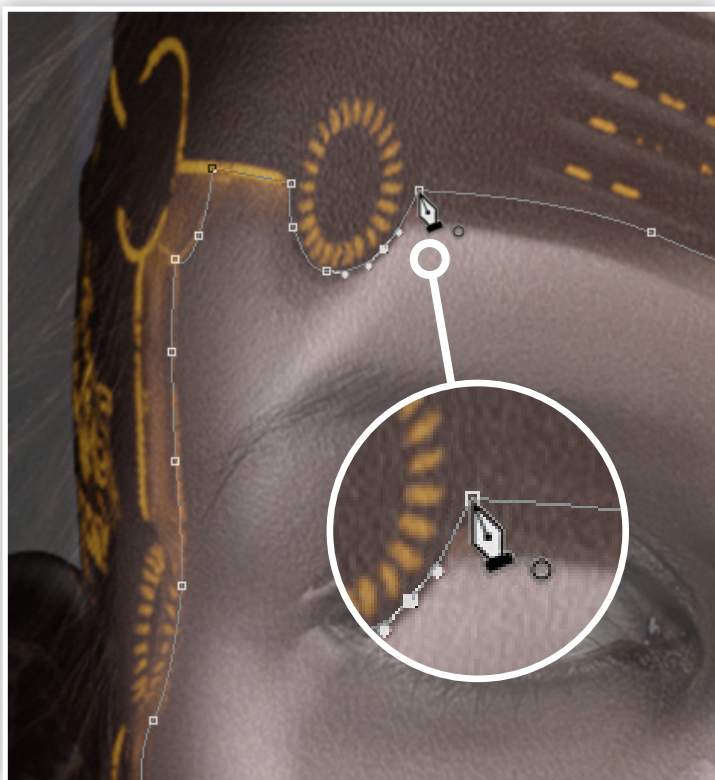
12 Keep the 'face' layer active and go to the Toolbar and choose the Pen Tool (P). Click once on the edge of the simulant suit face area to add an anchor point and then click and drag further along the edge to add another anchor point.



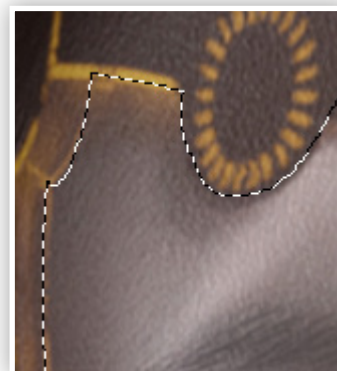
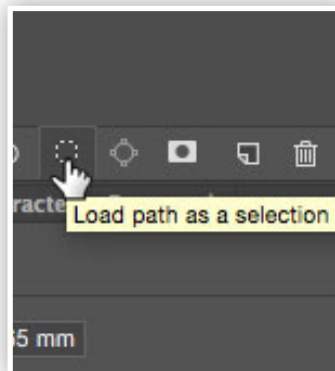
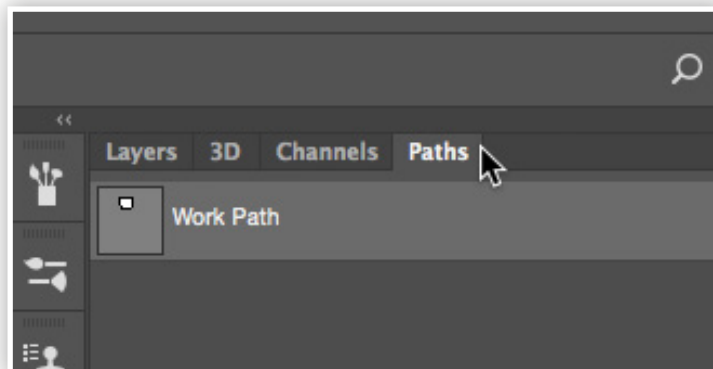
13 You drag your mouse around and will be able to create a curved line between the two anchor points that you added, that matches the curve of the suit. When you have the curve as you want it, you can release the mouse button.



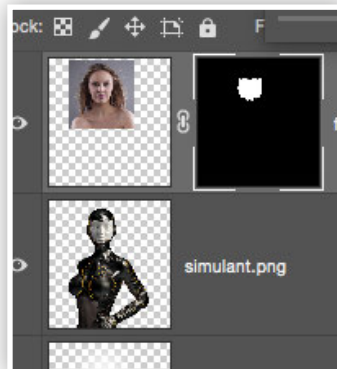
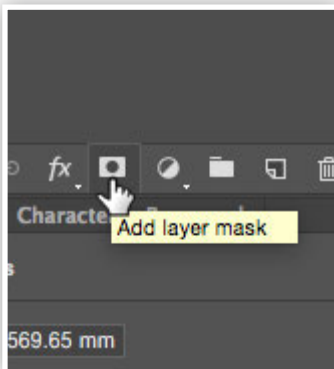
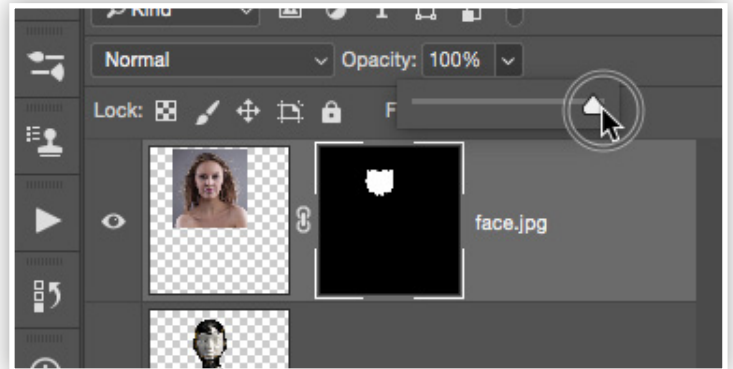
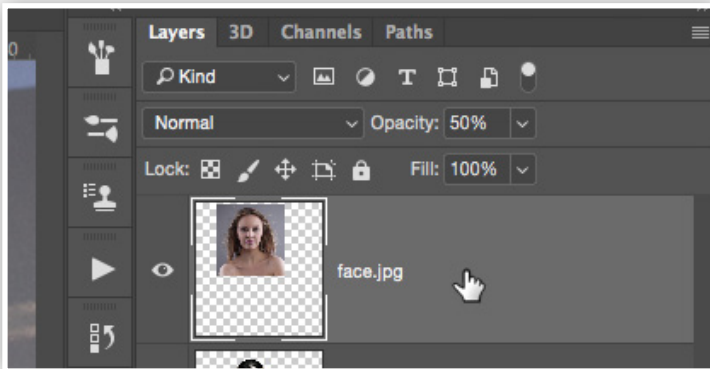
14 You can then move along and add a new anchor point and click and drag that one to continue creating curved areas along the suit face mask. If you don't want any curves, you can simply click once to add a point and move on and click again to add another.



15 Using the Pen Tool you can work your way around the face mask until you've gone all the way around and come back to where you started. You can click on your starting point to join up the path you've created.

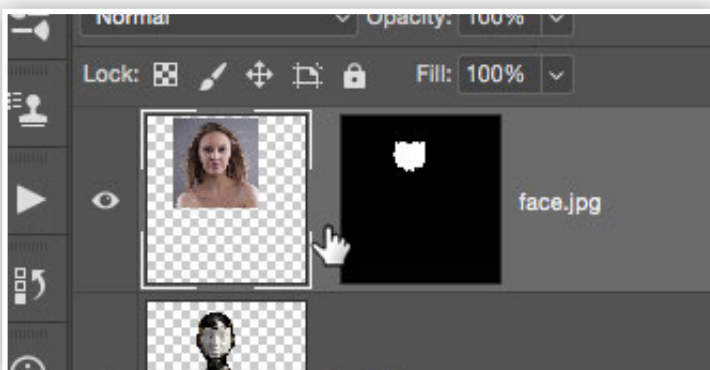
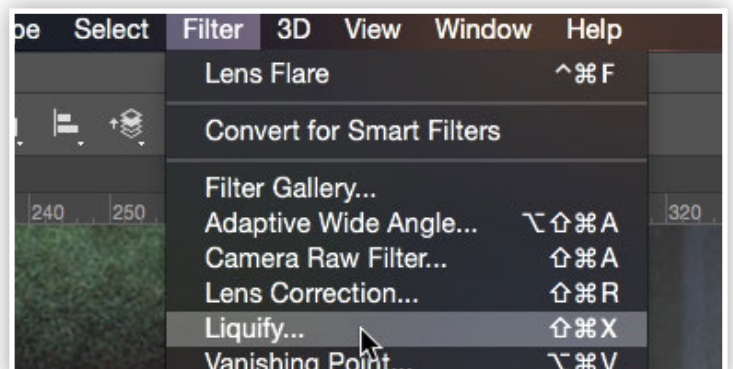
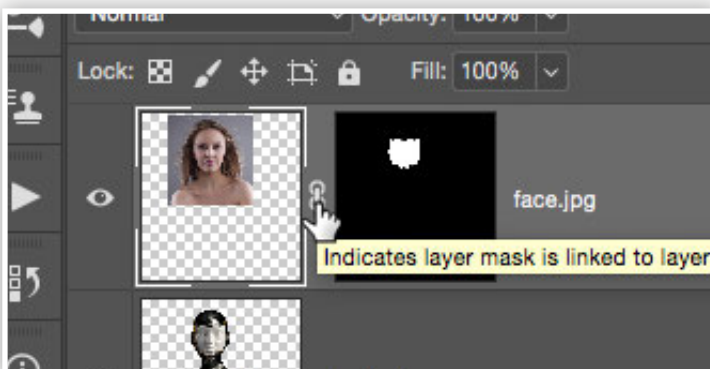


16 Go to the Paths tab above your layer stack and click on it. You will see the path you've just drawn as a Work Path. Below are a number of icons. Click on the Load Path As Selection to convert the path to a selection. You will see marching ants appear to confirm this.



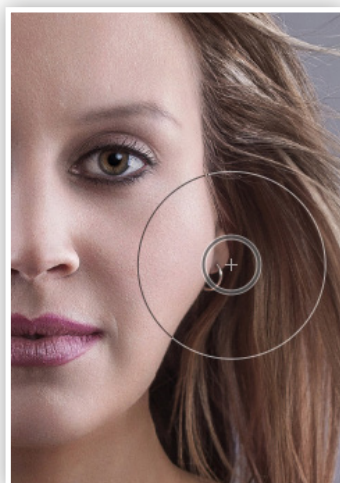
17 Go back to your Layers tab and make sure the 'face' layer is still active, go to the bottom of the layers palette and click on the Add Layer Mask button. A mask will be added in the shape of the selection.

18 You can now return the Opacity of the 'face' layer to 100% and only the area inside the face mask can now be seen. Everything else outside the selection is hidden by the mask you just added. You may notice that the human face isn't quite wide enough to fit the face mask.

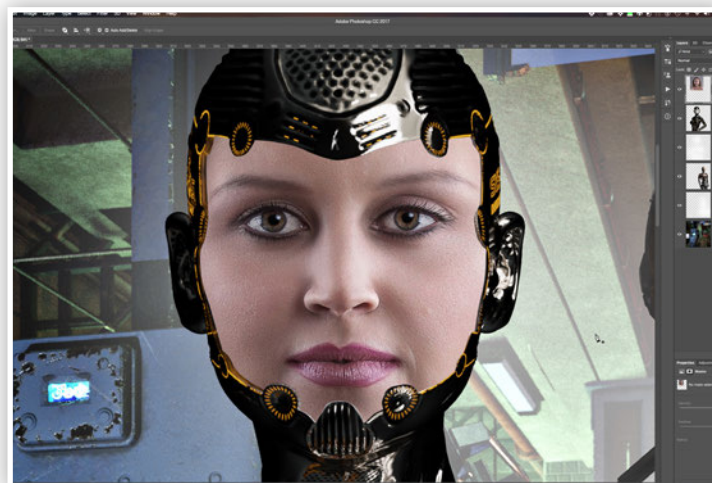


19 Between the 'face' layer thumbnail and the mask thumbnail is a small chain link icon. When visible, it means that any move, scale or adjustment to the image will also affect the mask. Click the chain link icon so the image and the layer mask are independent of each other.

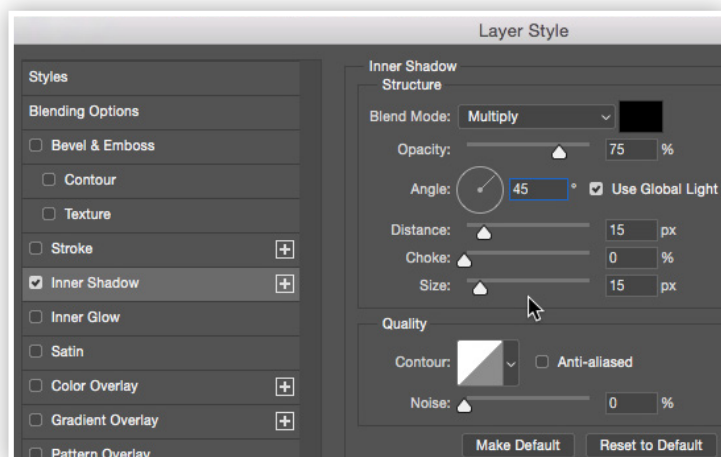
20 Make sure the 'face' thumbnail is active and go to Filter > Liquify (Shift + Cmd + X). The Liquify panel will open and you can use the Forward Warp Tool (W) to stretch out the edge of the girl's face.



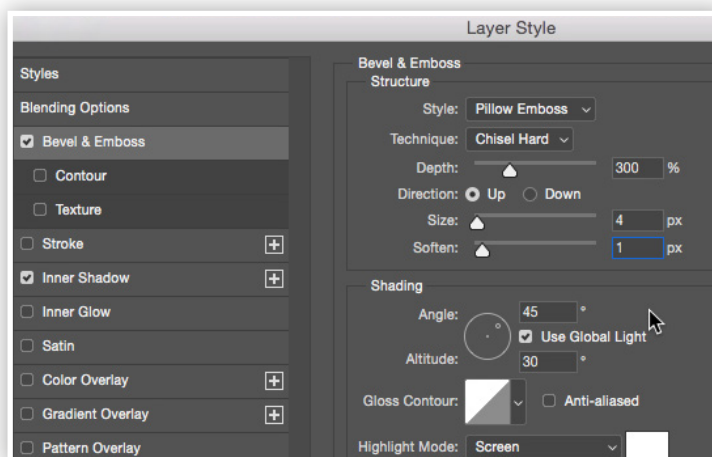
21 Work around the edges of the face by the cheeks and chin. You won't need to stretch it out too far. Make sure the lips, eyes and nose are unaffected by the stretching. When you're happy, you can click OK to apply the Liquify effect.



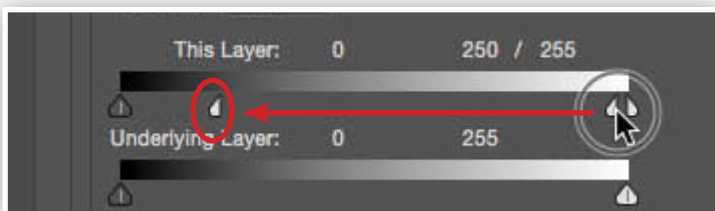
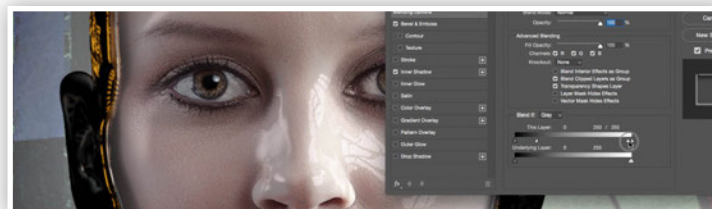
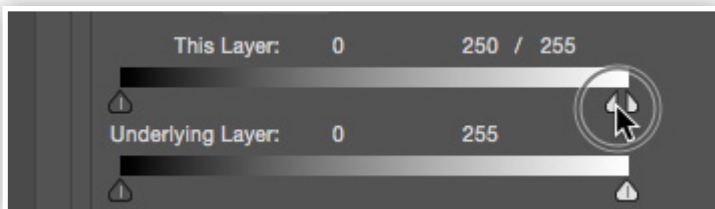
22 When you return to the document, her face will have been warped so now there is no gap along the side of the face mask. Now you need to better blend her face into the face mask give her flesh the appearance of being less human and more synthetic.



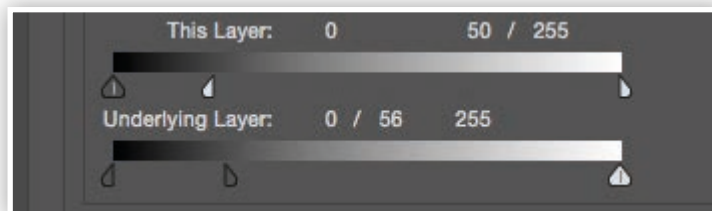
23 Double-click the 'face' layer and you will call up the Layer Style panel. Start by checking the Inner Shadow button and use the settings shown to add a small shadow that makes the human face look more a part of the mask.



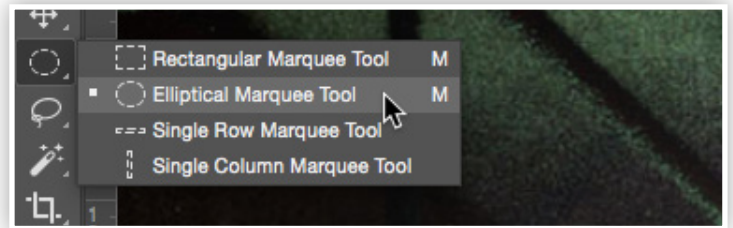
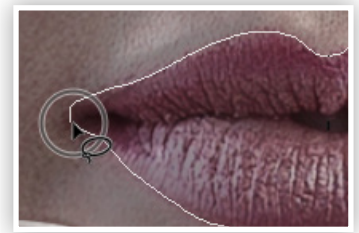
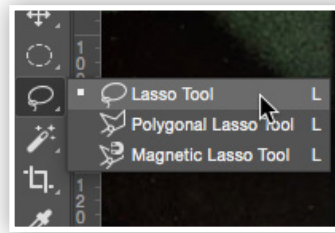
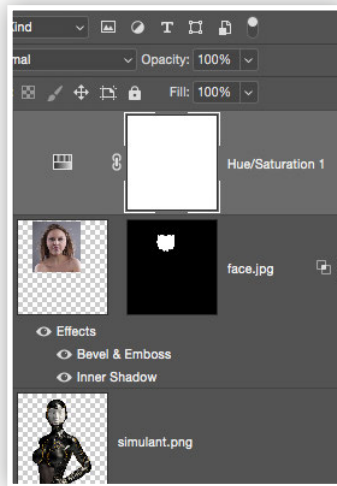
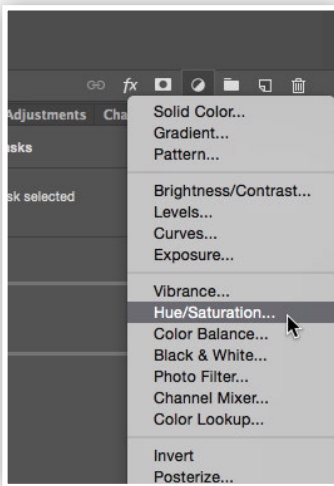
24 You can also check the Bevel & Emboss button and use the settings shown to add a small bevel to the edge of the face mask to give it a more solid feel. Next, you need to blend the human face into the white simulant face below.



25 Keep the Layer Style panel open and go down to the Blend If section and the white furthest right slider on This Layer. Alt + left-click on the lefthand side of the stop and it will separate into two pieces. Click and drag the lefthand part of the slider to the left.

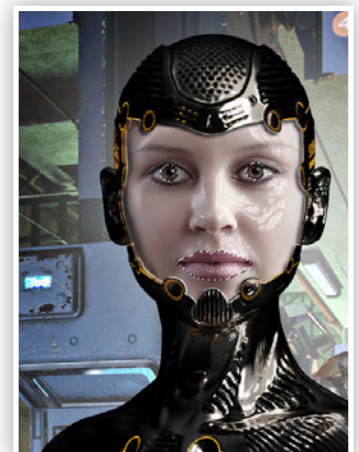
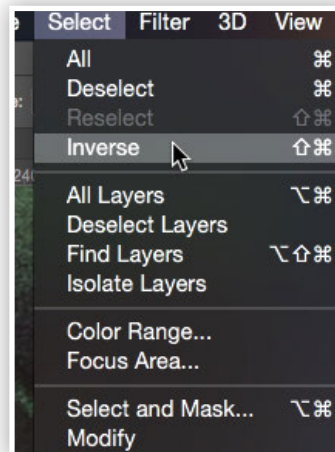
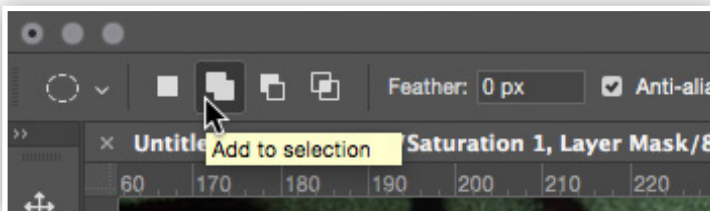


26 When you do, you will see how the 'face' layer blends much better with the brightest areas of the white face on the layer below. Do the same with the furthest left slider on Underlying Layer and slide it a little to the right to blend the darker areas.



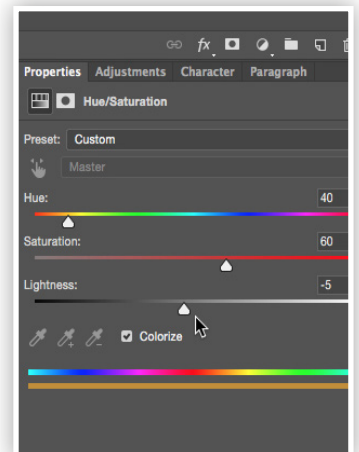
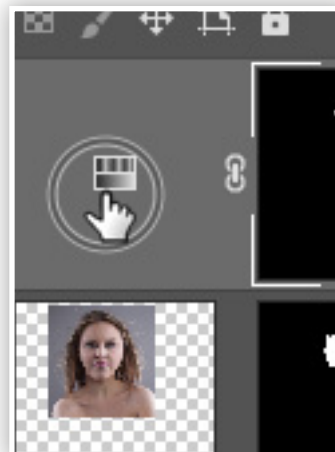
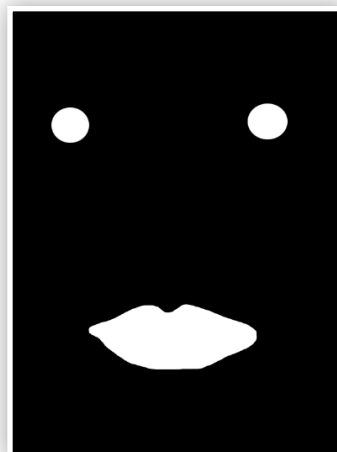
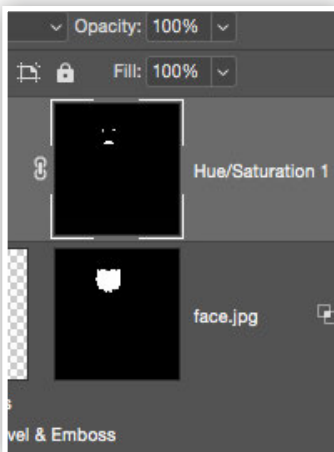
27 Next, click the Create New Fill Or Adjustment Layer button and choose Hue/Saturation from the dropdown list. This will add a Hue/Saturation adjustment layer to the top of the layer stack. You can use this to colour her eyes and lips to match her suit.

28 Go to the toolbar and choose the Lasso Tool (L) and draw around her lips; when you join back up to the start point, you'll have a selection of the lips. Next, go to the toolbar again and this time choose the Elliptical Marquee Tool (M).



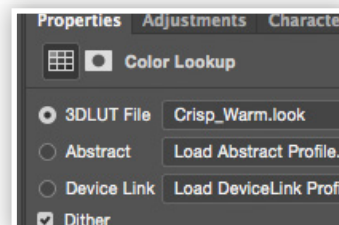
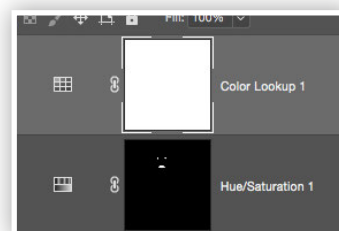
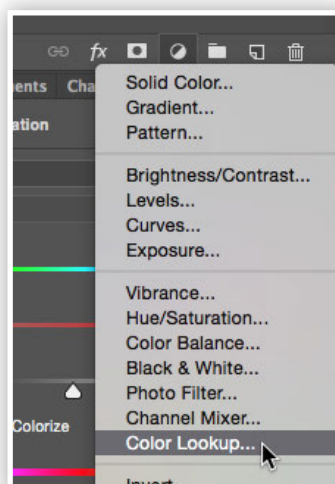
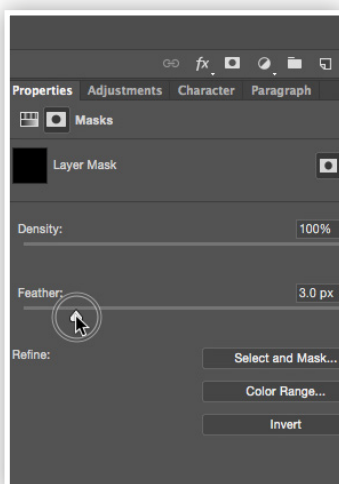
29 In the options menu above, click the Add To Selection button. Click and hold on the centre of one eye and then press the Alt key, you can now draw an ellipse outwards from the point you clicked. Encircle the iris. Then do the same for the other eye.

30 The lips and both eyes are now selected. You need the mask to only let the Hue/Saturation layer affect them so you need to invert the selection by going to Select > Inverse (Shift + Cmd + I). The selection will invert, so everything except the eyes and lips are selected.



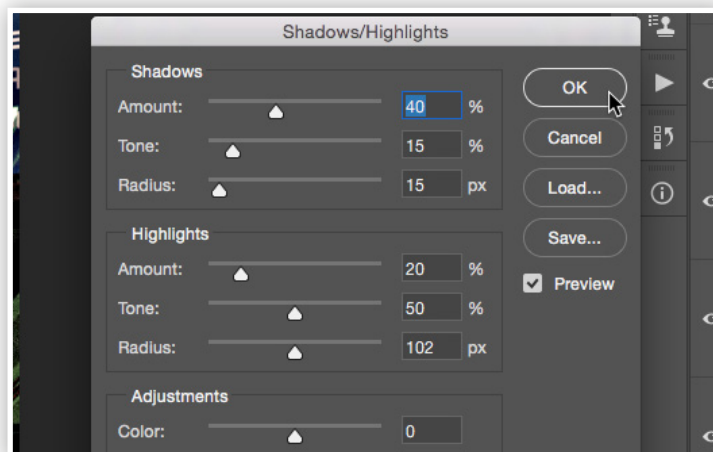
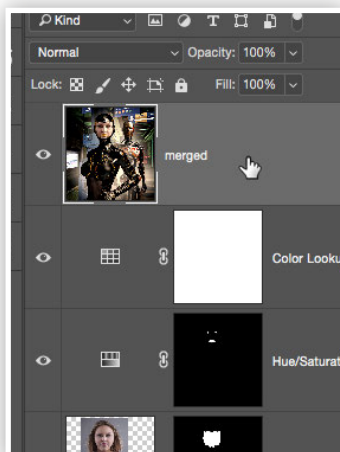
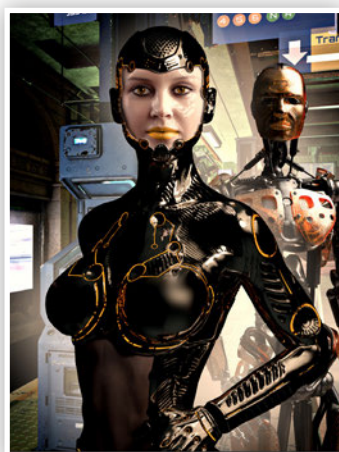
31 Set your background colour to black and then simply hit the delete key. The inverted selection will be replaced with black. The mask should now display the lips and both eyes as white on the black mask. Clear the selection by pressing Cmd + D.

32 Click on the Hue/Saturation layer icon and in its Properties panel make sure Colorise is checked and make Hue 40, Saturation 60 and Lightness about -5. Both eyes and her lips should now be a golden yellow to match the highlights on her suit.



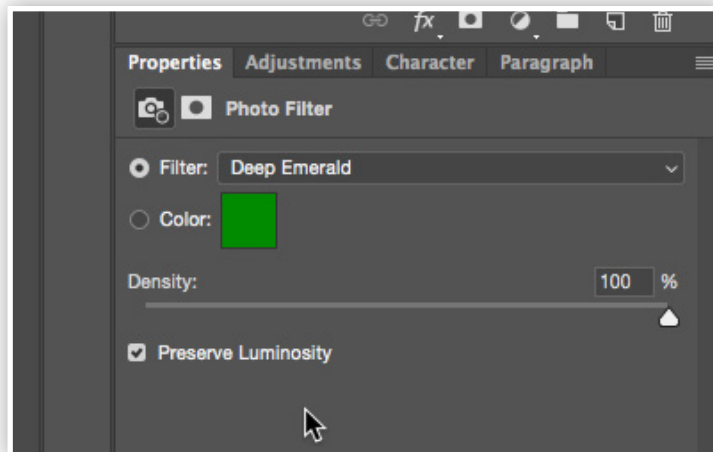
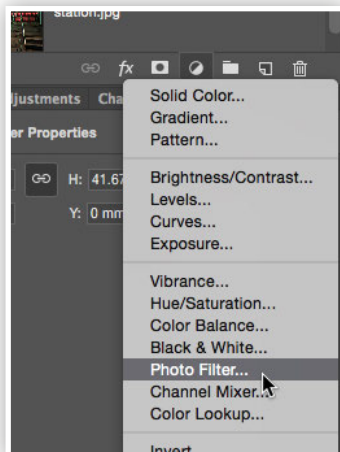
33 If you want, you can click on the layer mask thumbnail and under its Properties, set the Feather value to about 3 pixels. This will blur the mask very slightly to soften the hard edge around her lips and eyes. Now we can experiment with some colour.

34 Click on the Create New Fill Or Adjustment Layer button again and choose Colour Lookup from the menu. Colour Lookup Tables (LUTs) are colour schemes you can add to a photo. You can choose from the options available in the menu.



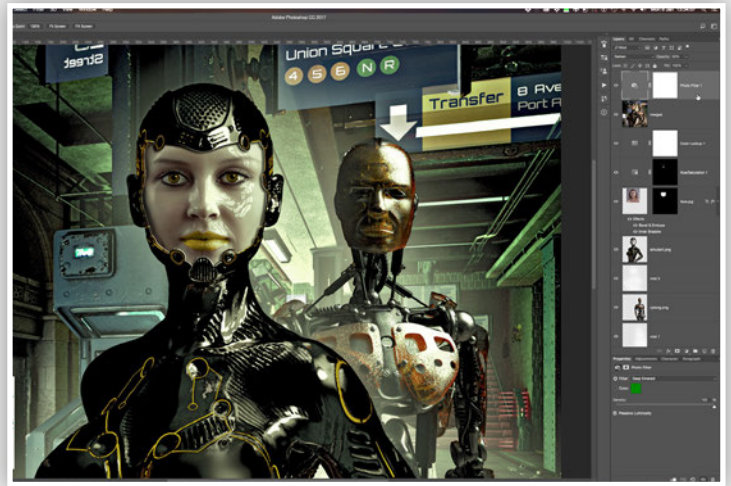
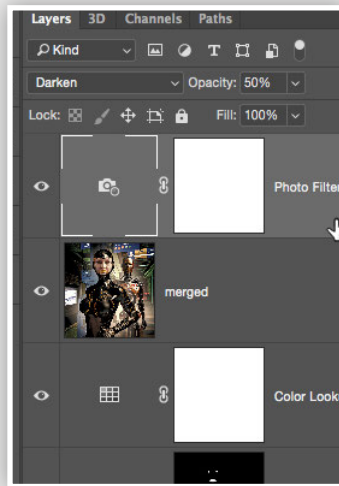
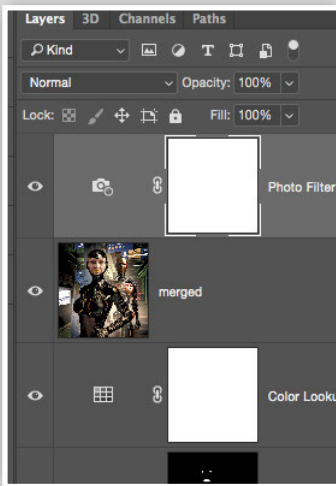
35 We've chosen Crisp_Warm.look to create a warm and contrasty look to the image. Next, press Shift + Alt + Cmd + E to create a new layer that is a merged version of all that is currently visible. You can name this new layer 'merged'.

36 Go to Image > Adjustments > Shadows/Highlights and under Shadows make the Amount 40%, Tone 15% and Radius 15%. Under Highlights, make Amount 20%, Tone 50% and Radius 102%. The other values can be kept at zero.



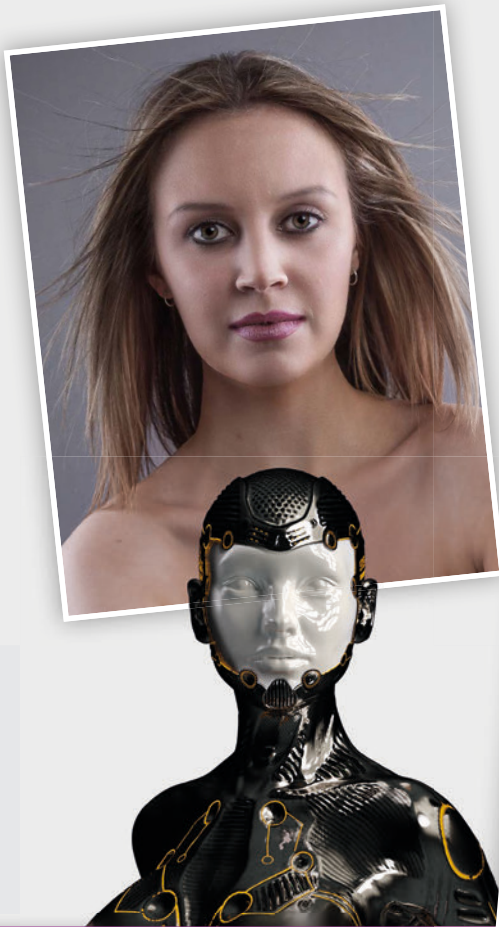
37 This just reclaims some of the areas of the image lost to shadows after the application of the Colour Lookup filter. You can make the image a little more bleak and futuristic looking by adding a Photo Filter.

38 Under the Photo Filter 1 properties, set Filter to Deep Emerald, Density to 100% and uncheck the Preserve Luminosity button. The image will go a bright green colour but you can blend it in the next step.



39 Click the Photo Filter 1 layer to make it active, set its Blend Mode to Darken and drop the layer Opacity to 50%. This blends the green in a more subtle way giving the image a more Matrix-style colour palette.

40 Your image is complete. By taking a group of elements and assembling them into a great science fiction image. You've also used masks, selection tools and adjustment layers to combine and colour grade the various parts.



Combine, create,
and enjoy

Photoshop is there to help you make amazing art.



Warm Up an Overcast Day



AFTER

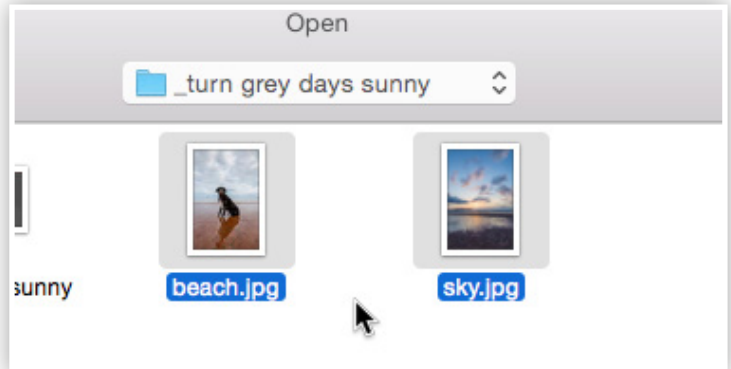
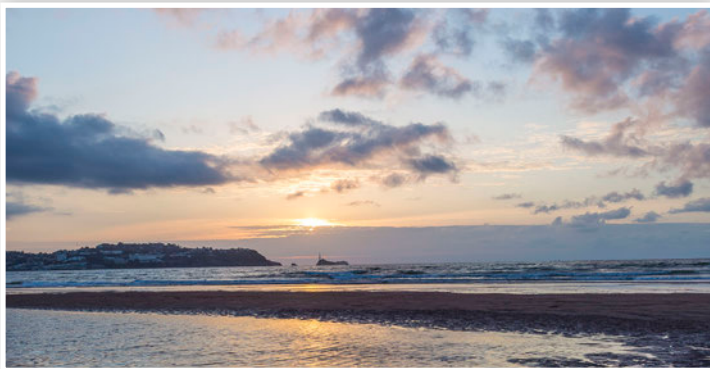
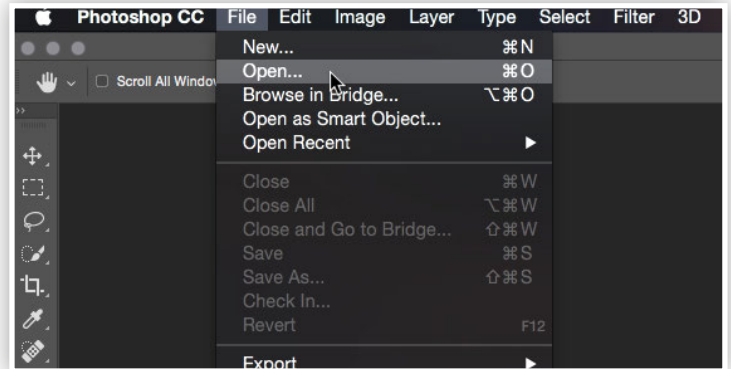
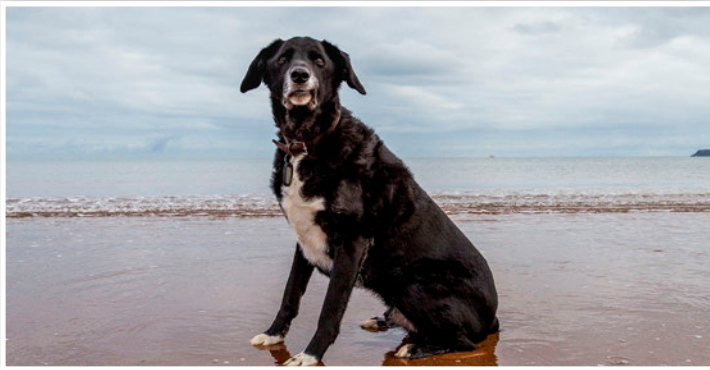
BEFORE

Use some simple but powerful tricks to turn grey skies sunny

In the UK at least, the weather is a long running joke. More often than not, we have to be prepared for the fact that the south of England is never going match the south of France for warm sun and blue skies. This is where Photoshop can help you. Let's say that you have an image and it is a typical day in the UK, in that it is bright but overcast. The sky is a canopy of mostly

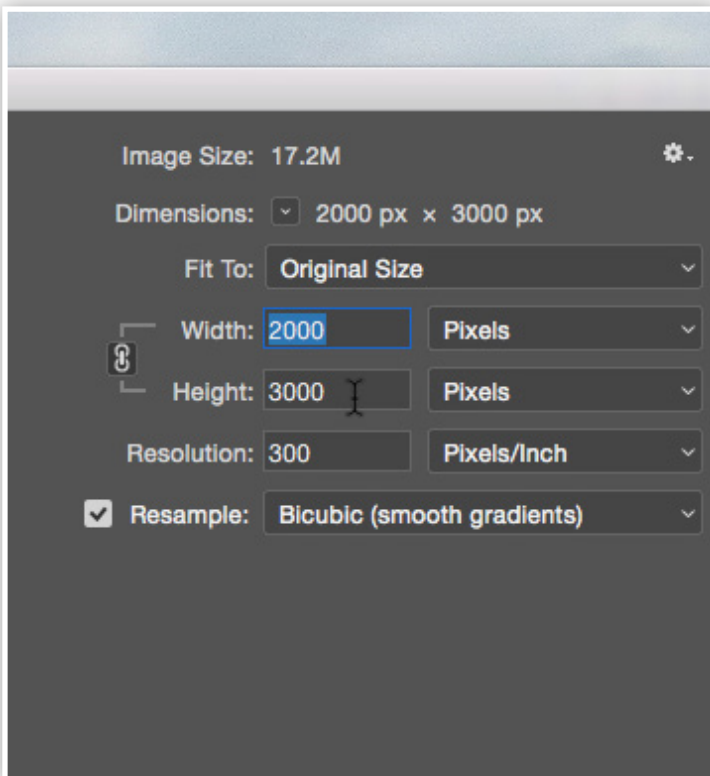
pale grey and is not particularly inspiring. It's a shot of your pet dog, sitting on the beach and you really want it to look a bit more warm and inviting. What can you do to improve it? This next tutorial will show you.



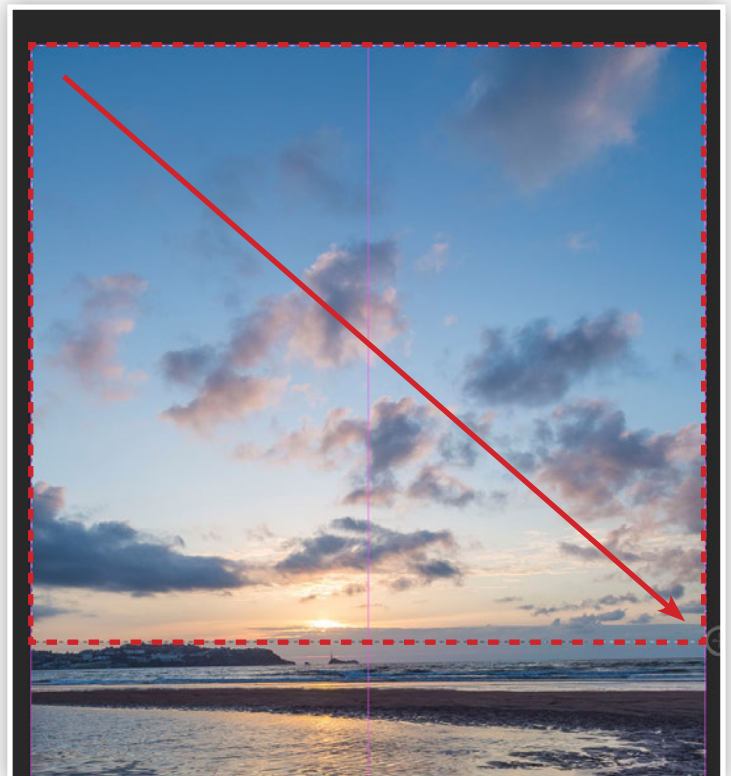


01 Here is a pet portrait of Bailey the dog on a grey day in Paignton, Devon, along with a photograph taken earlier in the year on the very same beach, that has some lovely clouds and pre dawn light. These two images can be combined to create a warmer image.

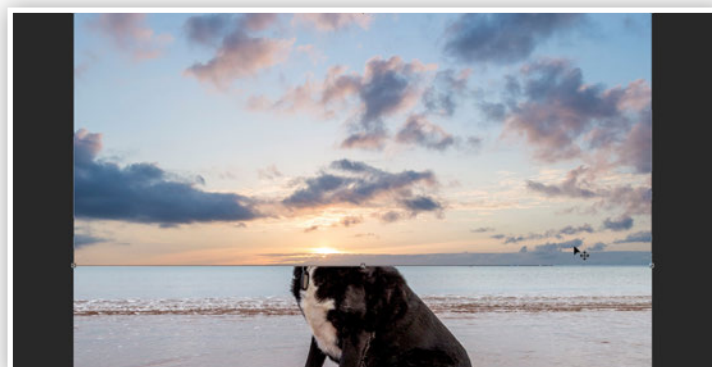
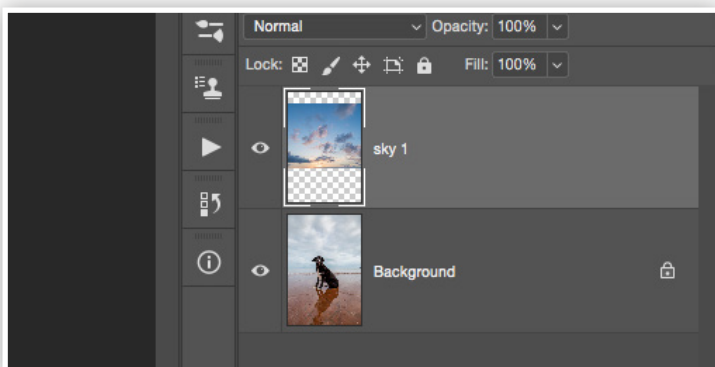
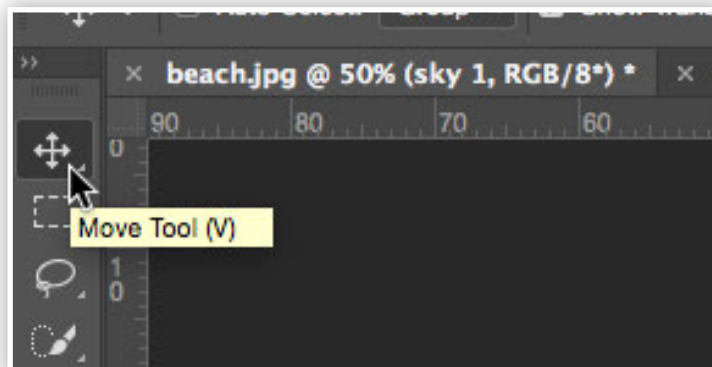
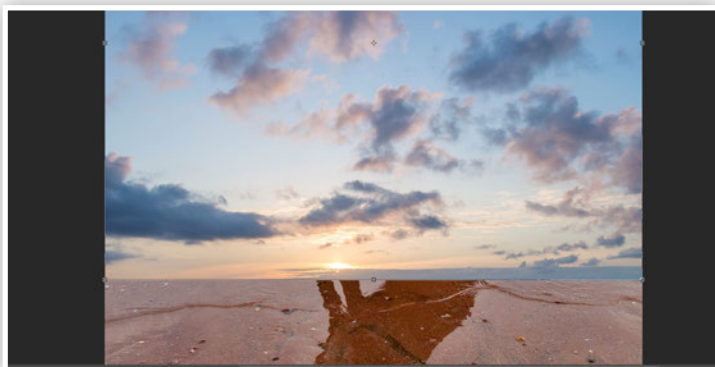
02 In Photoshop, begin by going to File > Open and navigate to where the two images are kept. The images are called 'beach.jpg' and 'sky.jpg'. Highlight them both and click on Open to open them both in Photoshop.



03 The images in this tutorial are 2000 pixels wide by 3000 pixels deep. Things like brush sizes and settings are based on this image size. If you are using larger or smaller images, remember that your settings will need to alter accordingly.

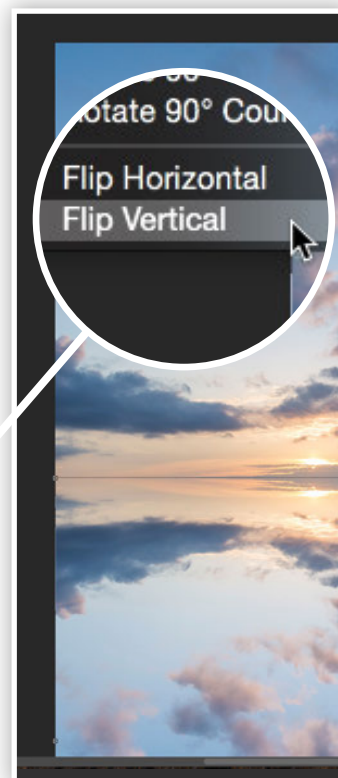
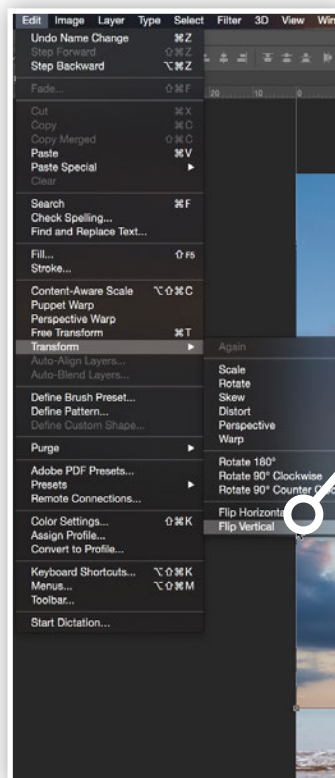
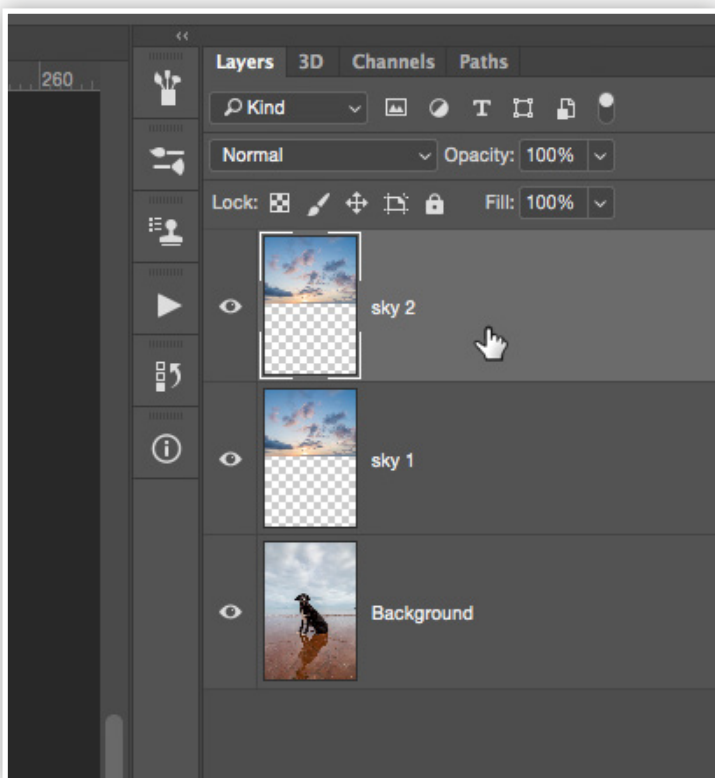


04 Click on the 'sky.jpg' document tab to view that image first. Go to the toolbar and select the Rectangular Marquee Tool (M). Drag a selection that starts in the top left of the image and ends on the right just above the horizon, so no land is selected.



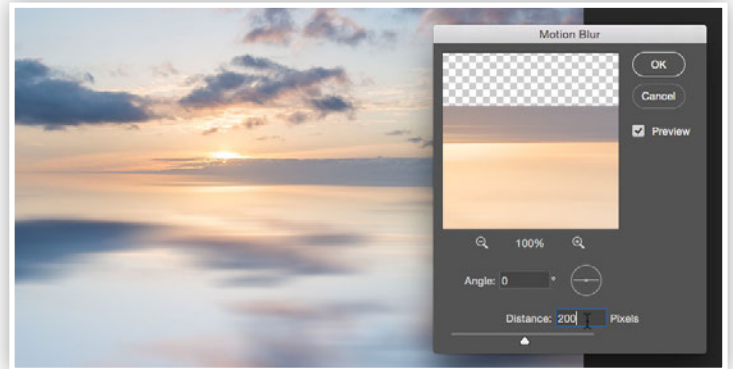
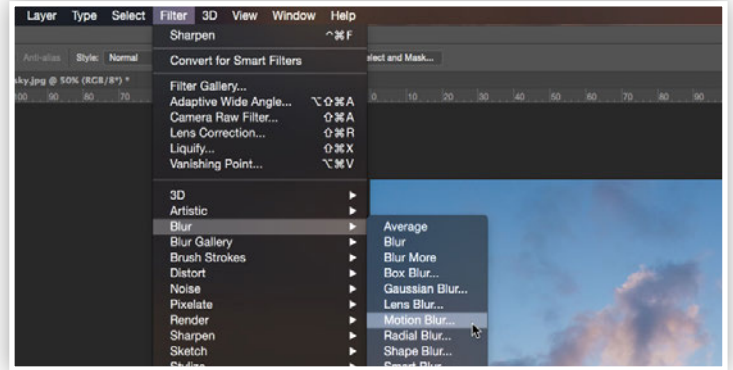
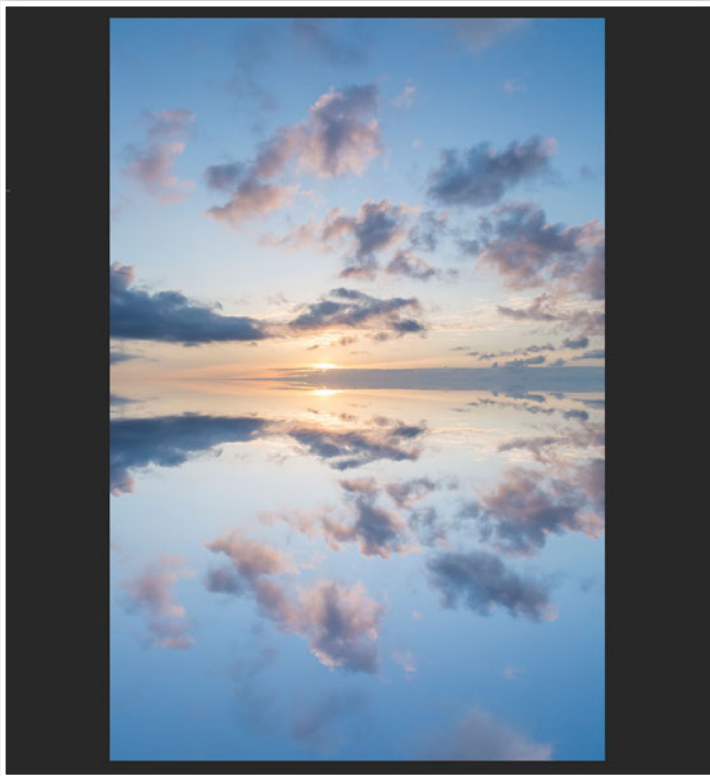
05 Press **Cmd + C** to copy that area of the photo. Then click on the 'beach.jpg' document tab to view the dog on the beach. Press **Cmd + V** to paste the sky. It will appear on a new layer. You can name this newly added layer 'sky 1'.

06 Next, go to the toolbar and choose the Move Tool (V) and use it to drag the sky up so that the bottom of the sky sits directly on the horizon of the beach shot. Obviously the sky image is covering the dog at the moment but that will be addressed later.



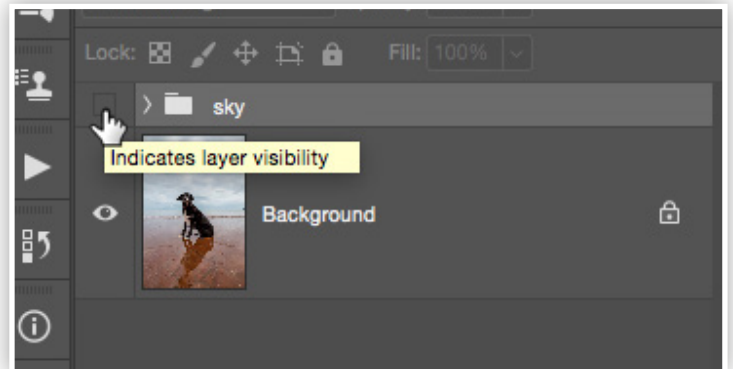
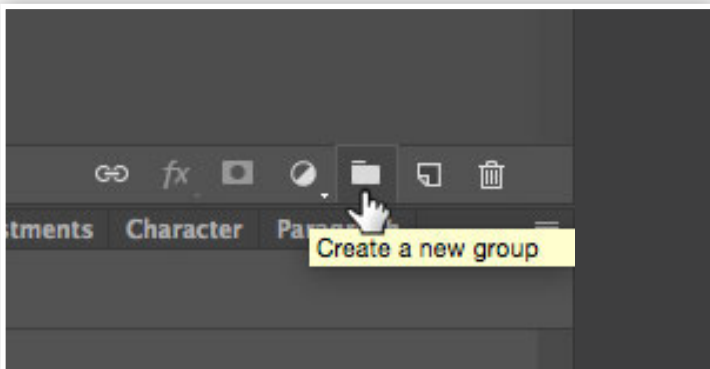
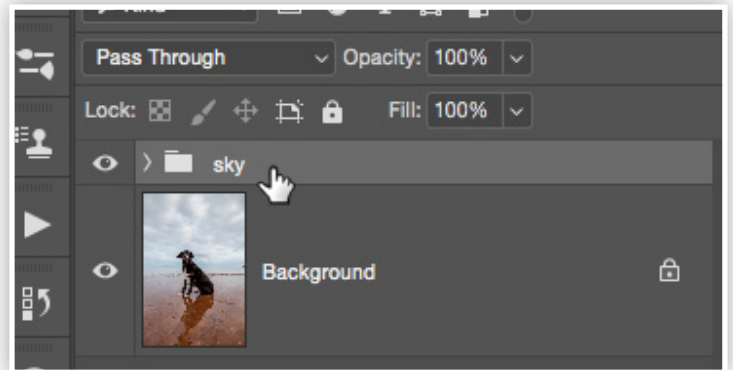
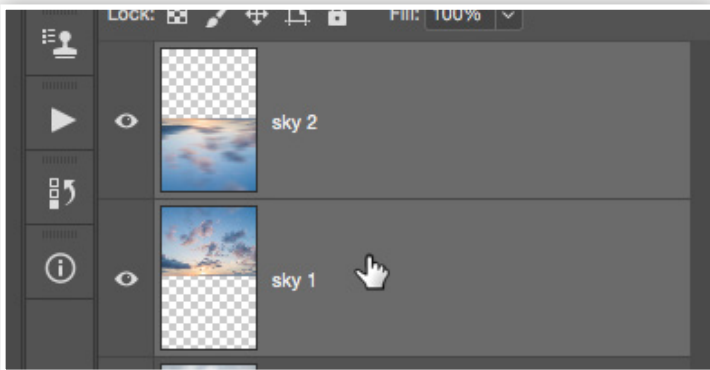
07 Make sure the 'sky 1' layer is active and press **Cmd + J** to create a duplicate of that layer. Name it 'sky 2'. This duplicate layer will be used to create a reflection of the sky to add a hint of realism to proceedings.

08 With the 'sky 2' layer active, go to **Edit > Transform > Flip Vertical**. This will flip the duplicate sky layer over so you can use it to create a mirror image of the sky. Use the Move Tool (M) to drag this layer down so the top of it is on the horizon.



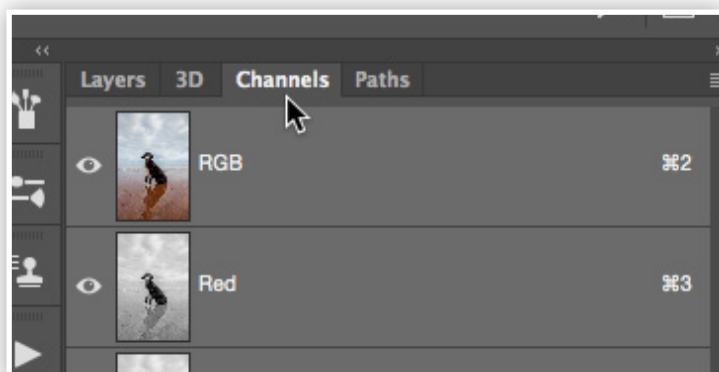
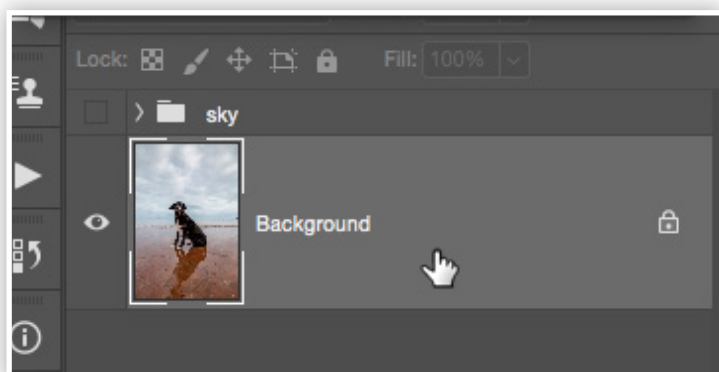
09 What you should have now is the 'sky 1' layer looking like a normal sky image and the duplicated 'sky 2' layer has been flipped and dragged down to create the illusion of a perfect mirror image.

10 Keep the 'sky 2' layer active and go to Filter > Blur > Motion Blur. From the dialog box that appears, make the Angle 0° and make the Distance value about 200 pixels. This will blur the 'sky 2' layer image in a horizontal direction.

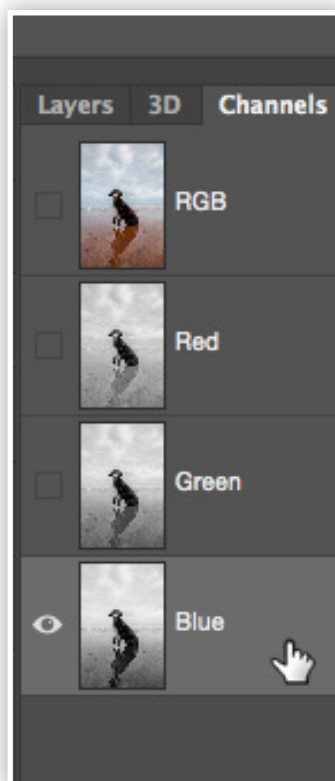


11 Click on the 'sky 2' layer and then hold down the Shift key and click on the 'sky 1' layer so they are both highlighted at the same time. Then click on the Create A New Group icon at the bottom of the layer stack.

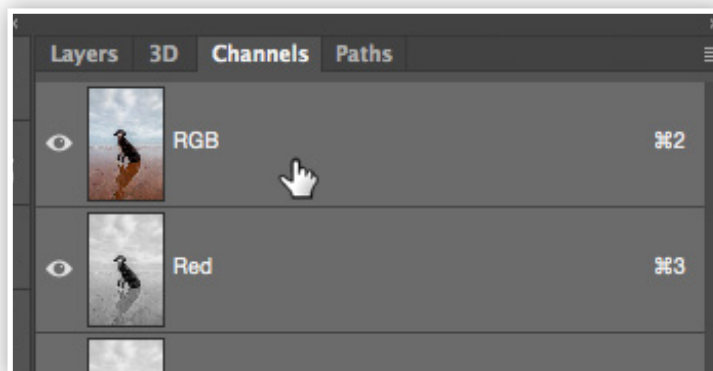
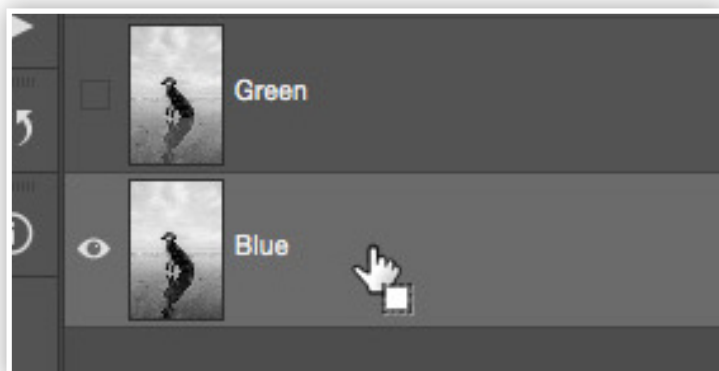
12 This will group those two sky images into a folder of their own. Name this group 'sky'. For the moment, make the 'sky' group invisible by clicking on its visibility icon shape like a small eye. Now you can figure out how to let the dog on the beach show through too.



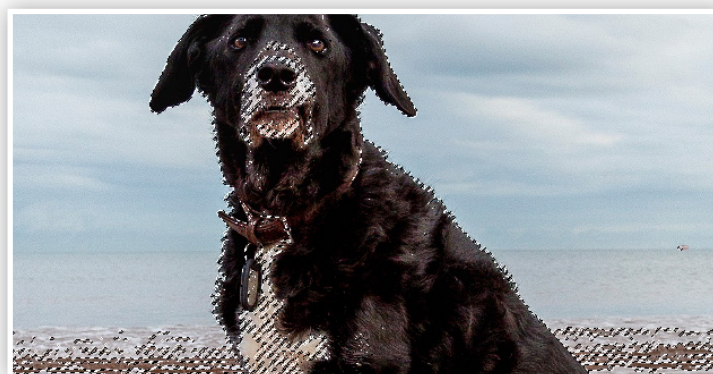
13 Click on the Background layer containing the dog/beach image so it is active. Click on the Channels tab at the top of the layers palette to display the Red, Green and Blue channels that make up the colours of the image.



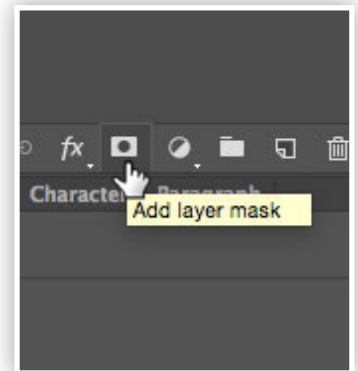
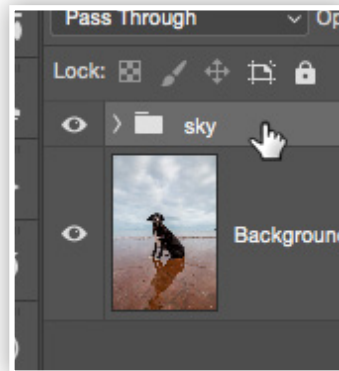
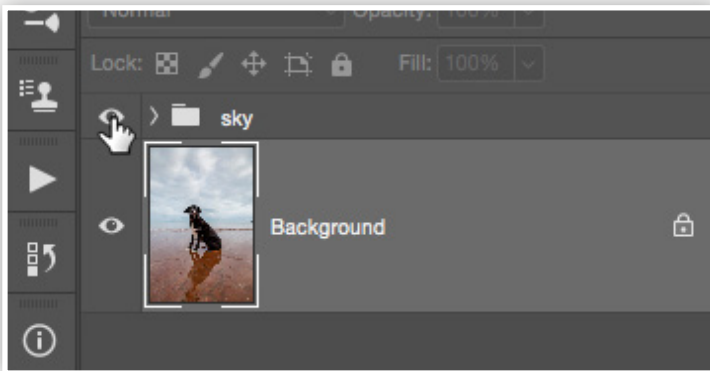
14 You are looking for the best channel, that has the least detail in the sky but contains the most detail in the dog and the foreground. The Blue channel looks like the best one. If you click on the Blue channel, only that channel will now be displayed in black and white.



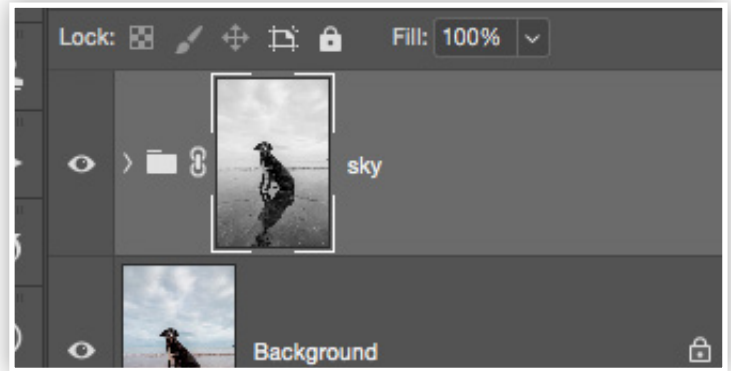
15 Press the Cmd key and the cursor will change to let you make a selection. Click on the Blue channel and you will have made a selection of the all the tonal parts of that channel only. Marching ants will show you the areas that are currently selected.



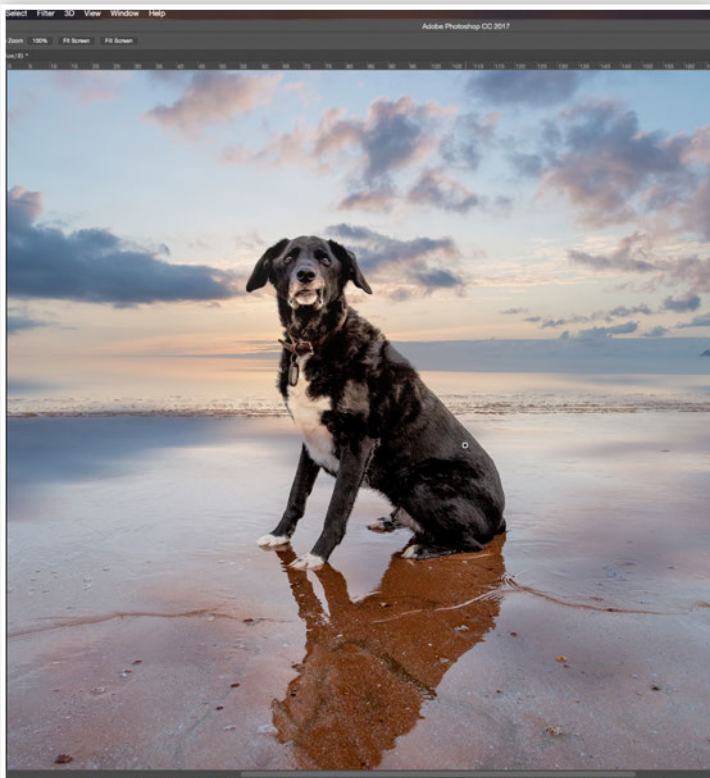
16 Click on the RGB thumbnail of the image to view the full colour version again and then click back on the Layers tab of the layer palette, so you can go back and view the document in normal fashion.



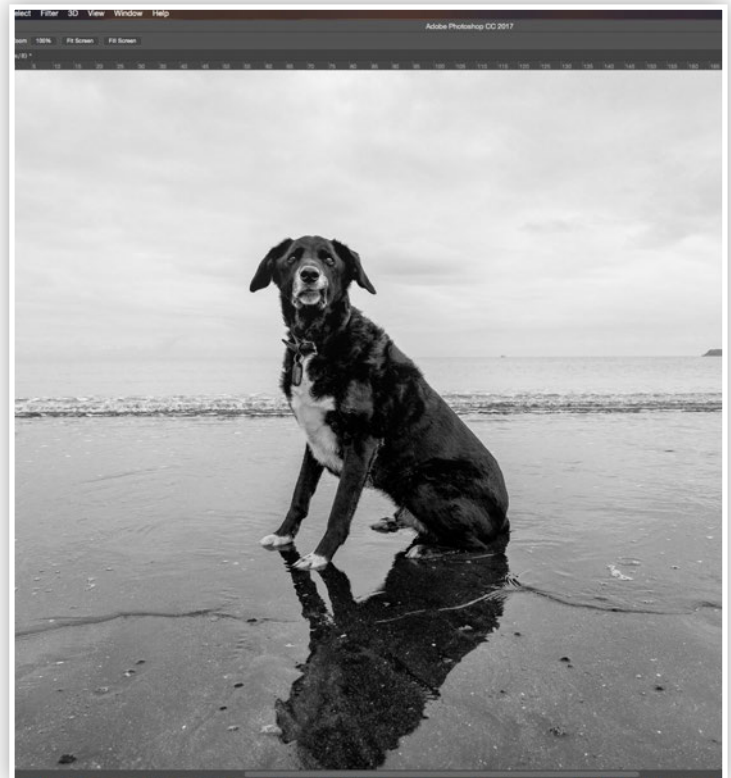
17 Click on the visibility icon of the 'sky' group again, in order to turn it on and make it visible once more. You should now see the marching ants selection over the sky images. For the moment, the dog and the beach have been covered again.



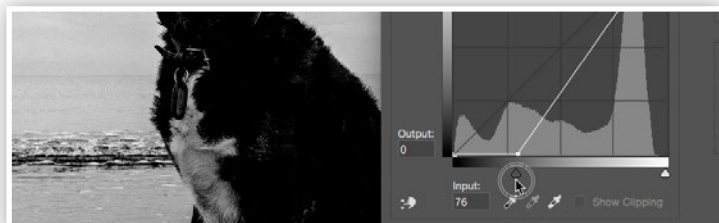
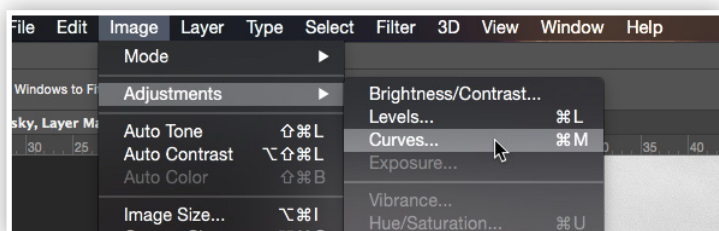
18 Click on the 'sky' group to make sure that it is active and then go to the bottom of the layer palette and click on the Add Layer Mask button. A mask will be added to the left of the group thumbnail, that matches the Blue channel selection you have just made.



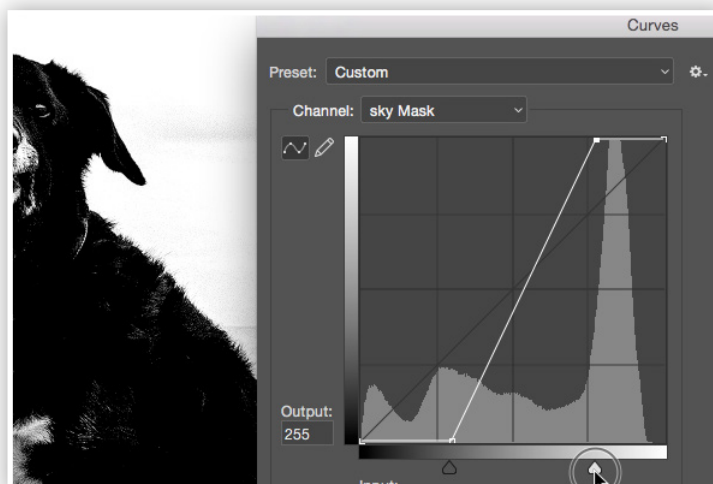
19 The dog and the beach are now visible again, since any white areas of the mask reveal parts of the sky on the layer above and any black areas of the mask conceal the sky layer above. It is a good thing to remember: 'white reveals and black conceals'.



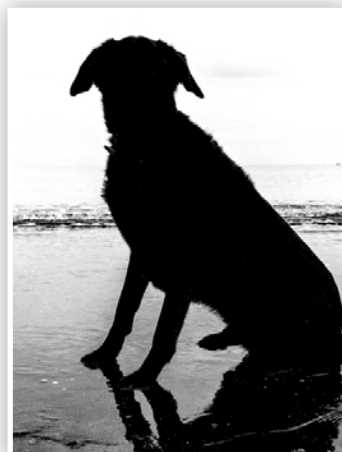
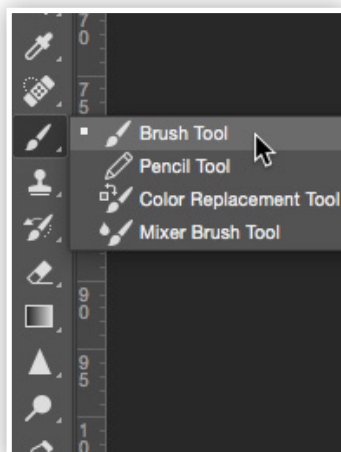
20 Since areas of sky can be seen on top of the dog, ruining the effect, you need to refine the mask. Alt + left-click the 'sky' group mask, so you can view it on its own. You need to remove as much detail from the sky and boost contrast enough to help with the process.



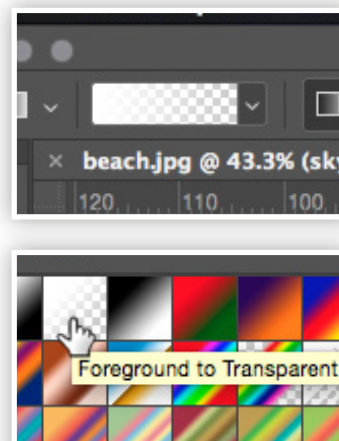
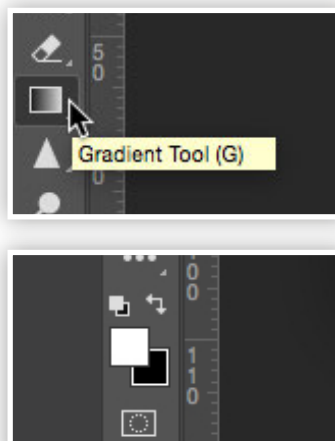
21 With the mask still active, go to Image > Adjustments > Curves (Cmd + M). Drag the Shadows Input/Output slider to the right. This remaps the tones in the image. This means more areas in the middle tones are pushed to solid black as you move the slider to the right.



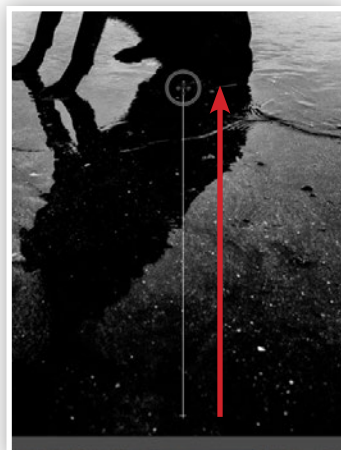
22 Now drag the Highlights slider to the left. This will make any of the brighter middle tones go white as the slider moves to the left. You have now made a very strong contrast enhancement to the mask so there are less middle tones in the image.



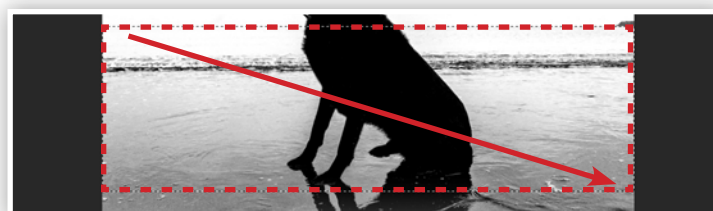
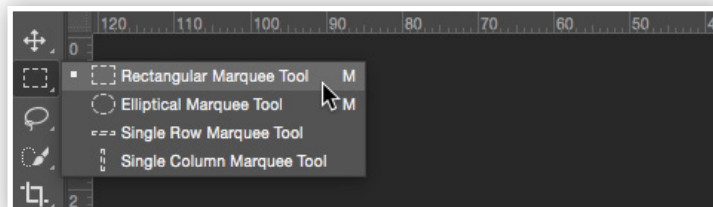
23 Now choose a small black, medium hard brush and use this to paint over any white areas visible within the outline of the dog. Paint over his face, chest and collar. You can even zoom in a little and paint out his white paws as well.



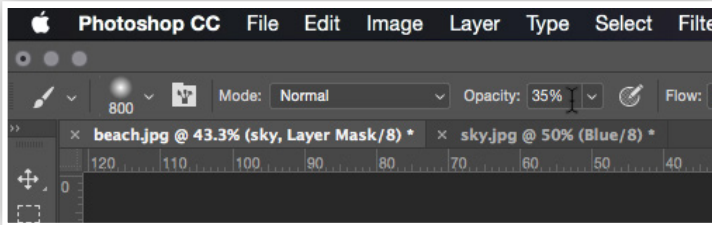
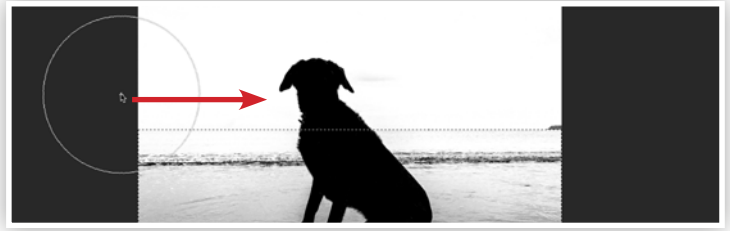
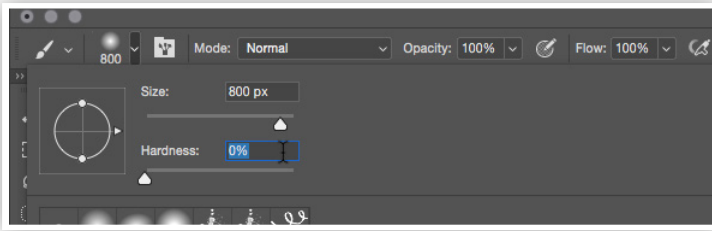
24 Next you need to address the sea and the sand in the foreground. Go to the toolbar and choose the Gradient Tool (G). Make sure the Foreground colour is white and your gradient runs from Foreground to transparent by clicking on the Gradient Editor.



25 Click and hold the start of the gradient at the bottom of the mask and drag upwards to the dog's paws. When you release the mouse button, a gradient will be drawn from the bottom with solid white that will fade to zero by the dog's paws.

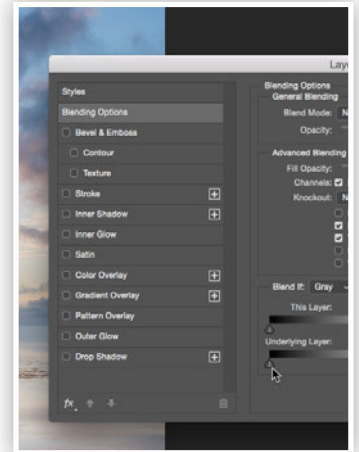
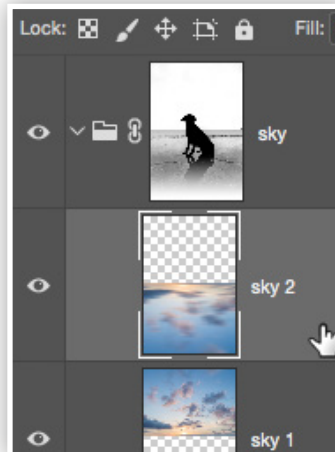


26 Now the horizon needs little work. Go to the toolbar and choose the Rectangular Marquee Tool (M). Left-click and drag a selection that starts on the right at the horizon and down to the left side below the dog's paws again. Set the foreground colour to black.



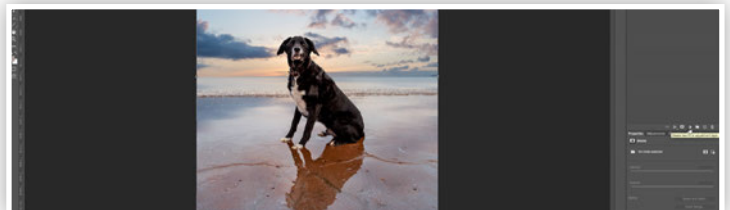
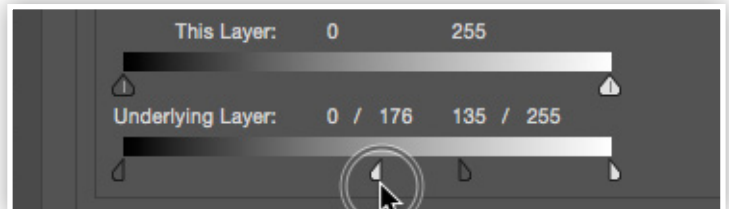
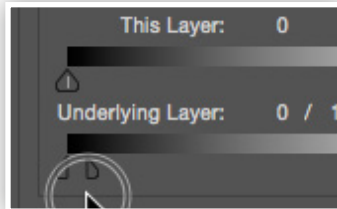
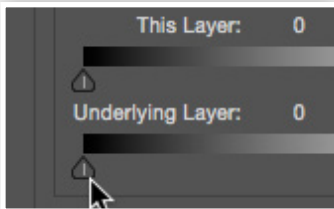
27 Keep that Rectangular Marquee selection active and go to the toolbar and choose a large 800 pixel brush, with Hardness set at 0%. Make the Opacity of the brush about 35%. You are going to add a little detail back into the horizon.

28 Starting on the extreme left of the selection, position your brush so the bottom quarter of the brush overlaps the active selection. Paint across the horizon to the right of the mask and the brush stroke shows up as a grey area on the mask. Press Cmd + D to clear the selection.



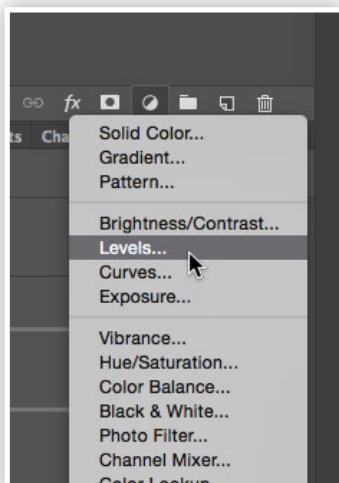
29 Alt + left-click on the mask to return to the normal view and you will see the combination of dog on the beach and the new sky is starting to gel quite well. There are still a few more things you can do to improve it though.

30 Open the group to display its contents and click on the 'sky 2' layer to make it active. If you double-click this layer, it will call up the Layer Style panel where you can use some advanced blending.

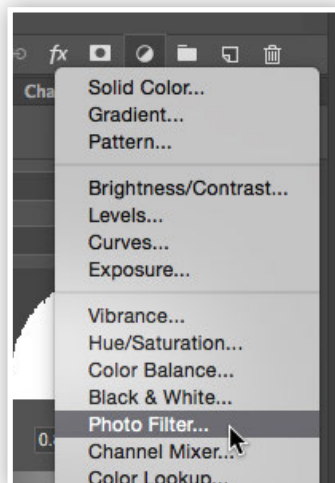
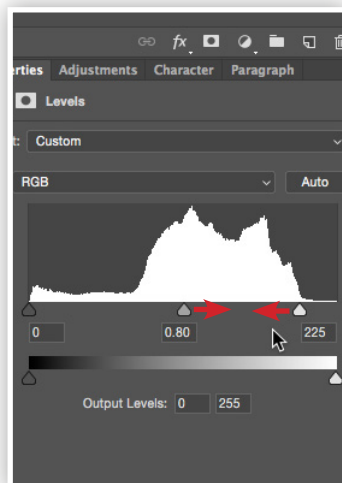


31 Under the Blend If section, Alt + left-click the right half of the shadows tab for the Underlying Layer. The tab will split in two and you can drag that half to the right; as you do, the blend will become more subtle as darker tones from the beach become visible.

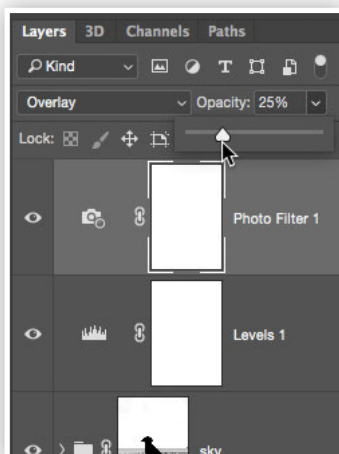
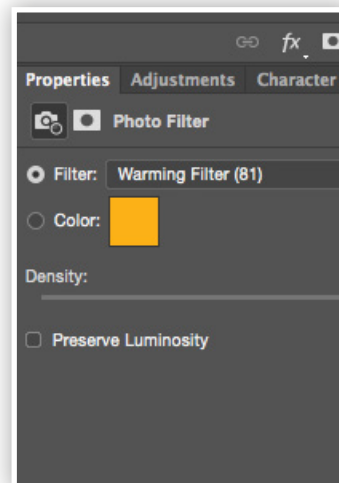
32 You can do the same with the Highlights tab on the Underlying layer and slide it to the left. Lighter tones from the beach become more visible in the blend but the colours of the sky are still present, so enhance it still further.



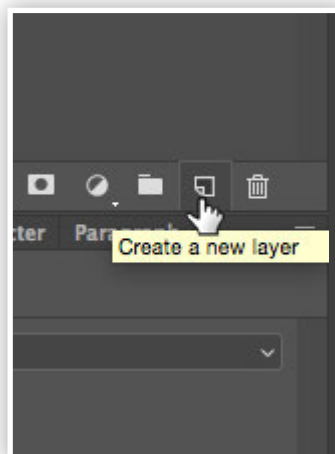
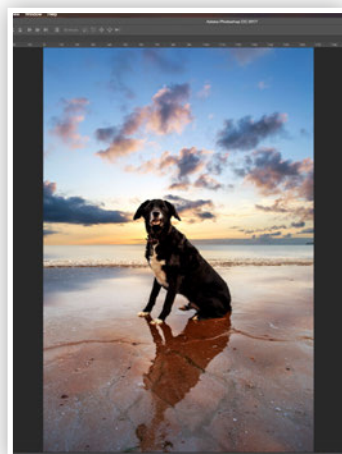
33 Click on the Create New Fill or Adjustment Layer button and choose Levels. Make sure it is at the top of the layer stack. In the levels adjustment properties, push the Highlights slider to the left and the Midtone slider a little to the right for a contrast boost.



34 Click on the Create New Fill or Adjustment Layer button again and choose Photo Filter. Under the filter's properties, make the Filter type Warming Filter (81) and slide the Density tab to 100% and uncheck Preserve Luminosity. The image will go completely orange but not to worry.



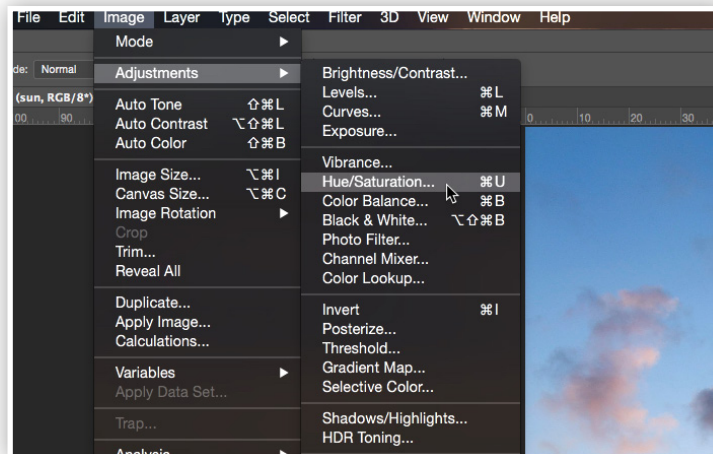
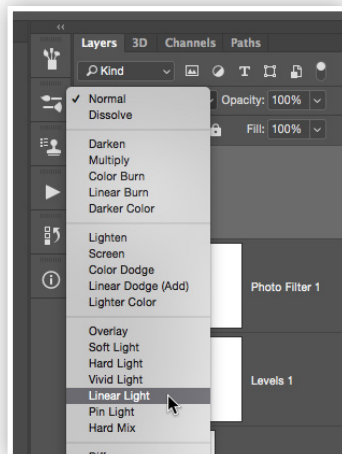
35 Set the Photo Filter 1 Blend Mode to Overlay and make layer opacity about 25%. This adds a small contrast boost but also adds a colour cast across the image to help blend the sky and beach together with the same colour.



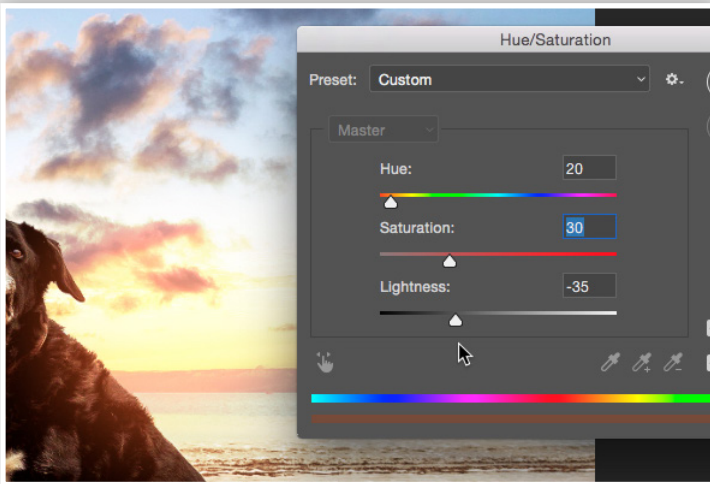
36 One final thing that is a favourite of ours is to click on the Create New Layer button and add a new layer to the top of the stack. Name this new layer 'sun'. You can add a hint of sunshine to help things out a little.



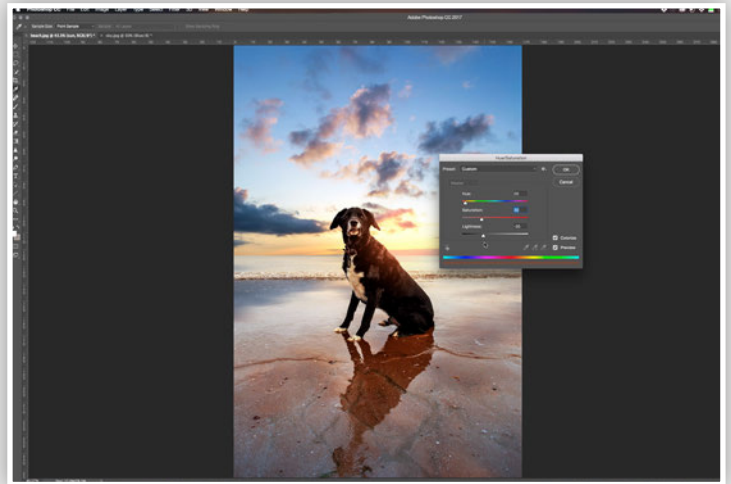
37 Choose a large soft brush of about 700 pixels, set the foreground colour to white and dab the brush a couple of times over the dog's shoulder, in the area of clouds near the horizon. Set the 'sun' layer Blend Mode to Linear Light.



38 With the 'sun' layer still active, go to Image > Adjustments > Hue/Saturation (Cmd + U). The Hue/Saturation panel will appear. We can use certain Hue/Saturation settings to create a subtle warm glow.



39 Make sure Colorize is checked and make Hue 20, Saturation 30 and Lightness -35 to create a warm glow that enhances the warm colours of the lit areas of the image.



40 Your grey day makeover is finished. An overcast day now has a warmer and sunnier disposition and feels less like it was shot in winter and more like a summer morning.



Cheer up those grey skies

A great technique for much warmer and dramatic images.



Day for Night

Turn daylight scenes into night time

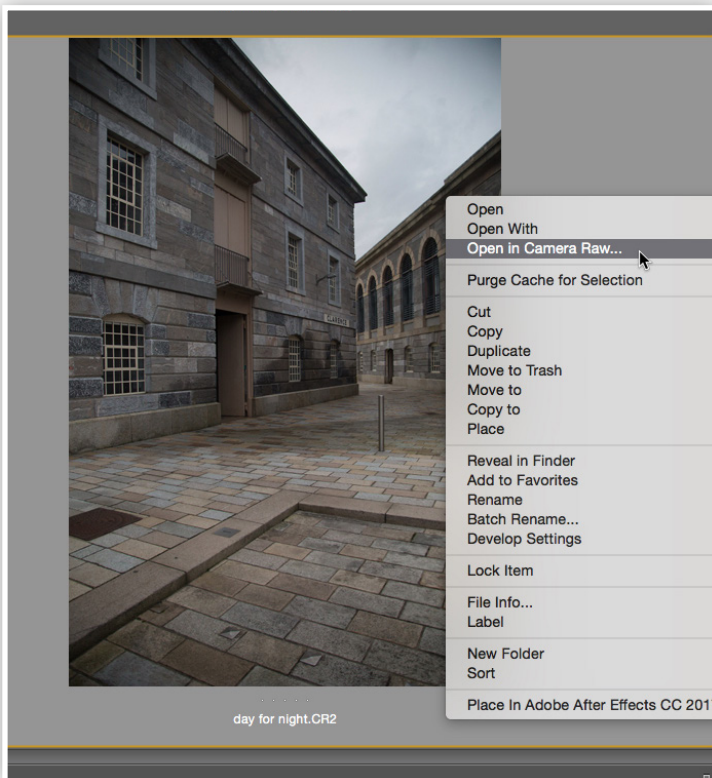
This is a great little technique for turning a daytime scene into a night time one, using a technique called 'day for night'. Day for night is actually a filmmaking process used when it is actually too difficult or expensive to shoot at night. Sequences are filmed outdoors during daylight hours with film stock, that is balanced for tungsten light, to give

the blue appearance. It is also underexposed in-camera or during post-production, with additional effects added to heighten the illusion. We have a shot of a stone walled street taken on an overcast day and it is not particularly appealing. With a little work though, you can turn it into a different image with a little digital help from Photoshop.

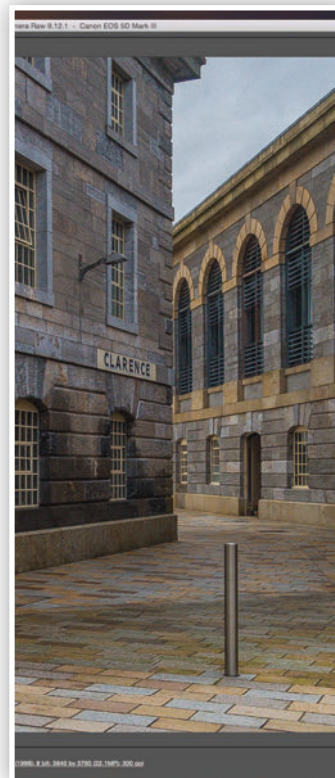
AFTER

BEFORE

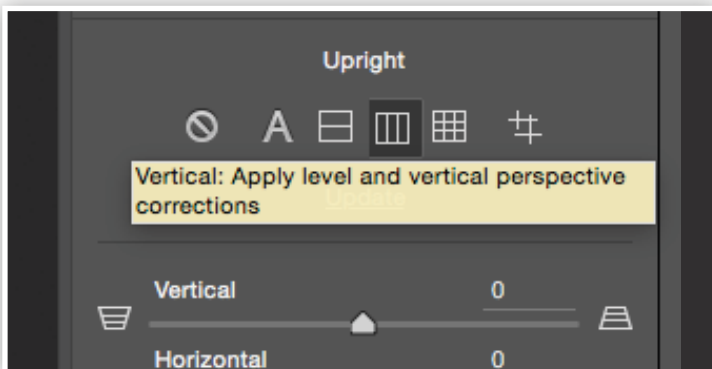
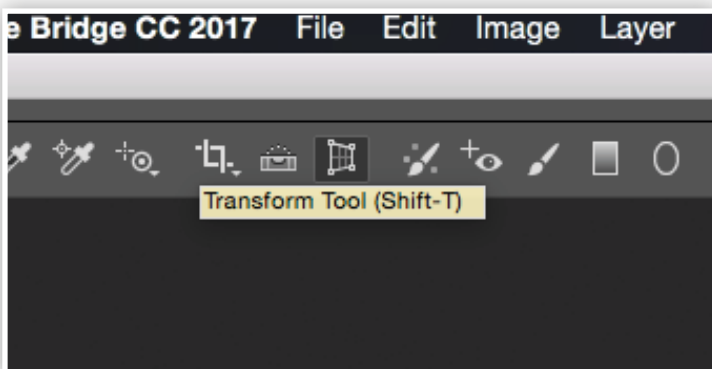
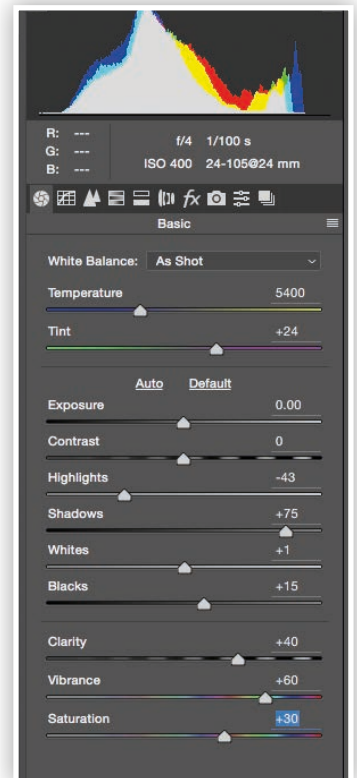




01 The process begins with the base image. It is a Raw file shot on a Canon 5DMK3 DSLR. You can do some simple processing of the file before turning it into a night scene. In Adobe Bridge, left-click on the file and choose Open In Camera Raw to begin.



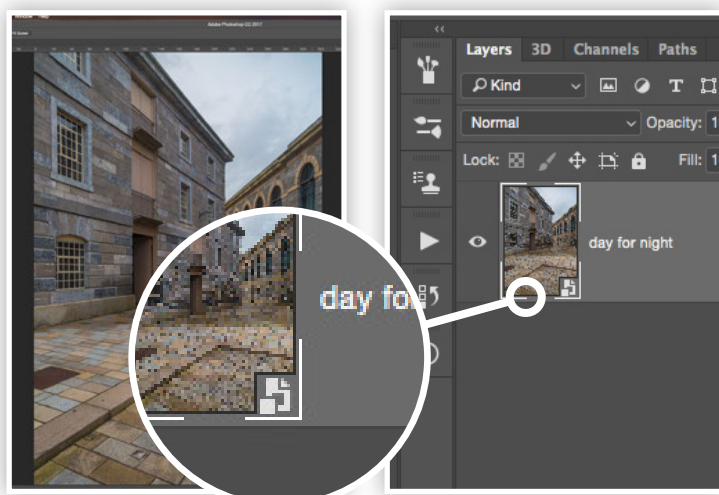
02 The file will open up in Adobe Camera Raw (ACR) and now you can make some basic adjustments to bring out the detail. We boosted saturation and midtone contrast as well as reducing highlight strength.



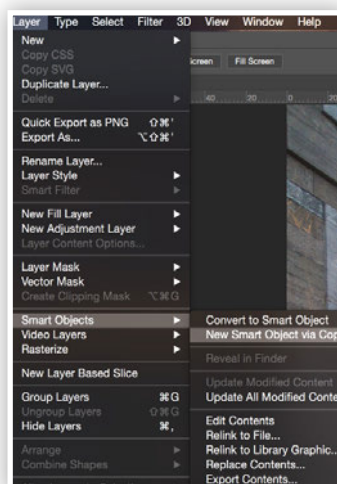
03 From the top menu bar, select the Transform Tool (Shift + T) and choose the Vertical perspective correction option to automatically analyse the image and shift the converging vertical elements to make it look like it is leaning backwards.



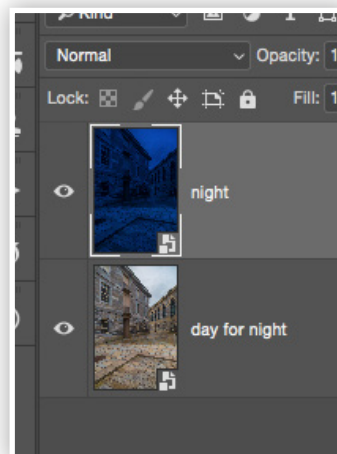
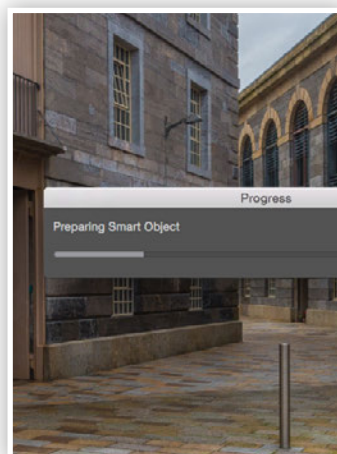
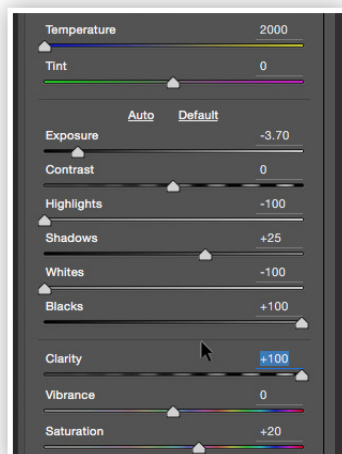
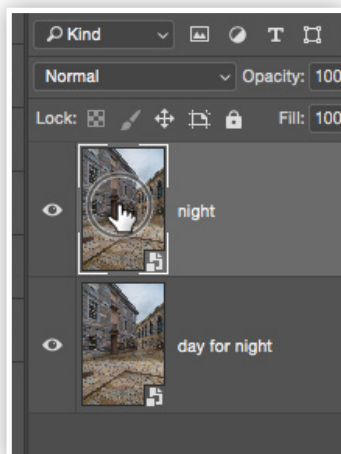
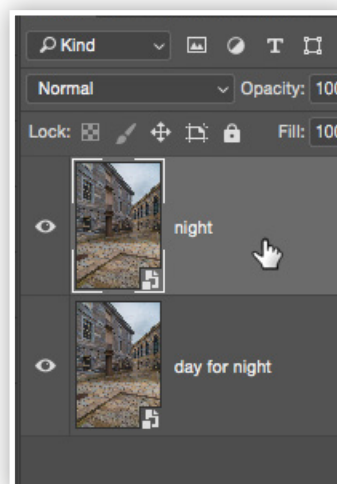
04 Rather than just opening the image, if you press the Shift key and click on Open, you can open the scene in Photoshop as a Smart Object. This means you can reopen the image in ACR at any time, to alter the adjustments you've made.



05 When the file is opened in Photoshop, you will see that the layer thumbnail has a small icon in its lower right corner. This is just to indicate that it is indeed a Smart Object and that any edits you make to it will be non-destructive.

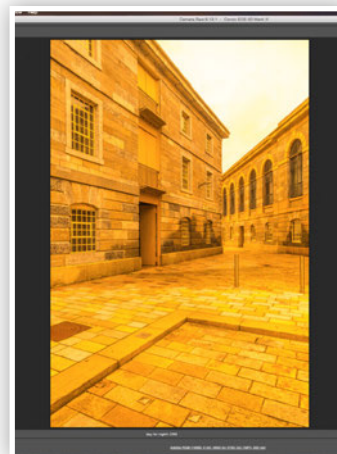
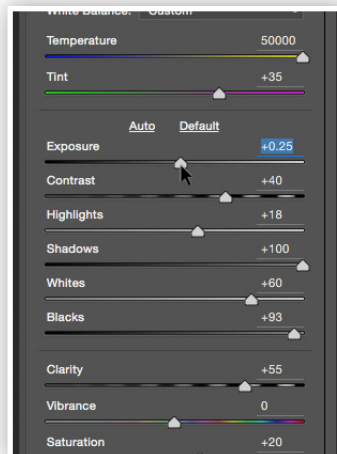
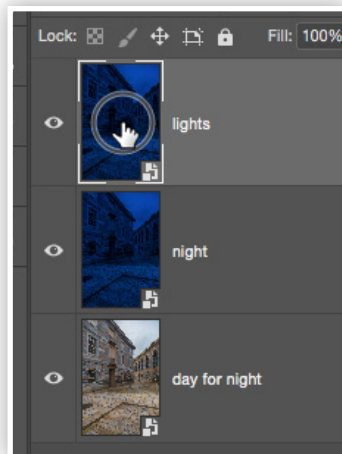
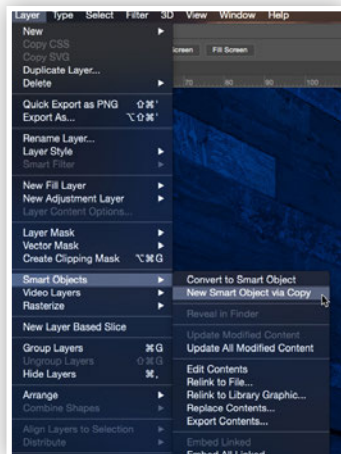


06 Keep this as a base reference and work on a copy instead. With the layer active, go to Layer > Smart Objects > New Smart Object Via Copy. Name this copy 'night'. This layer will be the basis of the night scene.



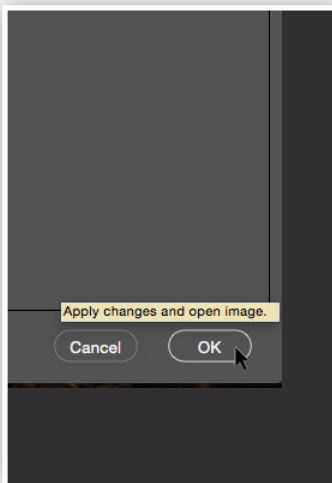
07 If you double-click on the 'night' layer thumbnail, it will automatically open in ACR. Go to the Basic tab and make the Temperature value 2000 and Tint 0. You can also make adjustments to suit your taste. We Pushed Exposure to -3.70, Clarity to 100 and Highlights and Whites to -100.

08 Click OK and the 'night' Smart Object file will be handed back to Photoshop, which will update and display the newly adjusted dark blue version of the image. Because this is a separate copy the original file on the layer below is unaffected by those adjustments.

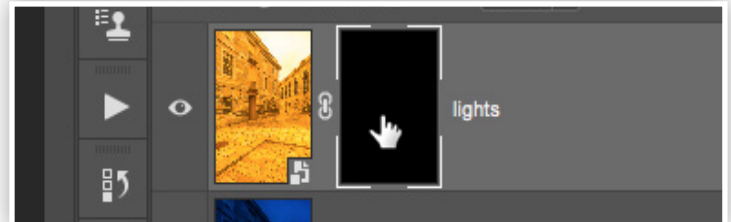
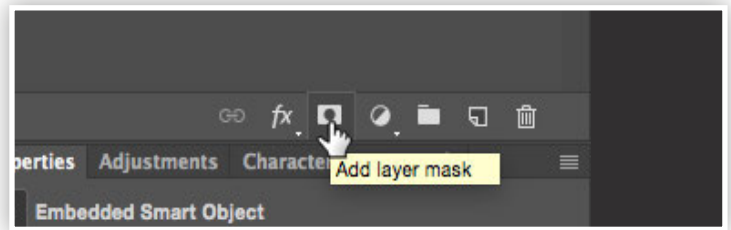
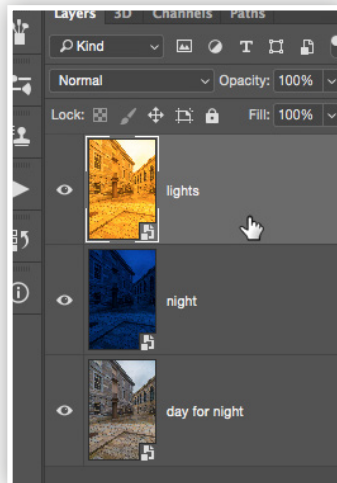


09 With the 'night' layer active, go to Layer > Smart Objects > New Smart Object Via Copy once again. Name this new copy 'lights'. We will now adjust this version of the Smart Object to give us some light sources to play with.

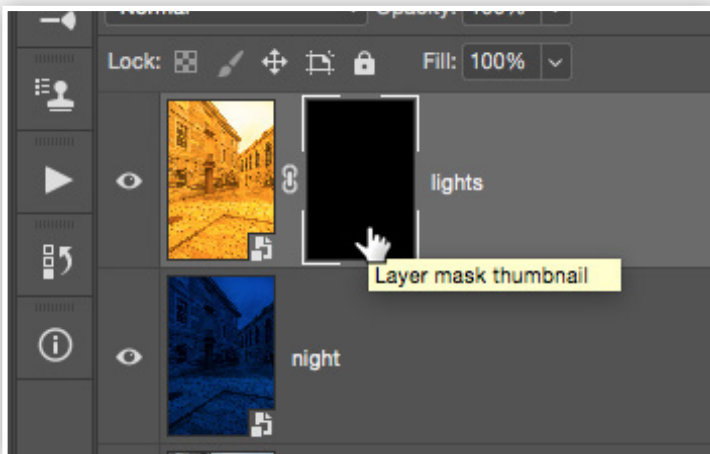
10 Double-click the 'lights' layer thumbnail to open this version in ACR. This time the Temperature has been pushed to 50000 and Tint to +35. We also increased Exposure, Contrast, Highlights and Whites to create a bright yellow/orange version of the scene.



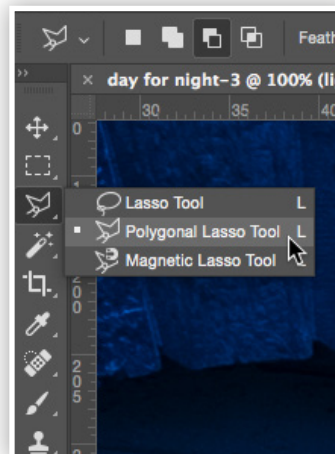
11 Click OK to go back to Photoshop and update the 'lights' Smart Object. You now have your dark blue night scene and the bright orange scene that can be combined to create our night time illusion.



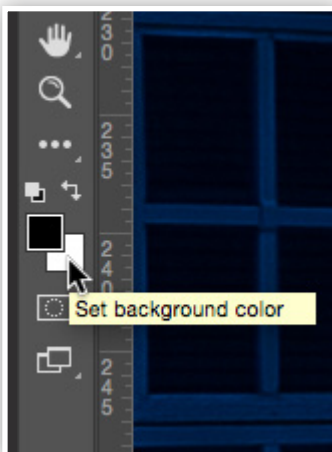
12 Keep the 'lights' layer active and go to the bottom of the layers palette and click on the Add Layer Mask button. If you hold the Alt key as you do so, the mask that is added to the 'lights' layer will be switched to black, hiding it for the moment.



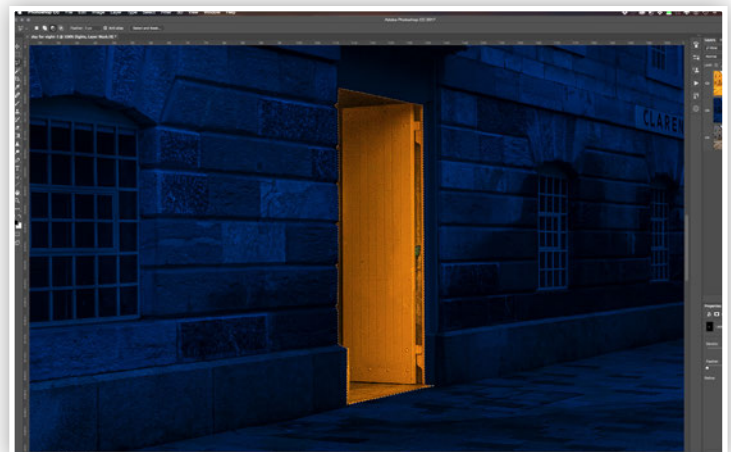
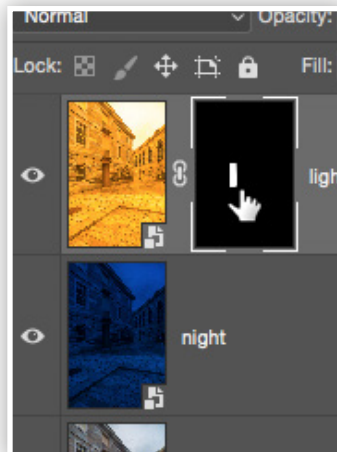
13 Make sure the layer mask thumbnail is active (not the image itself). You will see it is highlighted to remind you. All the work is being applied to the mask, not the image, so it's important to double-check.



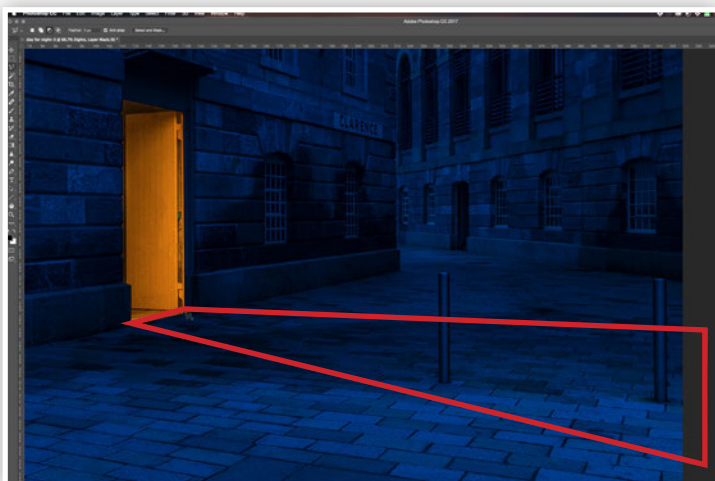
14 You're going to start by lighting up the doorway in the lower left of the scene. Go to the toolbar and choose the Polygonal Lasso Tool (L) since the selections you'll be making are mostly straight edged. Create a selection that runs around the doorway opening.



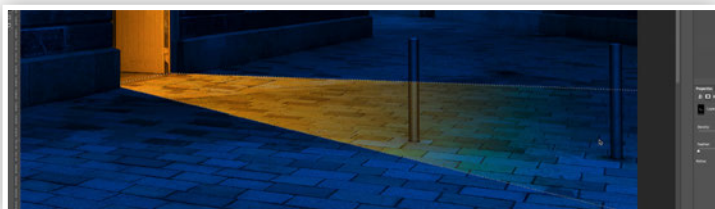
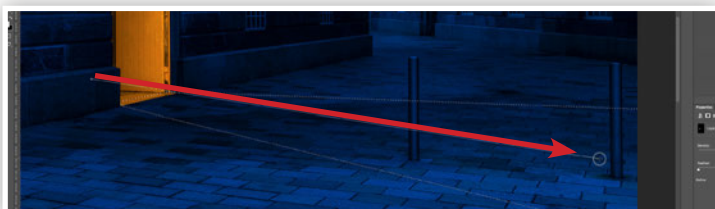
15 Set your background colour to white. With the 'lights' layer mask still active, hit your Delete key and the selection you just made will be deleted and filled white. Since white areas of a mask reveal, that part of the yellow image will be visible through the mask.



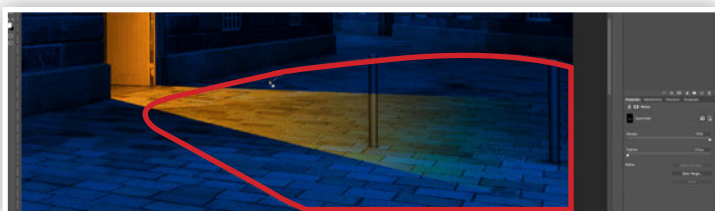
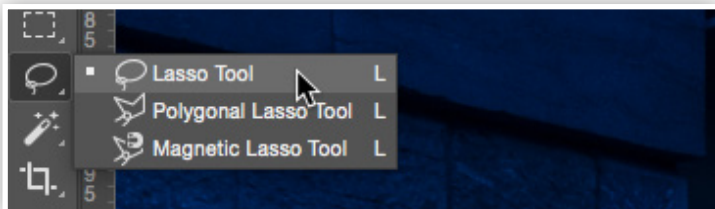
16 The doorway is now lit up bright yellow and the process of lighting up the night has begun. Since the doorway selection is still active, press Cmd + D to cancel it. You can now move on to the next part, adding more to the mask.



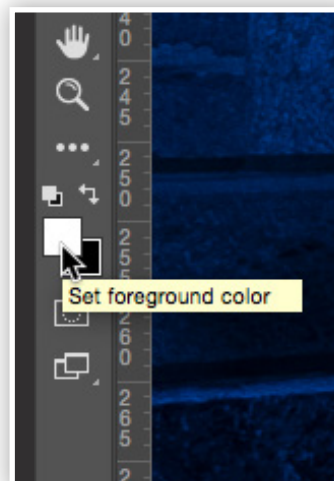
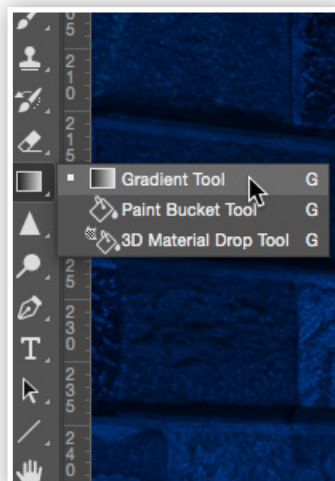
17 Use your Polygonal Lasso Tool to create a selection that extends out from the doorway threshold into the street to create a pool of light. You need to judge how the light spills out. You can always use Alt + Cmd + Z to undo in steps if you want to try again.



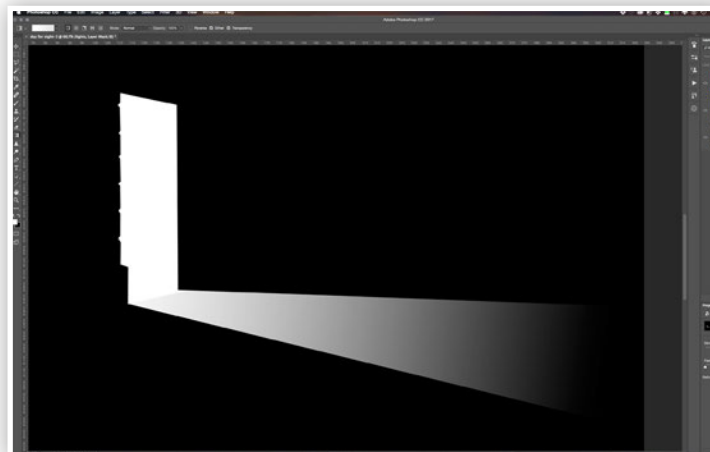
19 Make sure your Gradient is Foreground to Transparent in the Gradient editor and then click and hold to the left of the doorway and drag your cursor to the right by the post. When you let go, a white grad will be added within the shape of the selection you made.



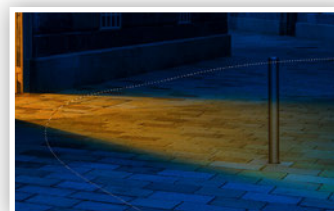
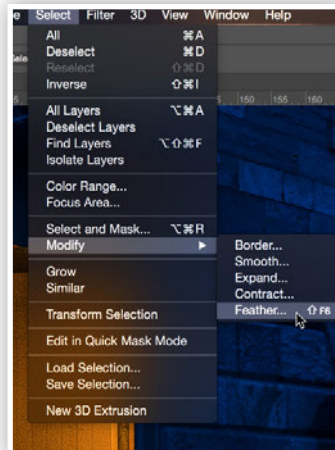
21 The light spill looks a little too hard edged for our taste. Go to the toolbar and choose the Lasso Tool (L) and draw a rough selection around it but keep a distance from the doorway. Keep the selection active.



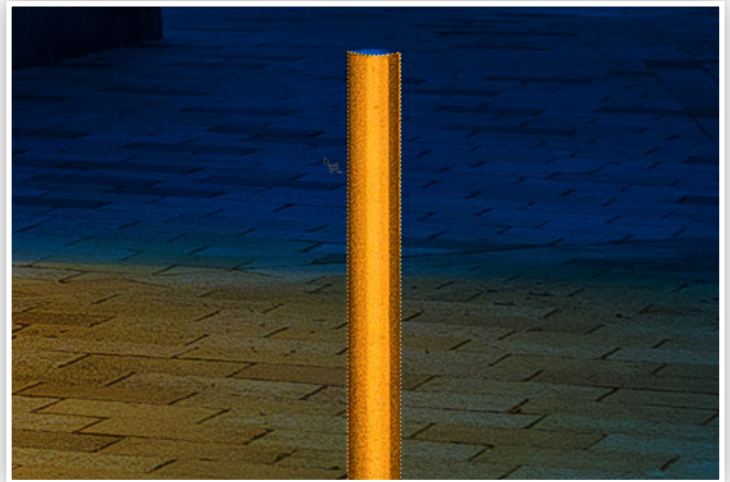
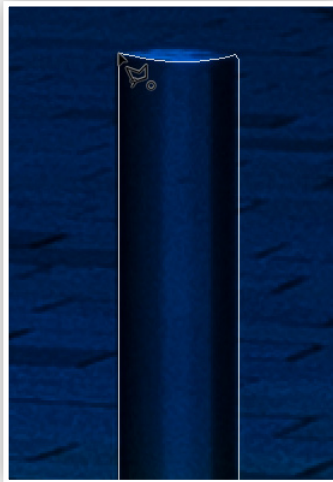
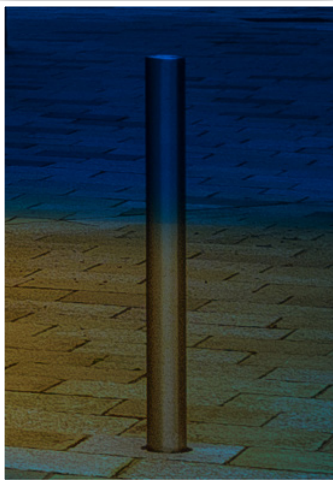
18 Rather than a just a solid block of light like the doorway, you want this area to fade in brightness. Go to the toolbar and choose the Gradient Tool (G) and make sure your foreground colour is set to white.



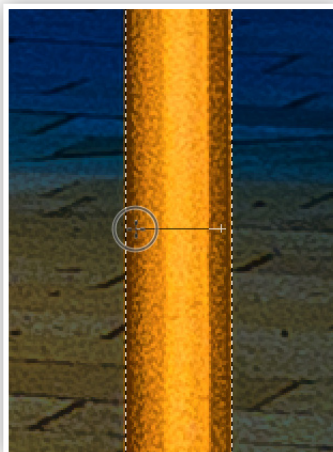
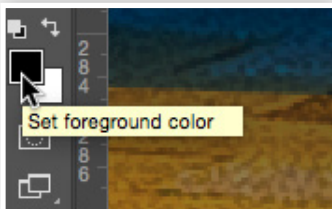
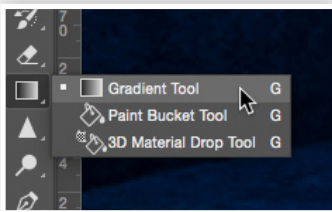
20 If you Alt + left-click the 'lights' layer mask thumbnail, you will see what you've done so far. The doorway is solid white and the light spill fades to nothing as it gets further from the door. Alt + left-click again to return the standard view.



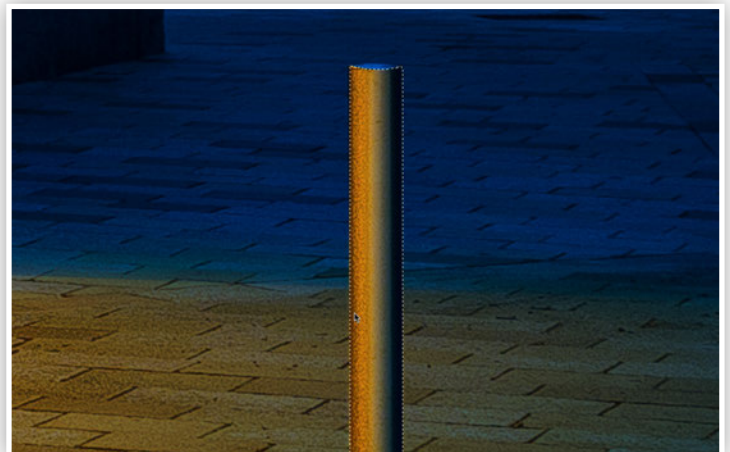
22 Go to Select > Modify > Feather (Shift + F6) and choose a Feather Radius of about 150 pixels and click OK. Then go to Filter > Blur > Gaussian Blur and choose a blur Radius of about 30 pixels to soften that part of the mask. Press Cmd + D to clear the selection.



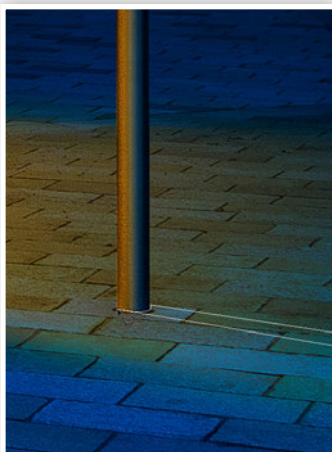
23 You can now address the issue of how the light falls across the post in the middle of shot. Zoom in to the post and use the Polygonal Lasso Tool to select the outline of the post. Now make sure the background colour is set to white.



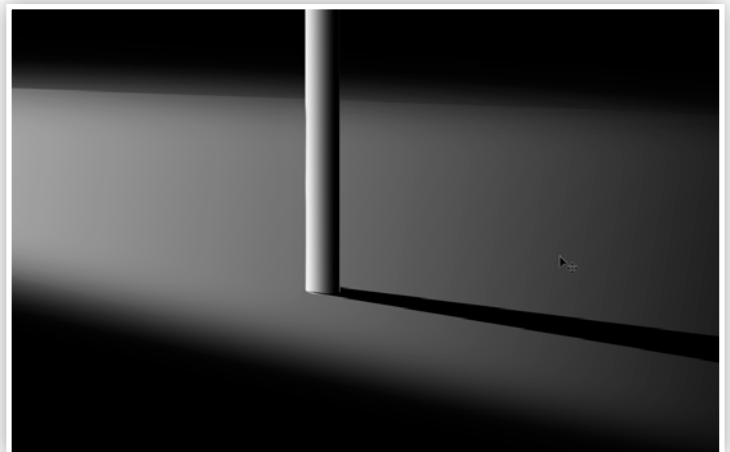
24 Hit Delete on your keyboard and the selection is deleted with white revealing the bright yellow post on the 'lights' layer. This is obviously way too bright but you can use the same technique that created the light spill from the doorway.



25 Go to the toolbar and choose Gradient Tool again. Make sure the foreground colour is black and Gradient is Foreground To Transparent. Now you can drag a small black grad that starts on the right of the post and ends on the left side of the post.

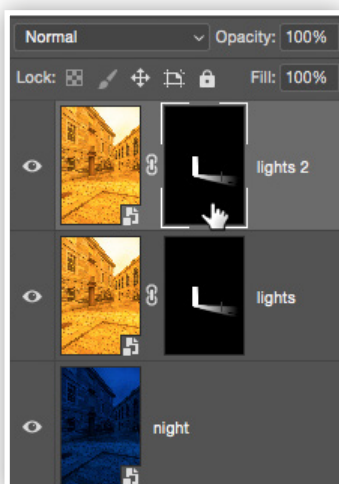


26 When you let go, the selection will be filled from right to left with a black grad that fades to zero, leaving a small amount of the bright yellow post visible through the mask. This gives the illusion of the post being lit on the left side.

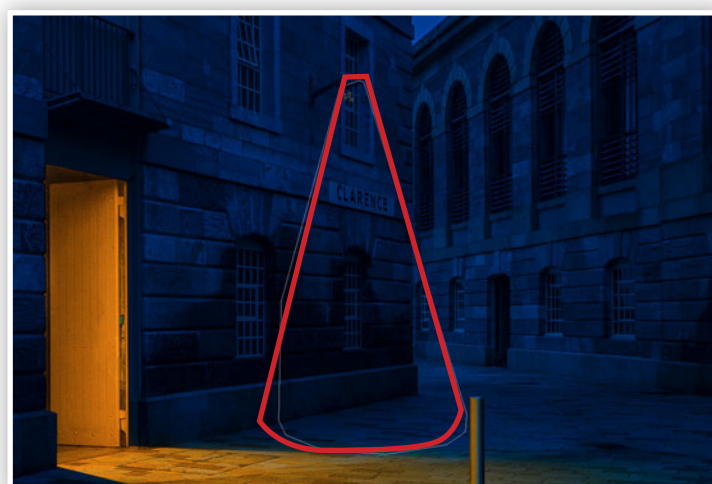
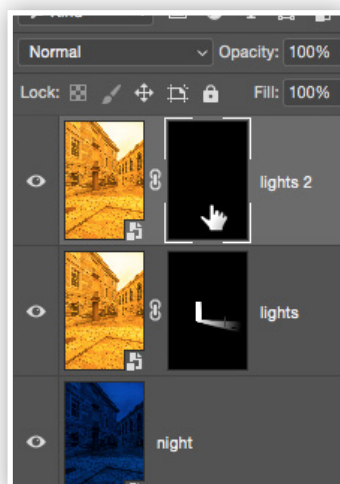


27 Now take the Polygonal Lasso Tool and select an area on the ground that extends out from the post to the right. Imagine that the post is casting a shadow. This time, set the background colour to black and hit Delete to hide any yellow to make a shadow.

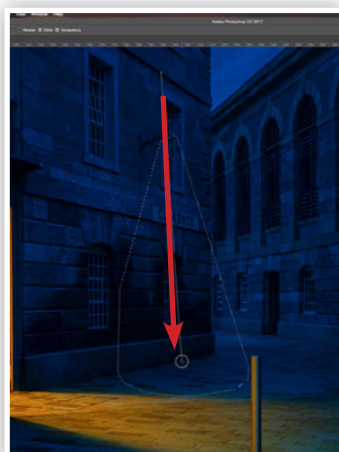
28 If you Alt + left-click the layer mask thumbnail again, you can see how you've created gradients to either reveal or conceal parts of the yellow 'lights' layer to add to the illusion we are creating here. Alt + left-click again to return to standard view.



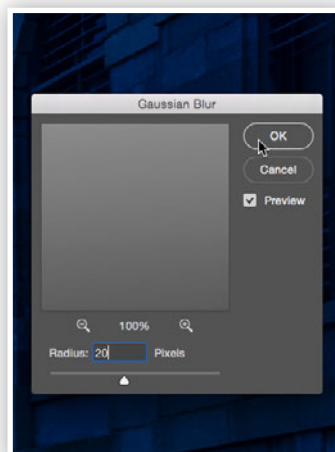
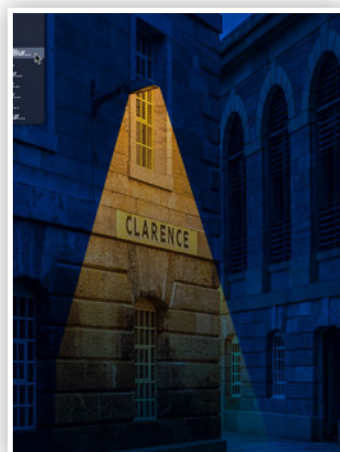
29 You don't necessarily have to try and make all the mask edits to one layer. If you press **Cmd + J** to duplicate the 'lights' layer and name it 'lights 2' and clear the mask, you can work on this layer without affecting the 'lights' layer below.



30 The next area to work on is the street lamp. Make sure you now have the 'lights 2' layer mask selected and active, and use the Polygonal Lasso Tool to create a selection that gives you a cone extending downwards from the lamp to the ground.



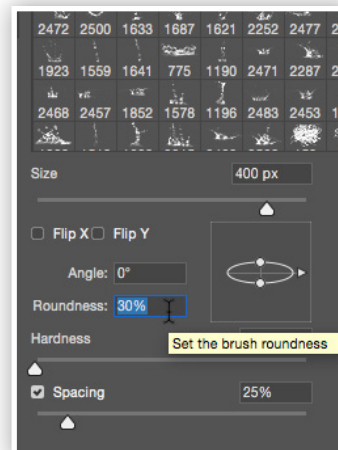
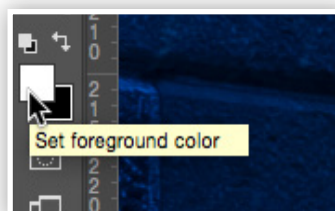
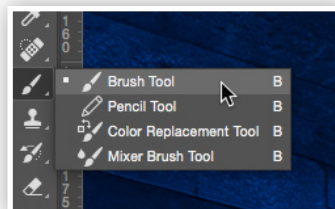
31 Just as you did with the doorway light spill, use a white to zero gradient that starts above the lamp and finishes just above the ground to create some lamplight. Clear the selection (**Cmd + D**) and then go to **Filter > Blur > Gaussian Blur**.



32 Choose a Blur Radius of about 20 pixels and you will soften the cone of light coming from the lamp. Since this is on its own layer, it won't affect the work already done to the doorway and post.



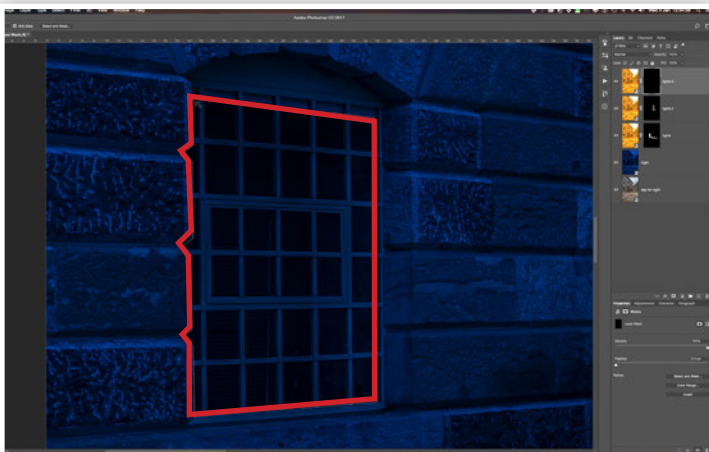
33 You can use the Polygonal Lasso Tool to select the lamp glass itself and set background colour to white; press delete to reveal the solid yellow area of the lamp. Now we need to create a small pool of light on the ground beneath the lamp.



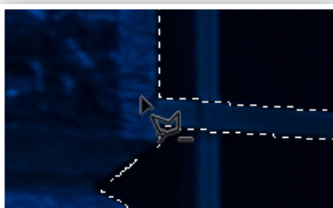
34 Choose the Brush Tool (B), set the foreground colour to white and make the brush Opacity about 35%. In the Brush properties panel, set the Roundness to around 30%. This flattens the brush to an ellipse that matches the perspective in the scene better.



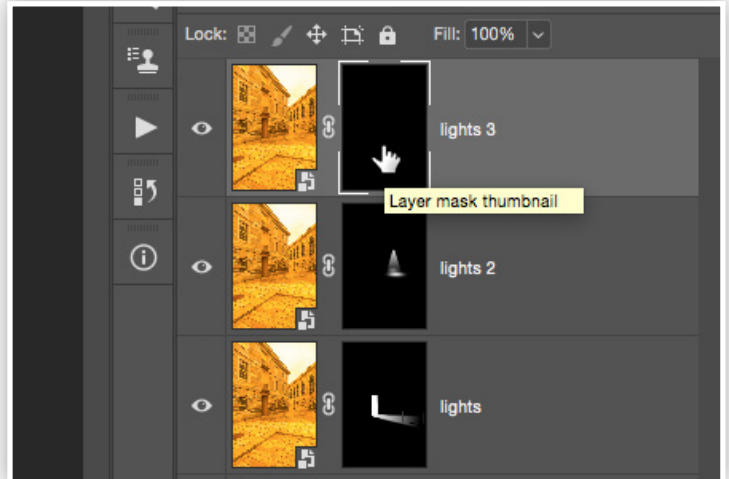
35 With the brush at about 700 pixels in size and Hardness at 0, begin to paint on the ground beneath the lamp. Since the Opacity is 35%, you can gradually build it up once you have a pool of light that you like. Things are looking good. Now for some windows.



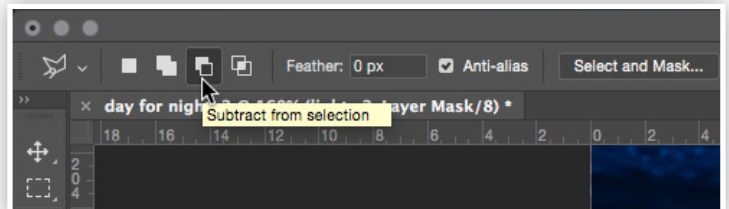
37 You could painstakingly try to select each pane of glass in the window but since it is all straight edged, there is a slightly quicker way of doing it. Use the Polygonal Lasso Tool and start by making a selection of the outer edge of the window frame.



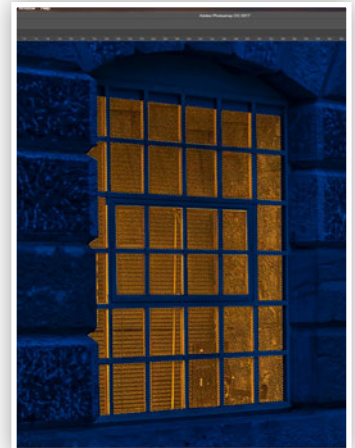
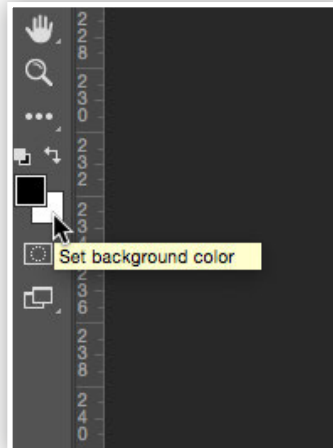
39 When you join back up to your start point, the area you've just drawn will be subtracted from the selection of the window frame. You can do all the horizontal window grids and the vertical ones in this manner until just the panes of glass remain selected.



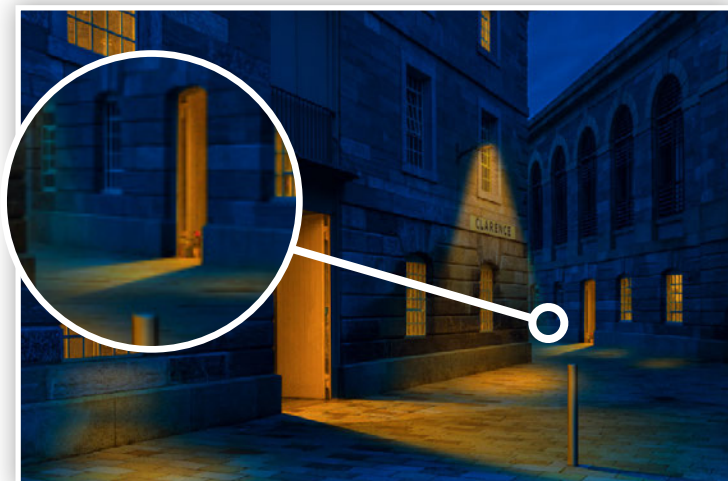
36 If you want, you can duplicate the 'lights 2' layer, name it 'lights 3' and clear the mask to black, ready for more edits. This time, you're going to light up the window to the left of the doorway.



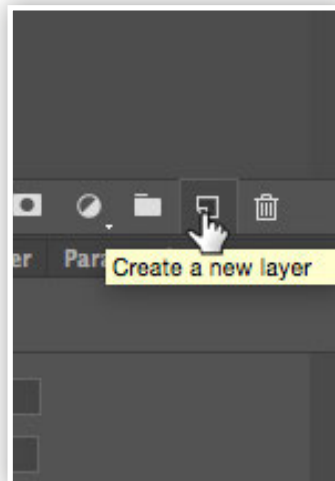
38 Make sure that the selection type for the tool is Subtract From Selection. Now you can use the Polygonal Lasso Tool to click and drag around the top horizontal grid. Make sure you start and finish outside the perimeter of the selection you've already drawn.



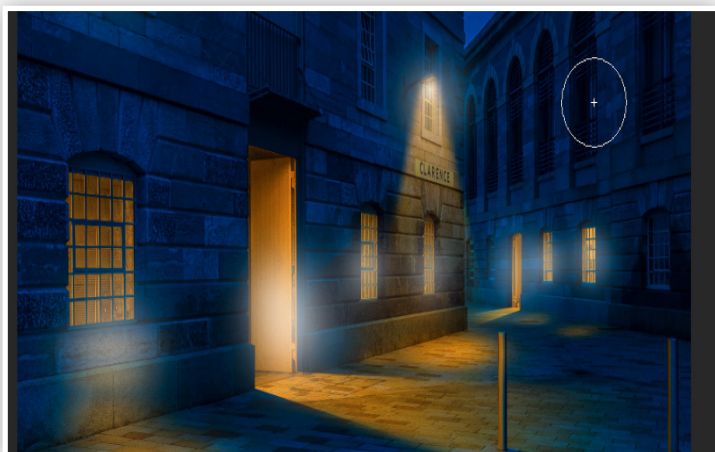
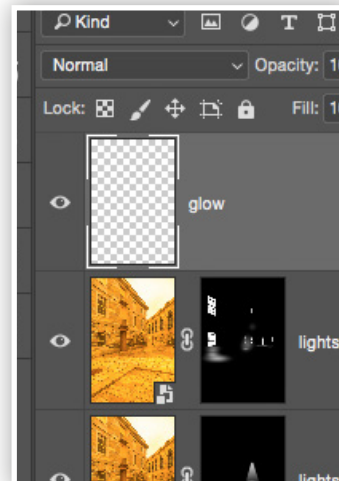
40 Once again, make sure the background colour is set to white and press Delete to clear that area of the mask and reveal the bright yellow portion of the 'lights 3' layer that you're working on. Press Cmd + D to clear each selection as you go.



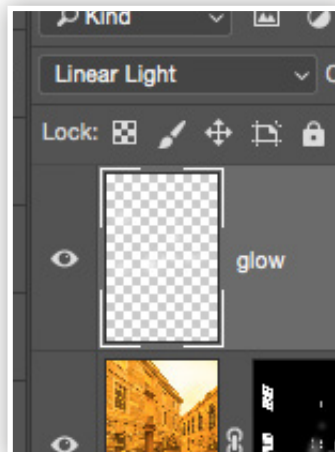
- 41 You can now reveal as many windows as you want in order to enhance this night scene. We even added another light spill gradient to the small doorway on the right of the scene and small pools of light beneath the windows at ground level.



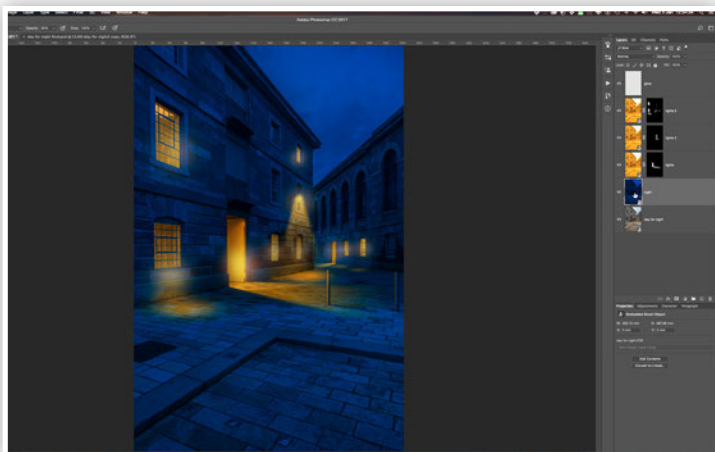
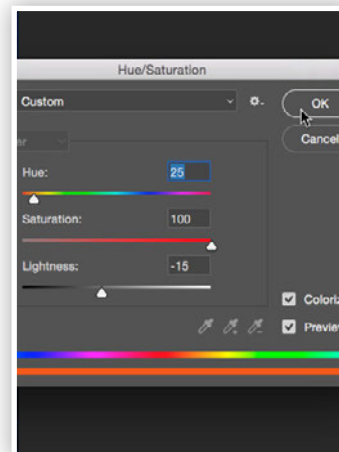
- 42 Go to the bottom of the layer palette and click on the Create A New Layer button. Make sure it is at the top of the layer stack and name it 'glow'. You're going to add some additional glow to the lighting already in place. Keep the 'glow' layer active.



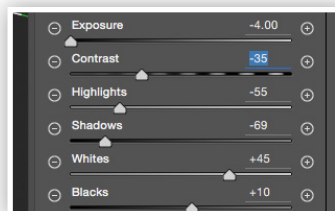
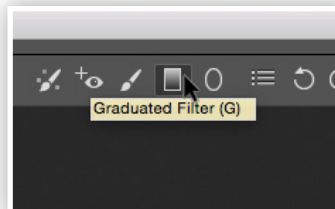
- 43 Go to the toolbar and choose a soft white brush and set Opacity to about 35%. Begin to brush over each area where light is seen from lamps or windows. If you need to decrease or increase the size of the brush, use the [and] keys to do so. Keep it subtle.



- 44 Now set the 'glow' layer Blend Mode to Linear Light and then go to Image > Adjustments > Hue/Saturation (Cmd + U). In the Hue/Saturation panel, check the Colorize button and make Hue 25, Saturation 100 and Lightness -15 to add an orange glow to your lights.

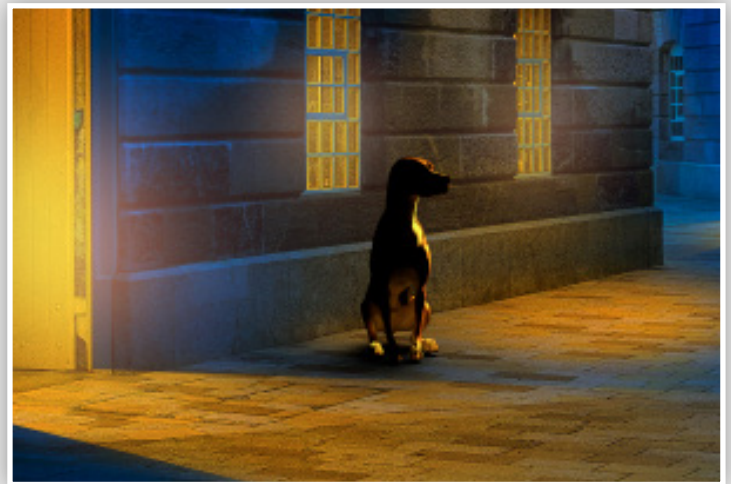
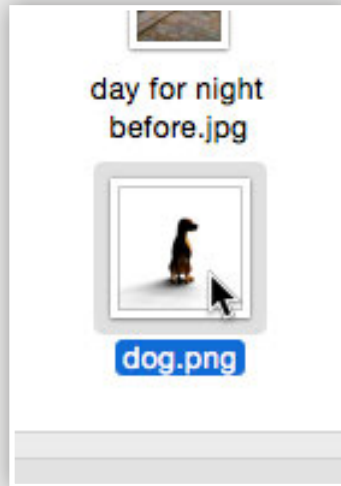


- 45 At the moment, you may think that the blue night portions of the image could be a little darker. That's not a problem since you can simply double-click on the 'night' layer thumbnail and reopen it in ACR.



- 46 In ACR, we used a Graduated Filter (G) and set its Temperature to -100 and Exposure to -4.00. Shadows were also set to -69. the grad was dragged down from the top of the image over the sky to darken it. The foreground was also darkened in the same way.





47 Click OK to return to Photoshop where the 'night' layer will be updated. To enhance the image further, and give it a point of interest, we have a small character you can add to the scene. Go to File > Open and navigate to the 'dog.png' we created for the scene.

48 We opened the dog image and used Cmd + C to copy it and pasted it into our main document. Then, using Cmd + T to activate the Transform Tool, the dog was scaled and positioned just by the doorway. With this, the day to night transformation is complete.



Create night from daytime

A classic Hollywood film technique on your desktop.



Luminosity Masks

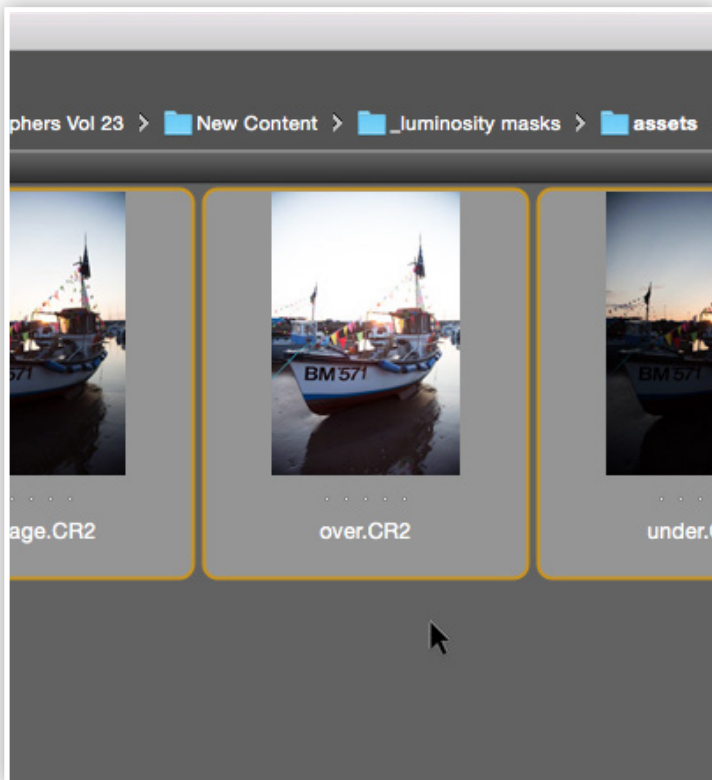


Unlock the power of advanced masking techniques

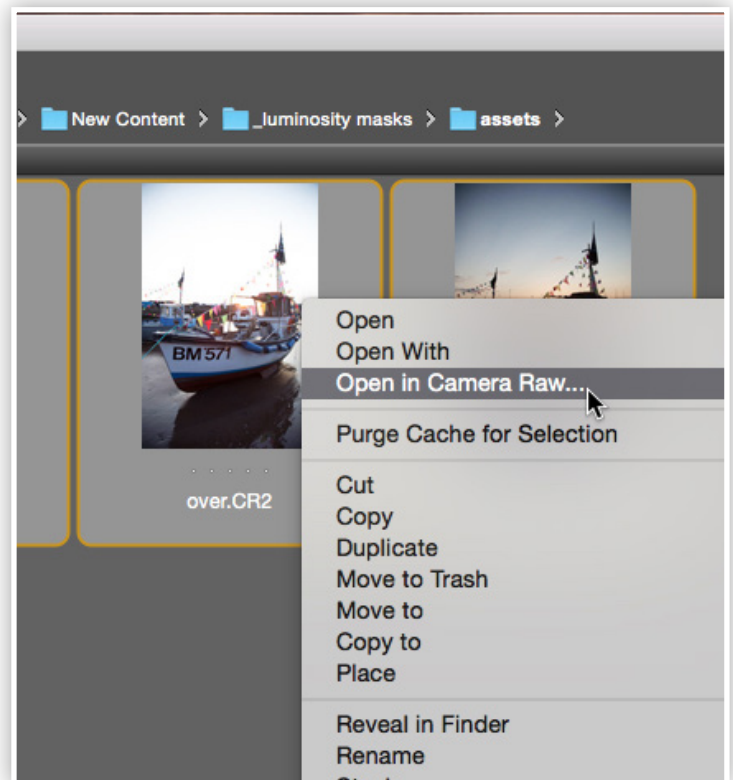
In this world of HDR photography, creating images of higher dynamic range can become a rather automated pushbutton affair. When HDR is done well the images can be fantastic but when you allow a program to make all the decisions for you, it's easy to lose touch with the simple technicalities of working on the photos yourself. This is where luminosity masks come in. Luminosity masks break an image down into selections, based on how dark or light

parts of an image are. In this tutorial we will show you how to get hands-on with the process of how to create and use luminosity masks. We'll combine parts of an image together, for a more pleasing and well-balanced image. We have a simple harbour shot with strong sunlight backlighting the scene. Three exposures have been taken, and you can combine and blend these together with the aid of luminosity masks.

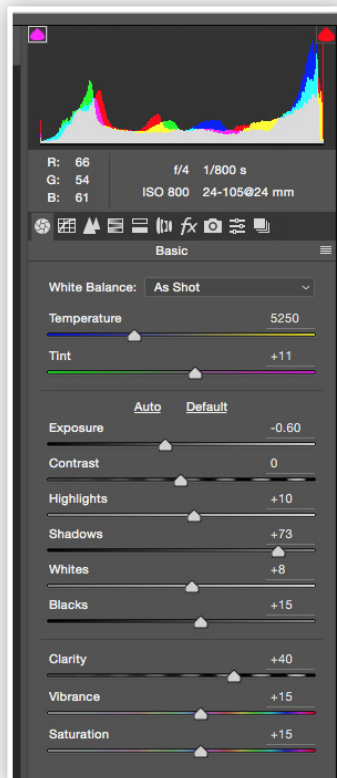




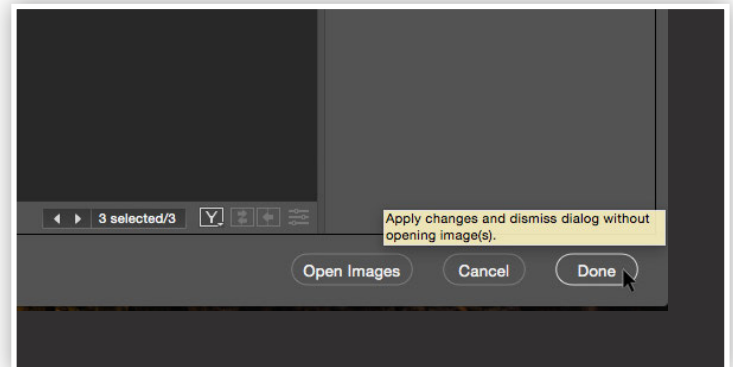
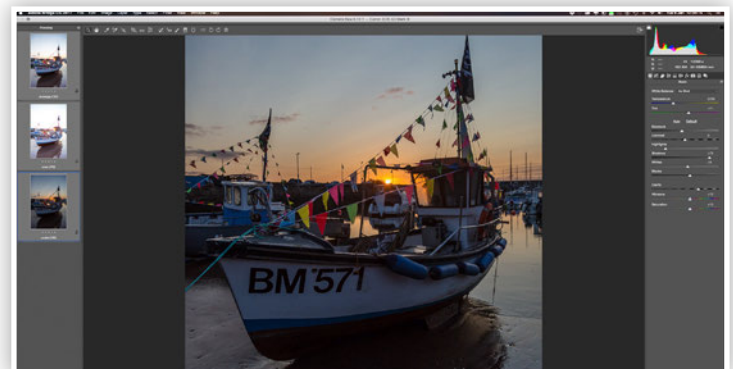
01 Let's begin in Adobe Bridge with the three Raw file exposures, taken on a bright morning down by the harbour. There is one average exposure, one is underexposed to retain highlights and the other is overexposed to reveal more shadow detail.



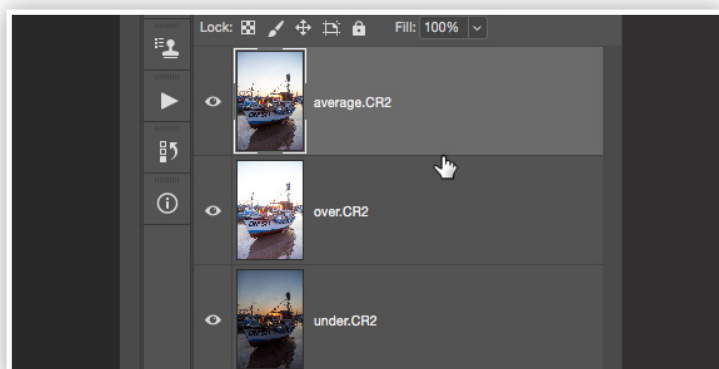
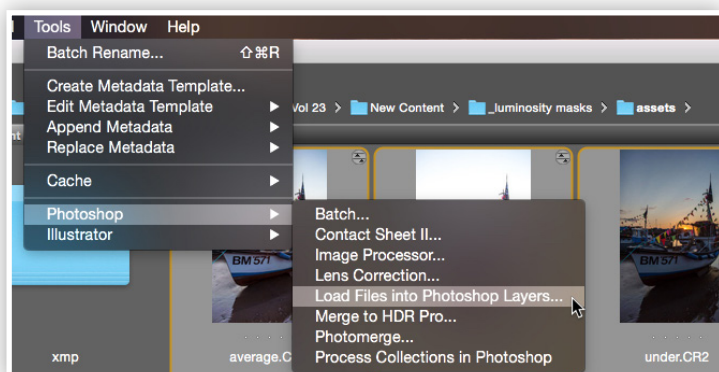
02 You can start with some basic processing of the Raw files. Highlight all three images and then right-click and choose Open In Camera Raw. This will fire up Adobe Camera Raw (ACR) where the Raw image files can be processed.



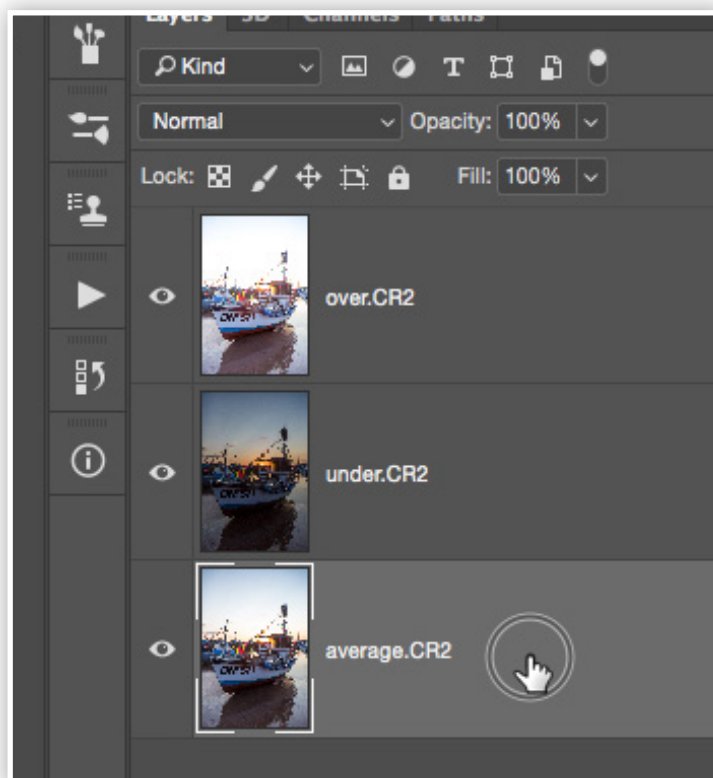
03 The average exposure was worked on first to get a reasonable spread of tones without pushing the image too far. The same was true of the overexposed version. The underexposed version was processed to make sure the sky was looking its best.



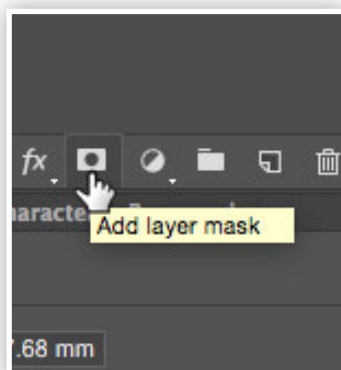
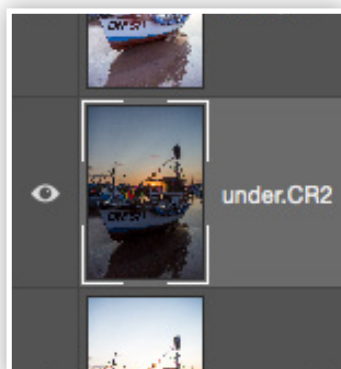
04 When you have the images ready and are happy with the processing done to them, you can go down to the bottom right of the screen and click on Done, to apply the adjustments you've made to the image files.



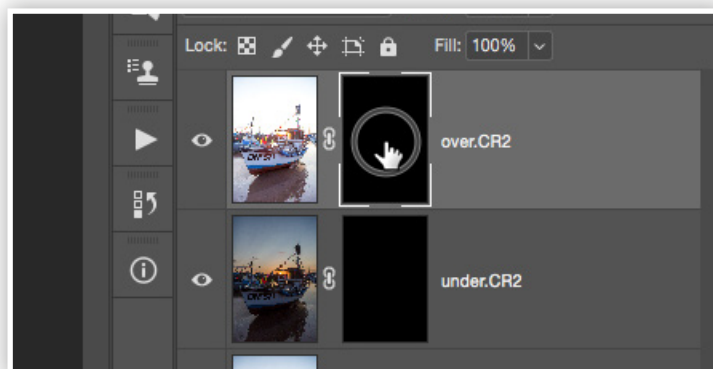
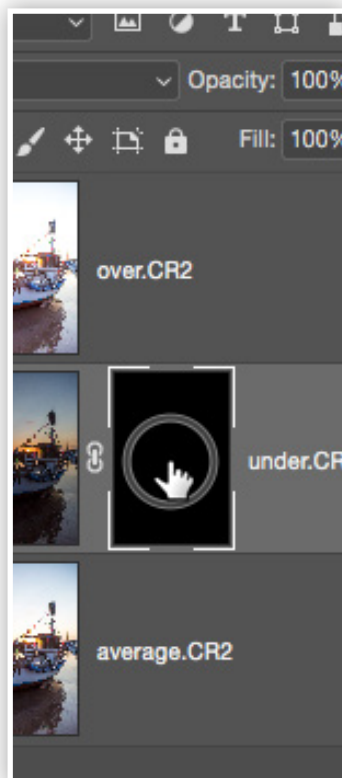
05 Back in Bridge you can keep the three files selected and then go to Tools > Photoshop > Load Files Into Photoshop Layers. This will open the images in Photoshop and stack the three of them in a new document.



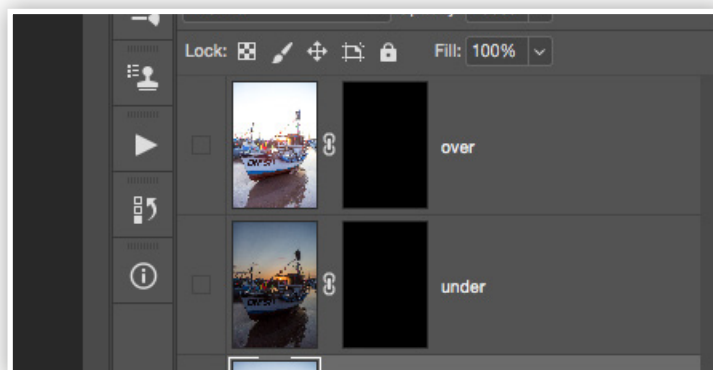
06 Arrange the layers so you have the 'over' image at the top, the 'under' image in the middle and the 'average' exposure at the bottom of the stack. Both the 'over' and 'under' layers will need masks for the next stages.

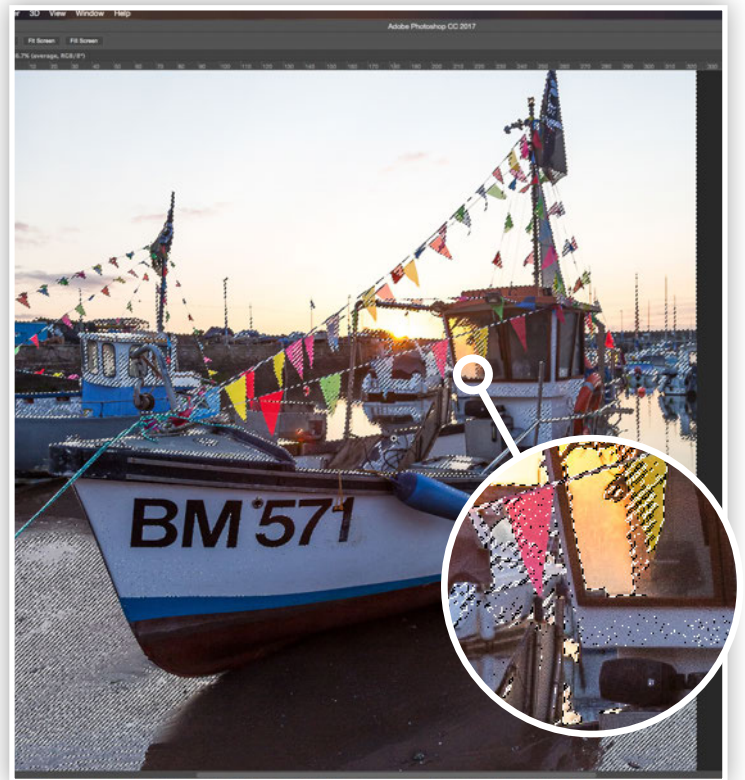
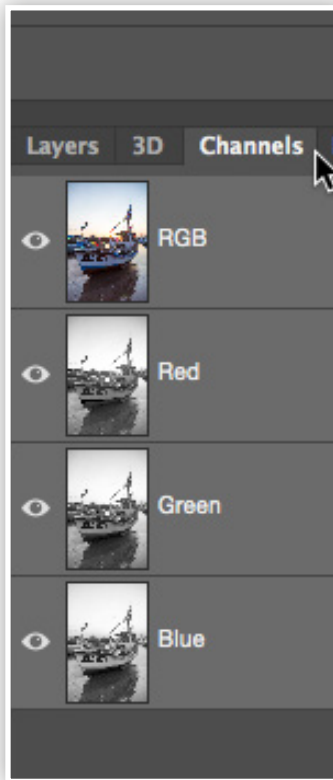
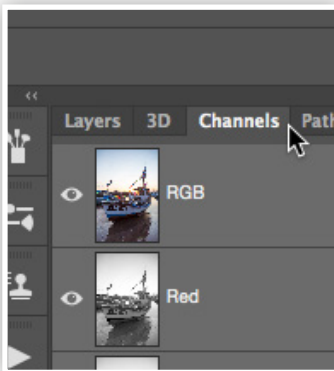
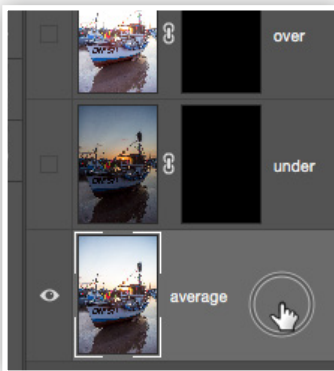


07 Click on the 'under' layer to make it active and then hold your Alt key and click on the Add Layer Mask button at the bottom of the layers Palette. A mask will be added that is black rather than the default white. This will hide the image for the moment.



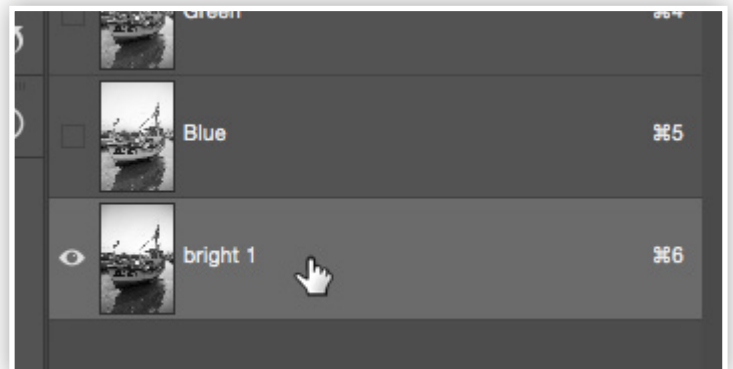
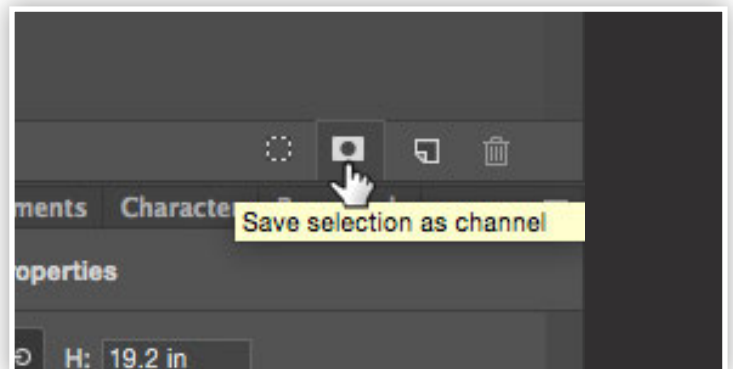
08 Do exactly the same for the 'over' image and add the black mask to its layer as well. For the moment, click on each of the 'over' and 'under' layer visibility icons to make them invisible until you need them in due course.





09 Click on the 'average' layer to make it active and then click on the Channels tab at the top of the layers palette to view the colour channels that make up the final image. You can see there's a composite RGB as well as each of the three colour channels.

10 To begin making your first luminosity mask you will need to press Alt + Cmd + 2. There is no other method available in Photoshop to do this. When you do, you will see the marching ants appear across your image.



11 What has just happened? The keyboard shortcut you just used selects all the mid to bright highlight areas of the image and turns them into an active selection. You won't be able to see it yet, but the selection is quite detailed and is comprised of subtle tones.

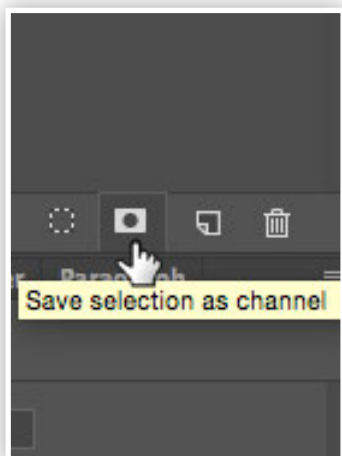
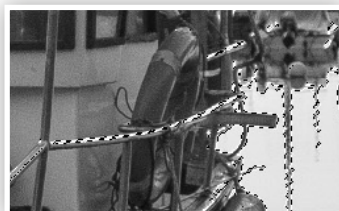
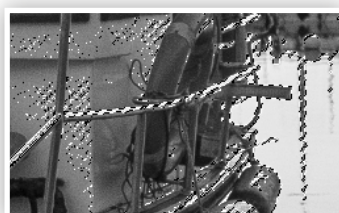
12 At the bottom of your Channels palette, you will see some icons. Click on the Save Selection As Channel icon. When you do, a new channel is created which you can name 'bright 1'. It is important to keep the selection active for the next part.



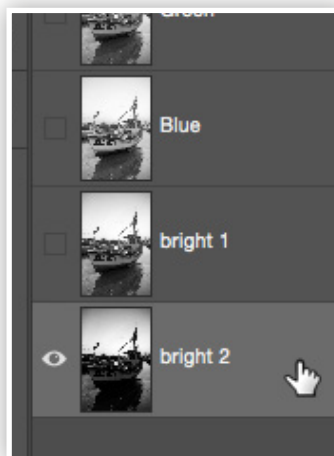
13 You are now going to create a series of luminosity masks that reduces the darker tones in each one, allowing just the brightest tones to show through until only the very brightest highlights remain.



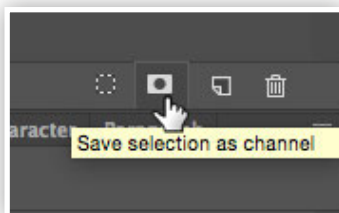
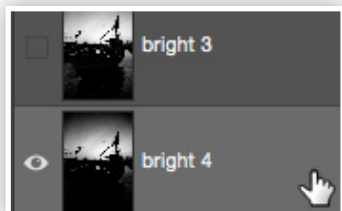
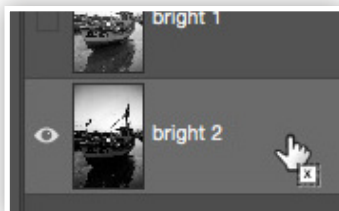
14 On the 'bright 1' layer, with the selection still active, hold Shift + Alt + Cmd. The cursor should change to a hand symbol with a small dotted box beneath it. The small box should contain an 'x' to indicate you have the correct keys pressed.



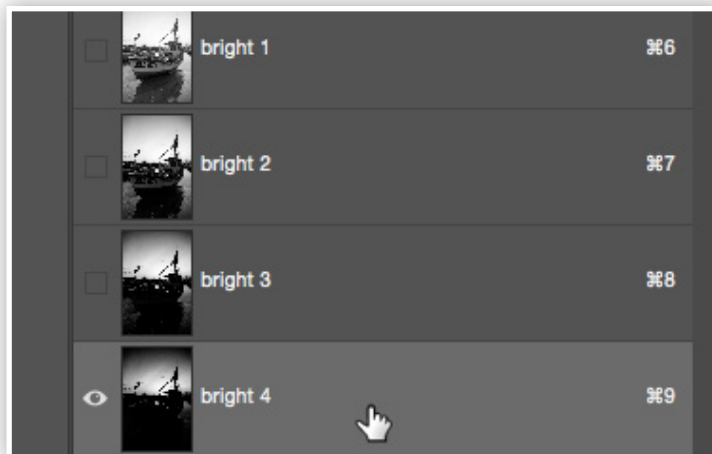
15 Left-click on the 'bright 1' layer and you should notice the marching ants change position as they have just selected a new area that contains less of the darker tones. Now go to the Save Selection As Channel button and click it.



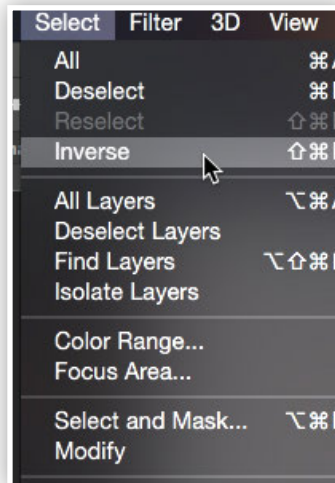
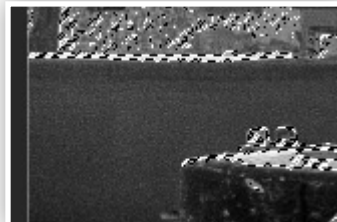
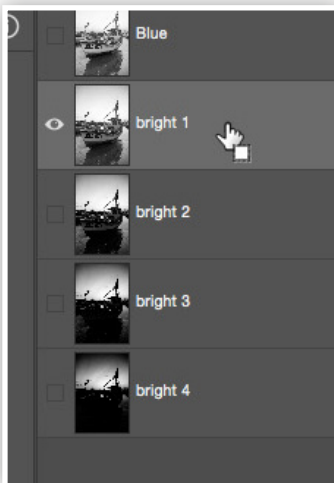
16 A new channel is created. Keep this new selection active and click on the new channel and name it 'bright 2'. You will see the image is darker since more middle tones have been removed and replaced with black.



17 Hold Shift + Alt + Cmd and click on the 'bright 2' layer, go to the Save Selection As Channel button again and click it to create yet another, even darker channel with even fewer middle tones. Name it 'bright 3'. You can even create another one called 'bright 4'.

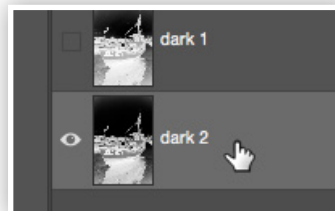
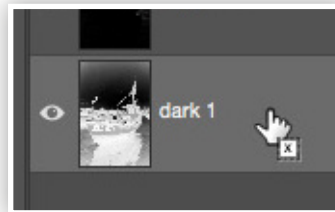
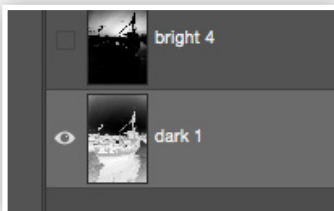
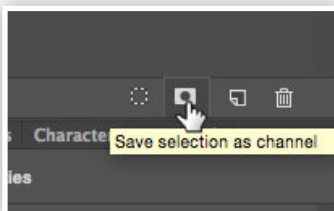


18 You now have four masks that get progressively darker, with only brighter parts of the image still visible. Next, you need to create some masks for the darkest areas of the image. At this point make sure you press Cmd + D to clear any active selections.



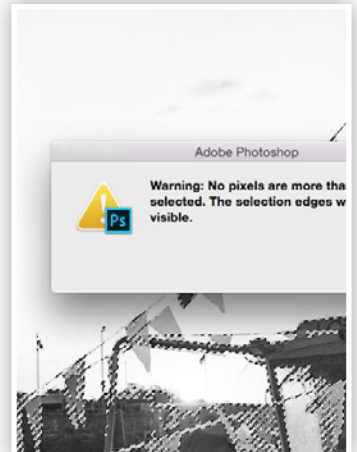
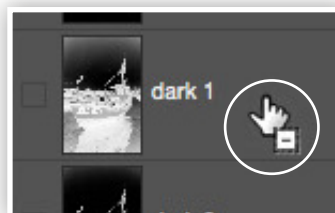
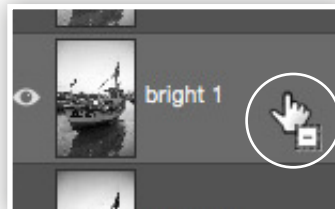
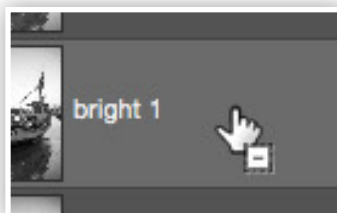
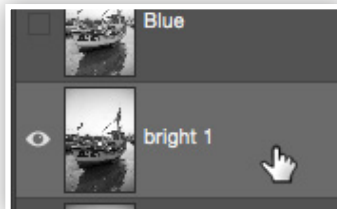
19 Click on 'bright 1' so it is active. Hold the Cmd key and you should see your cursor change, like it did before, only this time there should be no symbol inside the small dotted box. Click the 'bright 1' layer to make a new active selection.

20 Since you want all the opposite darker tones, go to Select > Inverse (Shift + Cmd + I) to invert the selection. Now, instead of the mid to light tones being selected, the mid to dark tones are now chosen. Keep this new inverted selection active.



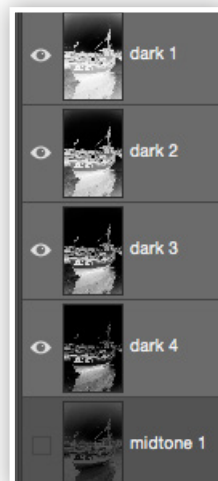
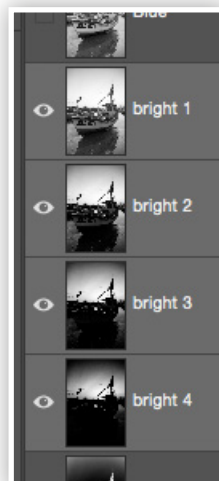
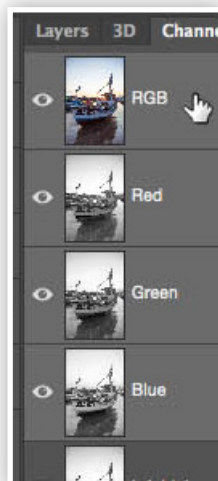
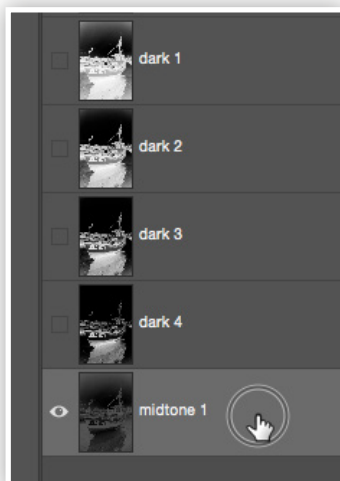
21 Click on the Save Selection As Channel button again and a new channel will be added, that looks the negative version of 'bright 1'. Name this new channel 'dark 1'. In this case, the brighter areas of the mask represent the darker areas of the photo.

22 With the 'dark 1' selection still active, hold Shift + Alt + Cmd and click on the 'dark 1' layer. A new selection is made and when you add this as a new channel, you will see that it is darker still. Use this method to create 'dark 2', 'dark 3' and 'dark 4'.



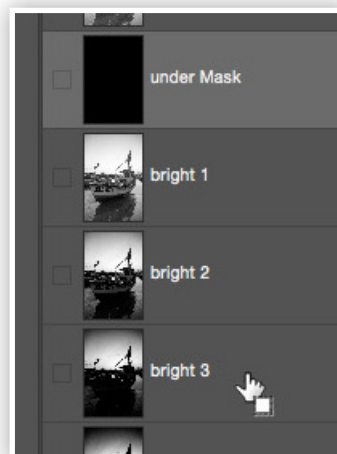
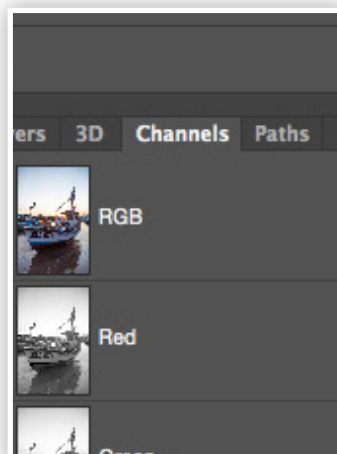
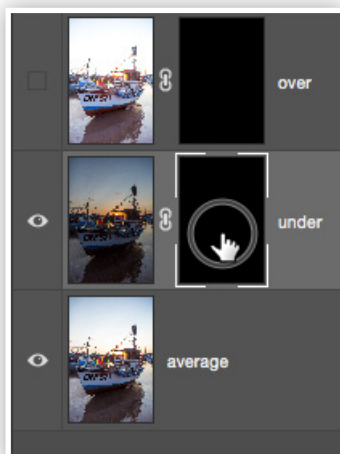
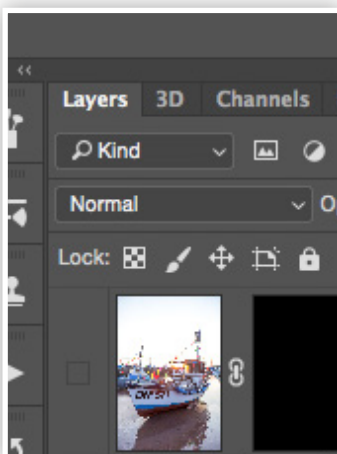
23 Press Cmd + D to clear any selections. You now need a mask that can let you work with the midtones only. Click on 'bright 1' and then hold Cmd + A to select all. Press Alt + Cmd. The cursor should now show the dotted box with a small minus symbol inside it.

24 Click on the 'bright 1' layer and you will subtract its light tones from the selection. Keep holding Alt + Cmd click on the 'dark 1' layer. You will see a warning that pixels are no more than 50% selected. This is fine; you can click OK to accept.



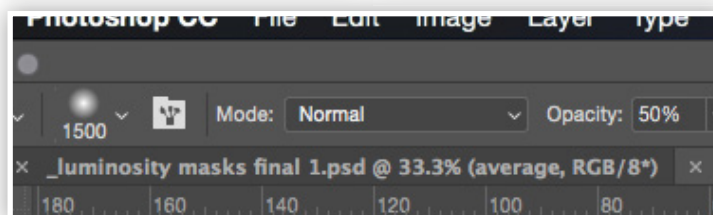
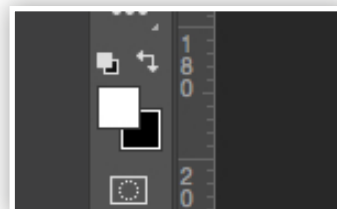
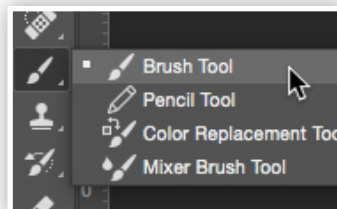
25 Despite not seeing any marching ants, you have a selection nonetheless. Click the Save Selection As Channel button once more and a new channel will be added. You can call this 'midtone 1'. You now have all the masks you need. Clear any selections.

26 Click back on the RGB channel to restore the normal colour view of the photo. To recap, you have your colour images and you now have four light tone masks, four darker tone masks and a midtone mask all ready for the next step.



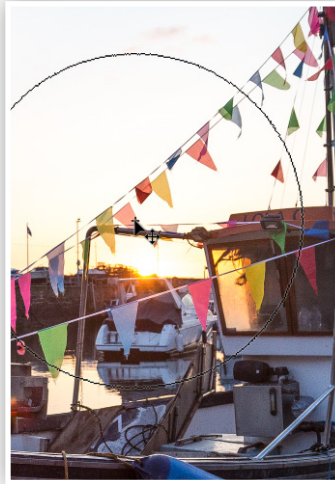
27 Click your Layers tab to view your layers again. Make 'under' visible and click on its mask thumbnail to make it active. It should be highlighted to let you know it's currently active and any edits will be made to the mask, not the image.

28 You want to start by revealing the darker sky in the 'under' layer. To do this, keep the 'under' layer mask active and click on the Channels tab again; hold the Cmd key and click on the 'bright 3' layer to make a selection based on that channel's tones.



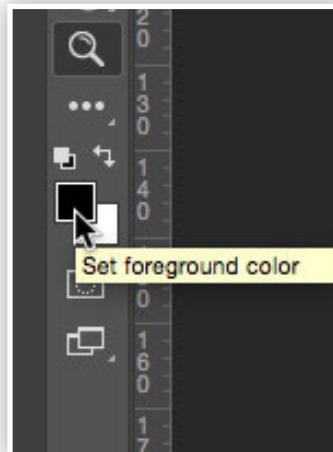
29 Click back on your Layer tab again and you should see marching ants covering the document. It's best to use 'bright 3' since it has a good range of the brightest tones, while retaining little of the darker values. This is a good mask to use for the sky.

30 Go to the toolbar and choose a large soft brush. Make sure the foreground colour is white and the brush Opacity is about 50%. You are going to paint white onto the 'under' layer mask and reveal areas of the darker exposure around the sky area.



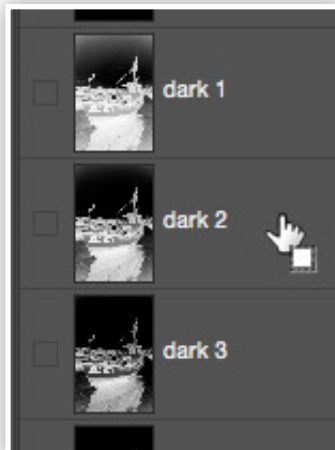
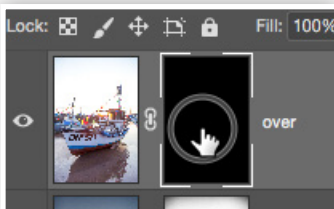
31 If you happen to find the marching ants a bit off-putting while you are applying the brush to the layer mask, you can press **Cmd + H** to hide the selection. However, just remember that you've hidden it. Turn it back on when you're done.

32 Start painting with your large soft white brush around the sky area: as you do, the darker sky will be revealed; because of the detail in the luminosity mask you're using the flags and fine details are nice and crisp.

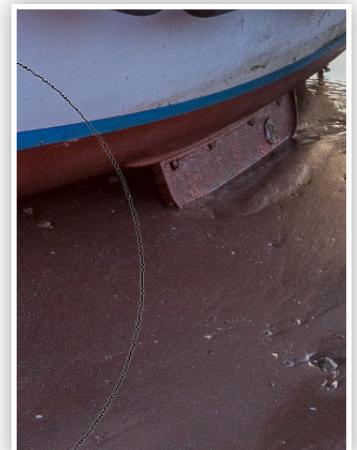
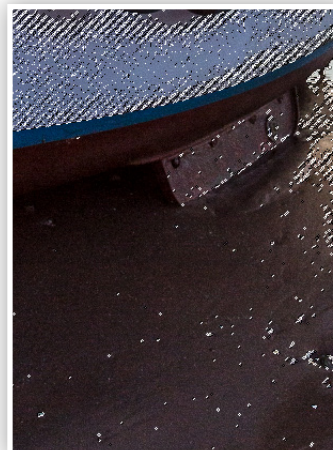


33 **Alt + left-click** the 'under' layer mask and you will see how detailed the mask actually is. Details such as the ropes, flags and the boat that would be difficult to mask manually are perfectly selected. **Alt + left-click** again to go back to the normal view.

34 Masking in this way does require some subtlety. At the moment the sky at the horizon is actually too dark and looks slightly odd. Simply change your brush colour to black and paint over the horizon to let a little of the 'average' exposure show through again.



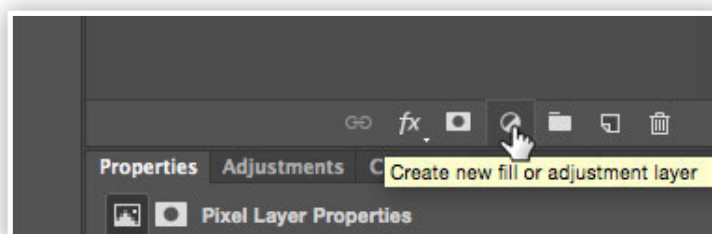
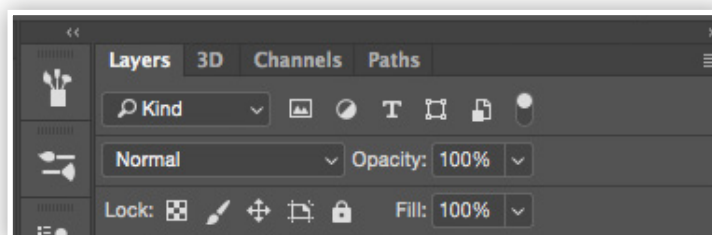
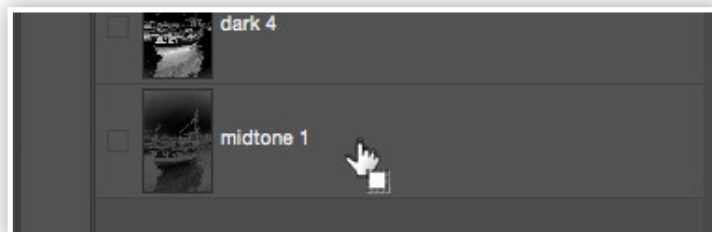
35 Shadow areas are next. Make sure you've cleared any active selections. Make 'over' layer visible and click on its layer mask to make the mask active. Click the Channels tab, hold the **Cmd** key and click on 'dark 2' or 'dark 3'.



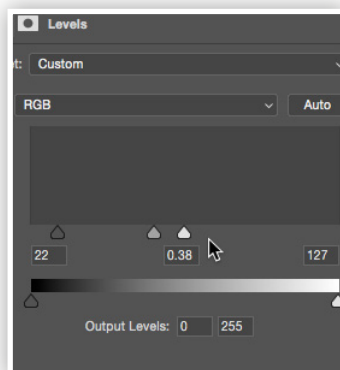
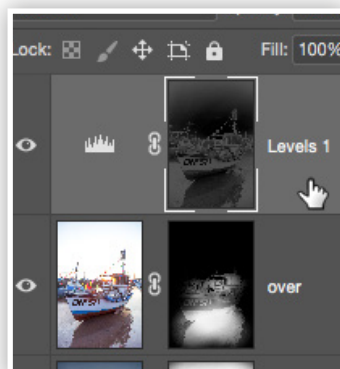
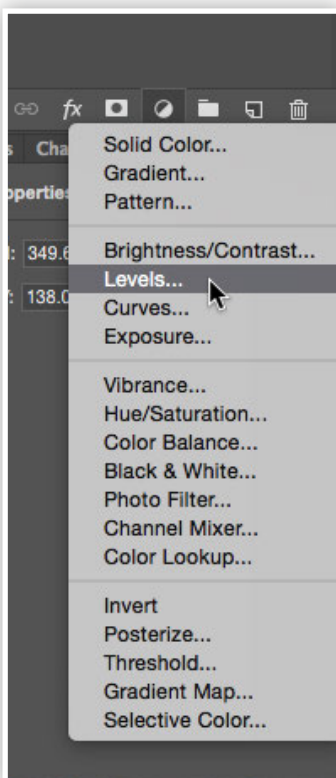
36 Marching ants will appear. Click on the Layers tab again and this time you can use a large, soft white brush at 50% Opacity to reveal the brighter areas of the 'over' layer to bring more detail back into the shadows in the darkest parts of the image.



37 Again, viewing the mask on its own shows how targeted you can make your adjustments using these masks. You are free to choose whichever mask you feel is most appropriate. It might take a little experimentation but that's part of the fun.



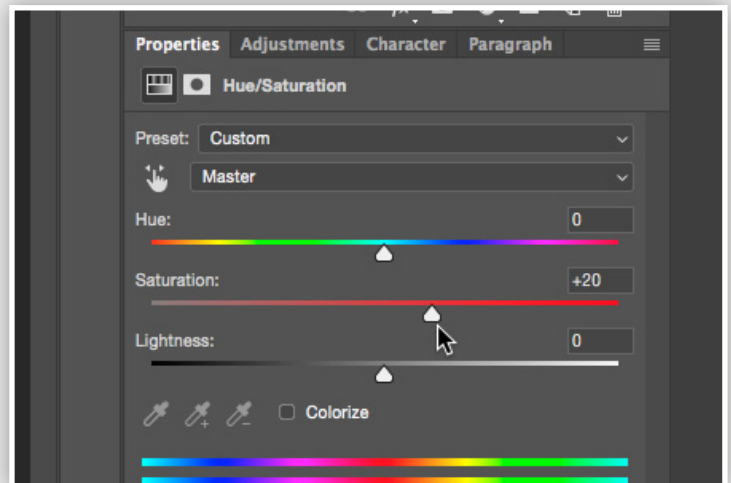
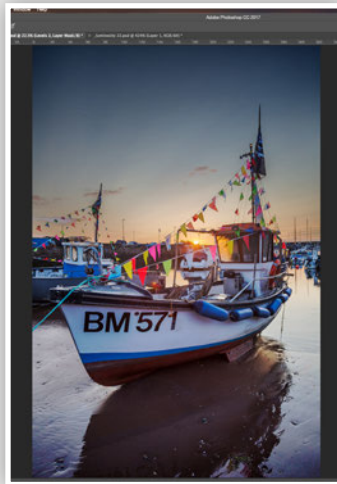
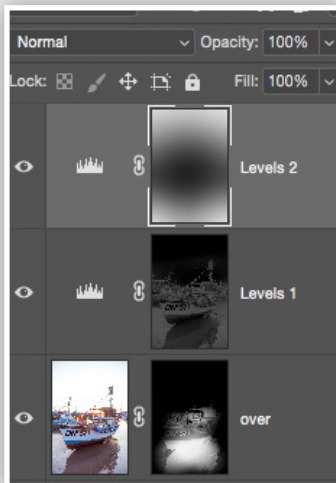
38 Clear the selection and then go back to the Channels tab and Cmd + left-click the 'midtone 1' channel. You will get the 50% pixel warning again but just click OK. Go back to the Layers tab and click the Create New Fill Or Adjustment Layer button.



39 Choose Levels from the dropdown menu and a Levels 1 adjustment, with a mask already in place based on the 'midtone 1' channel, will appear. We adjusted the levels to add a little more contrast to all the midtone areas in the photo.



40 Bear in mind that there is no reason for you not to get in and adjust each luminosity mask yourself if you wish. For example, the 'under' layer mask had some dark vignetting at the top corners of the mask which we painted white to remove.



41 For some final touches, we added another Levels Adjustment that we used to darken the image and then used a very large black brush on the mask, just so the sky and immediate foreground was a little darker.

42 We also added a Hue/Saturation layer and boosted Saturation just to give the image a little more punch and emphasise the sunrise colours in the image. With that, your image is complete, without the need for any manual selection tools.



Targeted exposure adjustments

Take control of the highlight and shadows in your images.

Monochrome Conversion Techniques



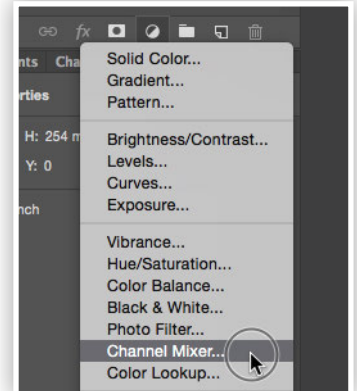
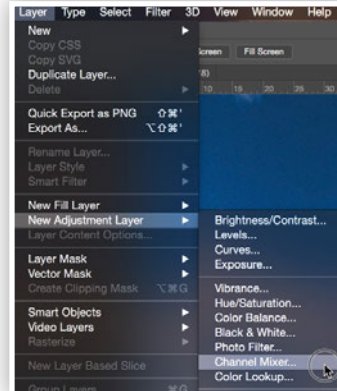
Explore the world of black and white imagery

Black and white photography is a wonderful creative form of the medium. It relies on great composition and lighting control and use of texture since the added complication of colour has been removed altogether. Whether you are a serious professional photographer or just an enthusiastic amateur, chances are you will have encountered black and white photography in magazines and online. You may have become aware that in the world of

monochrome images, there are any number of ways of converting a colour image into a monochrome one. Some techniques work better than others. In the next few pages, we'd like to share some of our favourite methods for turning a colour image into a punchy and detailed monochrome version using non-destructive methods.

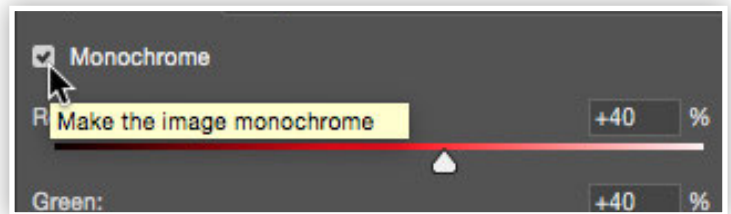
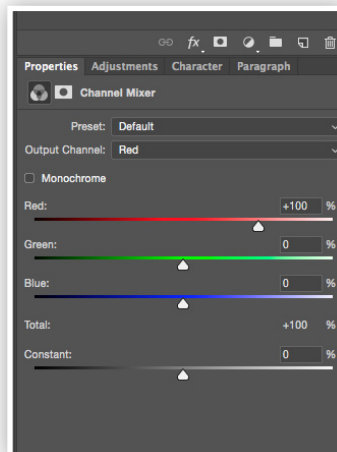
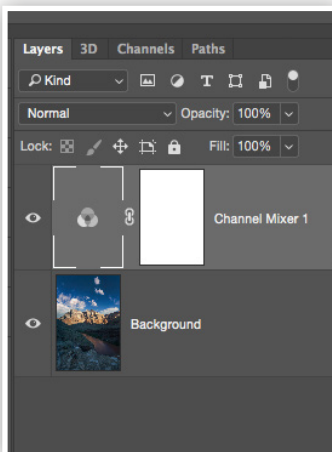


The Channel Mixer



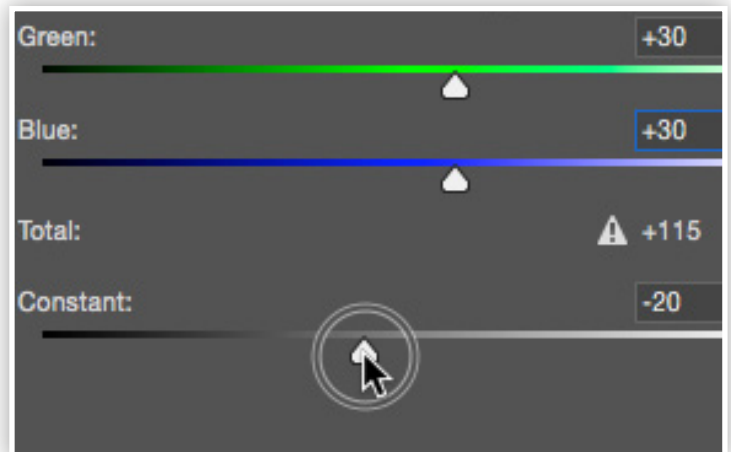
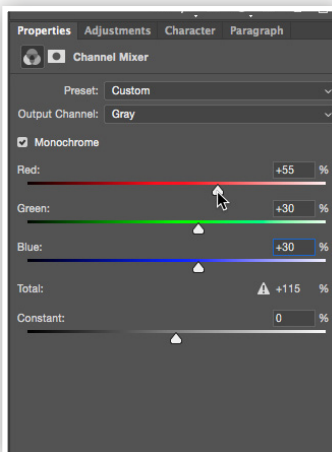
01 Let's start with the Channel Mixer in Photoshop. It allows you to alter the mix of the three component colours of Red, Green and Blue, that make up any colour digital photograph. We are going to use the Channel Mixer on this landscape image of the Grand Canyon.

02 The Channel Mixer can be found by going to Layer > New adjustment Layer > Channel Mixer or by clicking on the Add New Fill Or Adjustment Layer button and choosing Channel Mixer from the dropdown menu that appears.



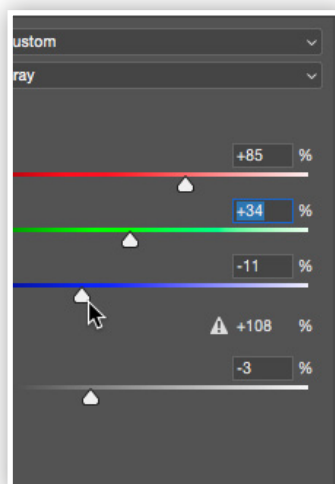
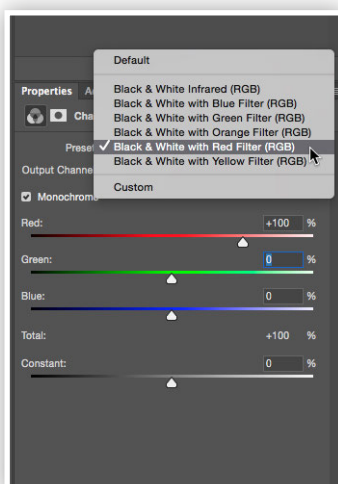
03 The Channel Mixer 1 layer will be added to the layer stack. In its Properties, you will see the RGB colour sliders and the Constant slider. The Constant slider is just a control for adjusting the final exposure of the adjustments you make to the RGB values.

04 The first order of business is to check the Monochrome box to display the image as a default monochrome version. Now you can use the RGB sliders to alter the amounts of red, green or blue in the image.



05 If you increase the red for instance, any part of the photo that contains red such as the rocks will increase in brightness. Adding more red makes the reds in the shot get brighter and brighter as it is increased. The same applies to the other two colours.

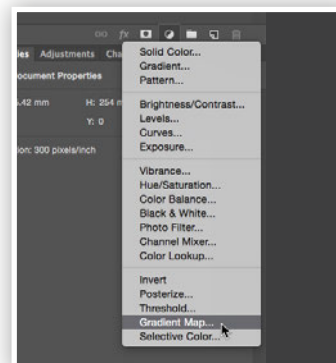
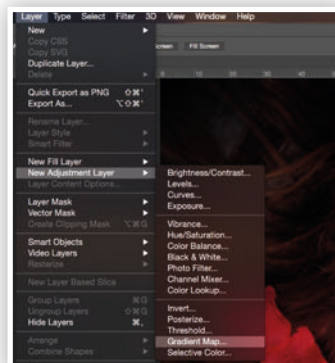
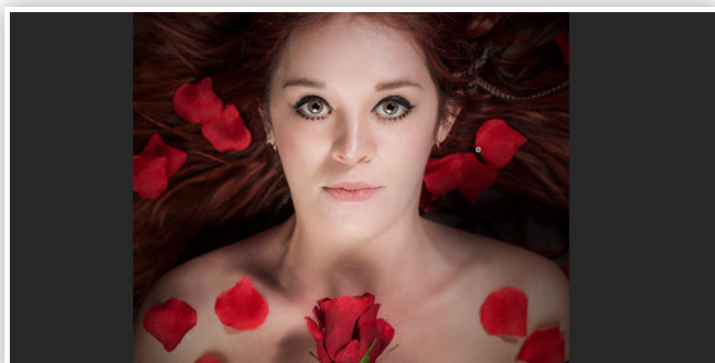
06 The Constant slider can either increase or decrease the exposure of the image based on how much you alter the RGB values. Note that if you mix the three values to a Total that exceeds 100%, it will warn you that you have done so but you do not have to adhere to exactly 100%.



07 You also have the option to apply a preset. Click on the Preset bar and a number of options will appear that mimic Black and White Infrared or various coloured filters. The Red filter for instance will make the rocks brighter and the sky much darker.

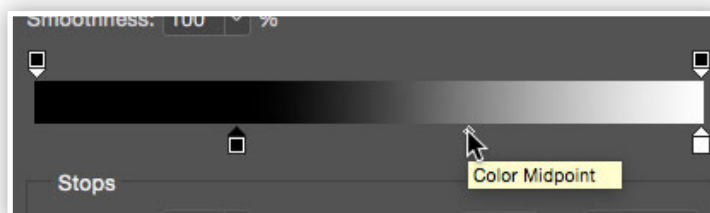
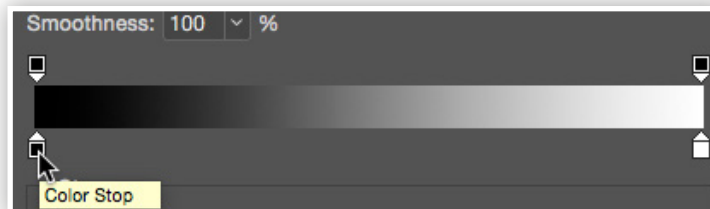
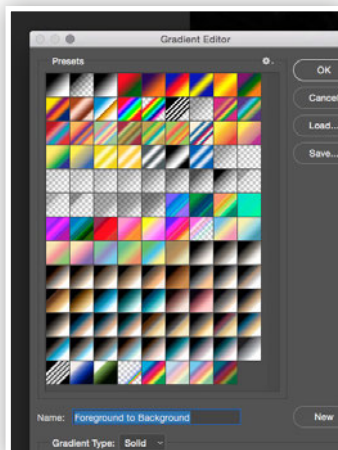
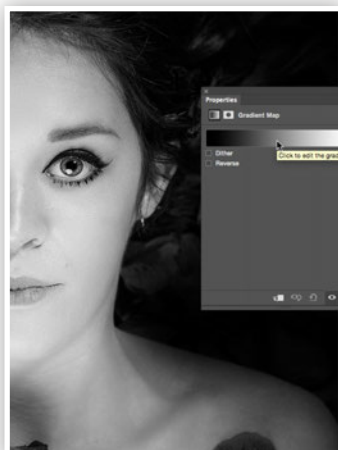
08 You can tweak the RGB values until you achieve an image that suits your taste. With Red at +85%, Green at +34%, Blue at -11% and Constant at -3%, you have a punchy image. Although the Total warning is active the mono conversion looks great.

Gradient Map



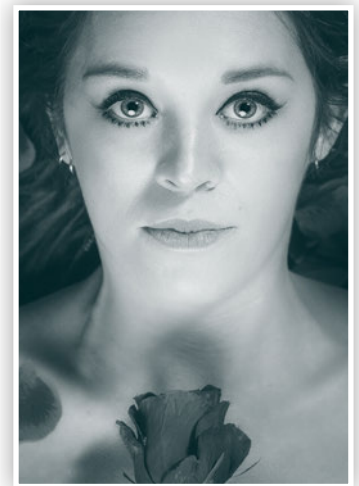
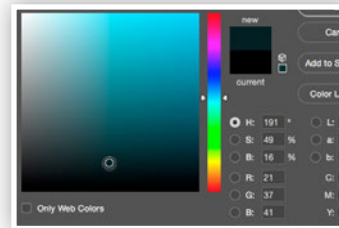
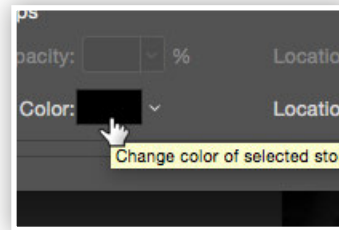
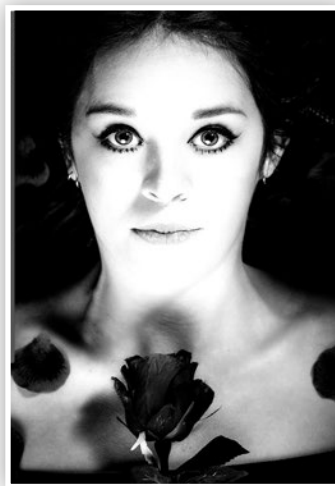
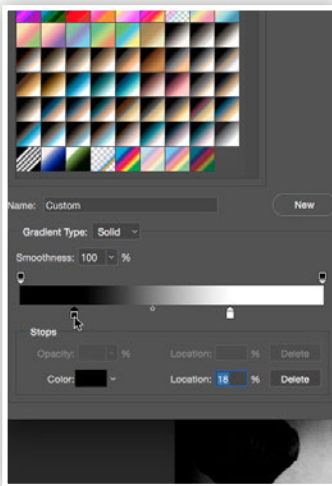
01 The Gradient Map is a method that takes your Foreground Colour and maps it to the darkest value in your photo and takes the Background Colour and maps that to the brightest value in the shot, creating a monochrome image based on those two colours.

02 Choose the Gradient Map by going to Layer > New adjustment Layer > Gradient Map or by clicking on the Add New Fill Or Adjustment Layer button and choosing Gradient Map from the dropdown menu that appears. We have set our foreground and background colours to default.



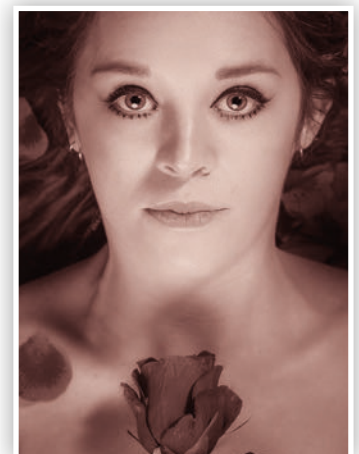
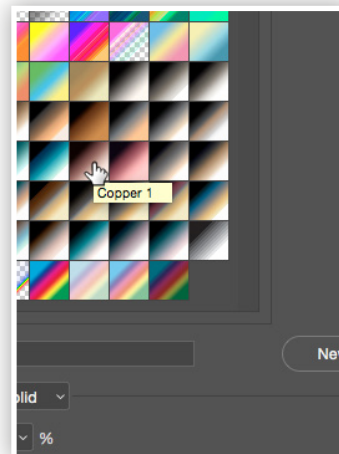
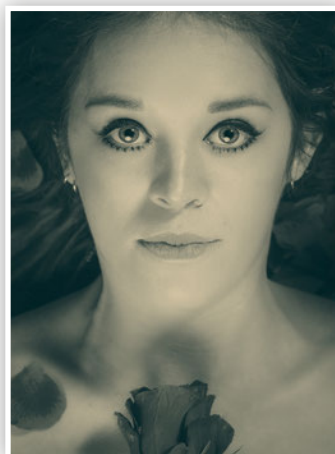
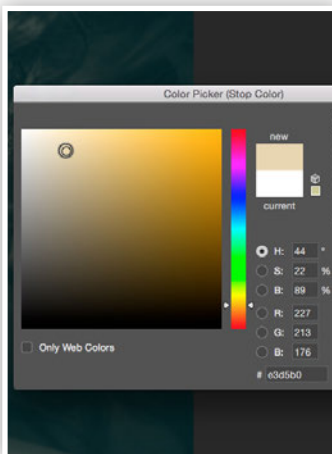
03 The Gradient Map 1 adjustment layer will be added above your image. If you click on its Properties, the current map is displayed. To alter it, click on the gradient and you will call up the Gradient Editor panel to alter the look and colours used in the map.

04 The Gradient Editor currently used the Foreground to Background (black to white) default. At each end of the gradient is what is called a Color Stop. These can be moved back and forth to alter the contrast of the image, as can the Color Midpoint markers.



05 When the Black Color Stop moves right, the lighter midtones are darkened; as the White Color Stop moves left, the brighter midtones and highlights are lightened. You can use these two sliders in combination to alter the exposure and Contrast of the image.

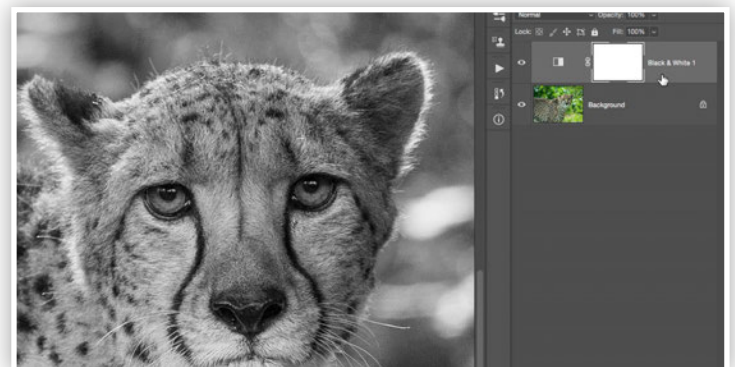
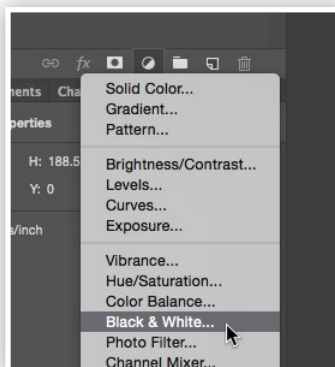
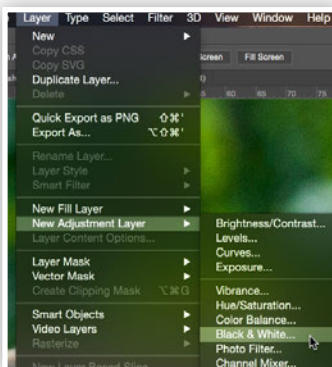
06 If you click on the Black Color Stop, you can alter its colour by clicking on the Color Picker tool. Here, we replaced the black colour with a dark turquoise colour. The image will now be tinted to reflect this choice of colour.



07 If you click on the White Color Stop and use the Color Picker to change it to a pale orange colour, you have created an image akin to a duotone, one that's comprised of two colours. Just as you did before, you can still move both Colour Stops and the Midpoint marker.

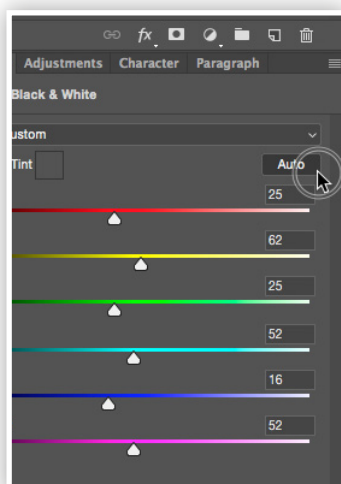
08 If you prefer, you can load up and use a number of preset values by clicking on the Option button and adding any available presets. You can then simply click on one of the Presets such as Copper 1 to automatically tint the photo.

Black and White Adjustment

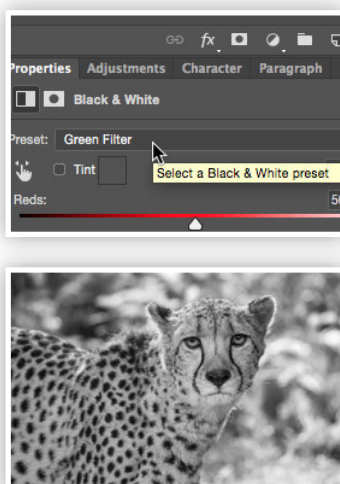


01 Just like the previous adjustments, the Black and White option can be accessed from Layer > New Adjustment Layer > Black & White or via the adjustments button at the bottom of the layers palette.

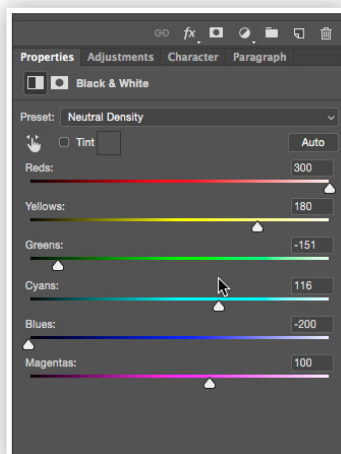
02 The Black & White 1 adjustment is added to its own layer above your image, which will appear as a monochrome version based on the default Black & White parameters applied. Since this is non-destructive, you can turn the Black & White adjustment off at any time.



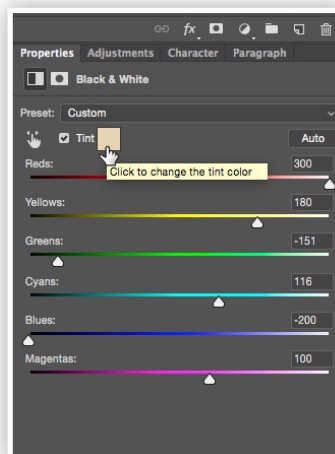
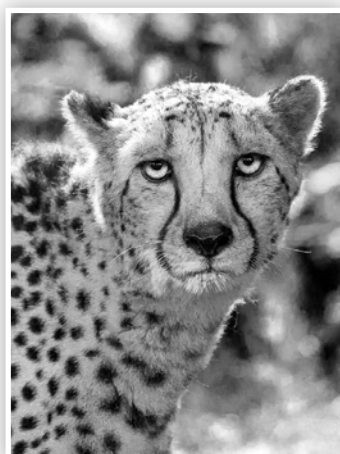
03 Clicking on the Auto button gives a neutral conversion; if you prefer, you can click on one of the available Preset filter options such as the Green filter, which in this case allows more green through, for much brighter green areas and blocks other colours.



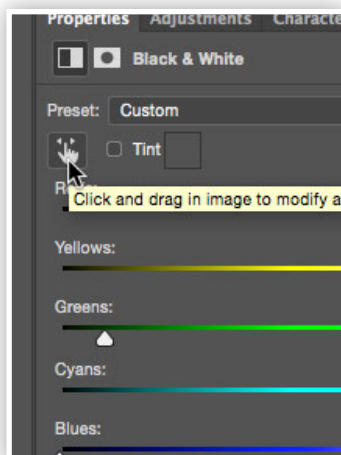
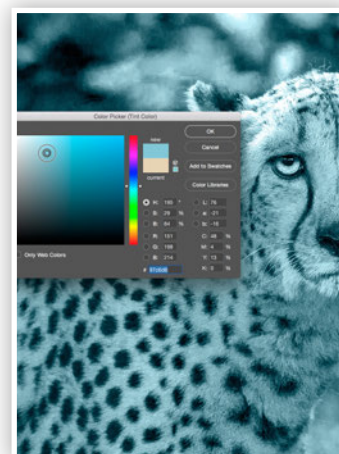
04 Each colour of slider will affect similar colours in the original image. If you slide the Green to the left, the foliage in the background will become much darker. Slide the Green to the right and the foliage will get much brighter.



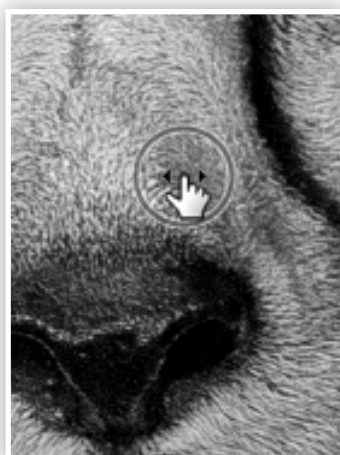
05 We arrived at a good balance of tones by boosting the Reds and the Yellows and dropping the Greens by a large amount. The Blues were pushed to the far left to bring out the spots and facial markings of the big cat.



06 You also have the option to tint the photos as well. If you check the Tint button, you can then click on the Color Picker and choose a tint colour where the entire image is derived from that colour.



07 You can also target specific areas of the image itself by using the interactive colour picker. Activate it and then click and hold on your photo where you want to alter its tonal value and slide the mouse left and right to modify the colour you've picked.

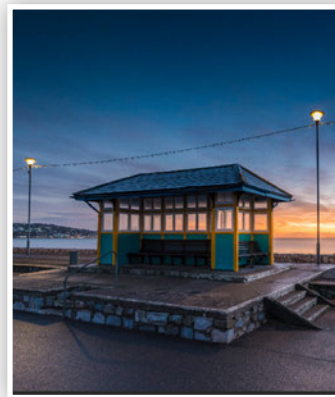


08 The Black and White adjustment method offers a lot of control over the image but be wary of making too many extreme modifications. The more you push the image to its limits, the more image artefacts will appear as the image starts to degrade.

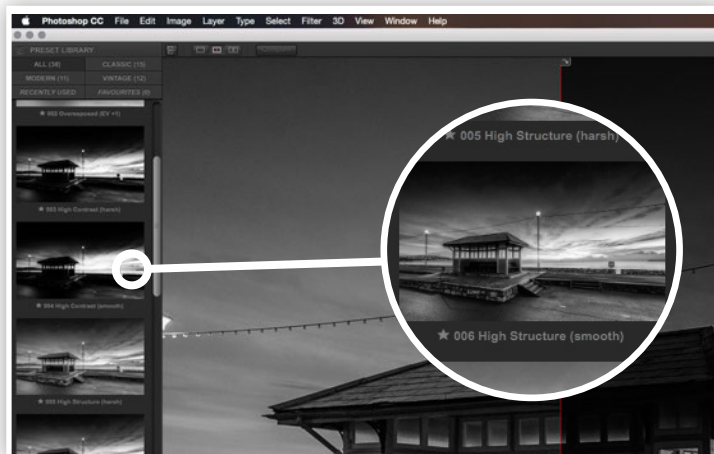
Silver Efex Pro 2 Plugin



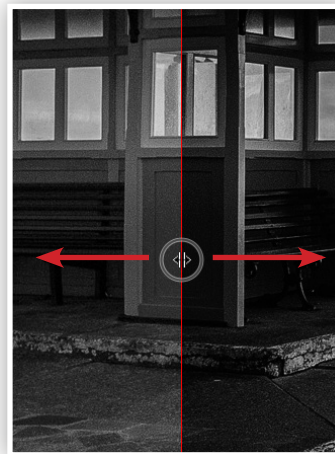
01 Used by many photographers, this plugin is now owned by Google and available to download for free. It offers a huge amount of control over your black and white conversions. The plugin installs and is detected by Photoshop the next time you open it up.



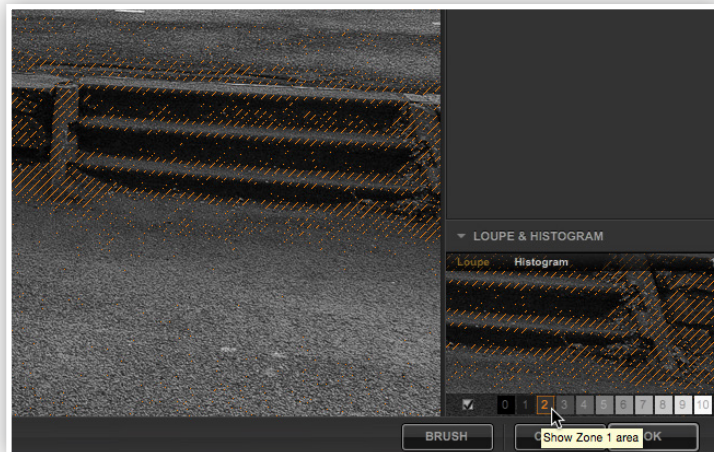
02 We have a seafront image taken at sunrise that we are going to convert using Silver Efex Pro. Once your plugin is installed, you can find it under Filter > Nik Collection > Silver Efex Pro. This will fire up the plugin automatically with its own screen.



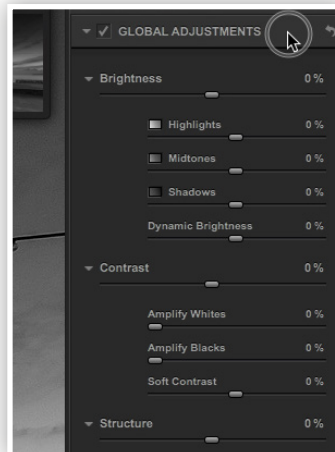
03 The Silver Efex Pro conversion screen will open and your image will have the default black and white conversion applied to it. On the left of the screen, you will see a number of presets that you click on and apply to your photo.



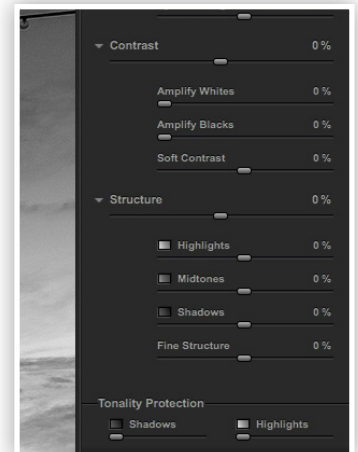
04 The main screen has a slider bar that you can swipe back and forth in order to view the before and after versions of the photo. There is also a small navigator window so you can move the image around if you are viewing at high zoom levels.



05 In the bottom right corner is the Loupe, Histogram and Zone viewer. The Zone viewer displays what areas of the image are solid black (0), up to brightest white (10). The Histogram is graphical representation of the spread of tones in the image.

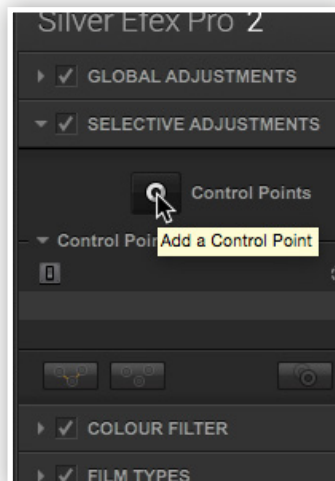


06 For a more hands-on approach to the conversion, you can use the adjustment tools range at the top right of the screen. Global Adjustments are the main Brightness, Contrast and Structure controls. Structure is a form of midtone contrast for amplifying detail.

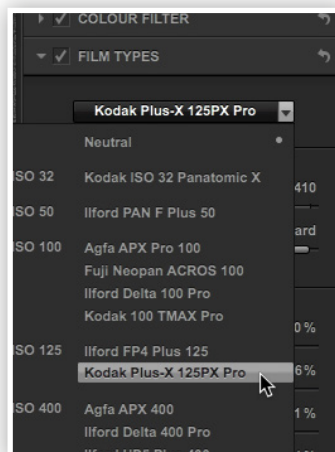
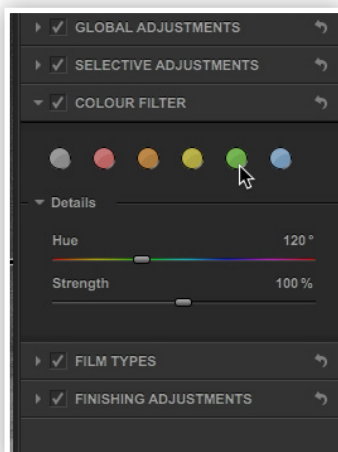




07 You can affect the tonal values in the highlight, midtone and shadow range of your image by using the sliders. The before and after slider can be used to compare the default black and white to your own newly adjusted mono conversion.

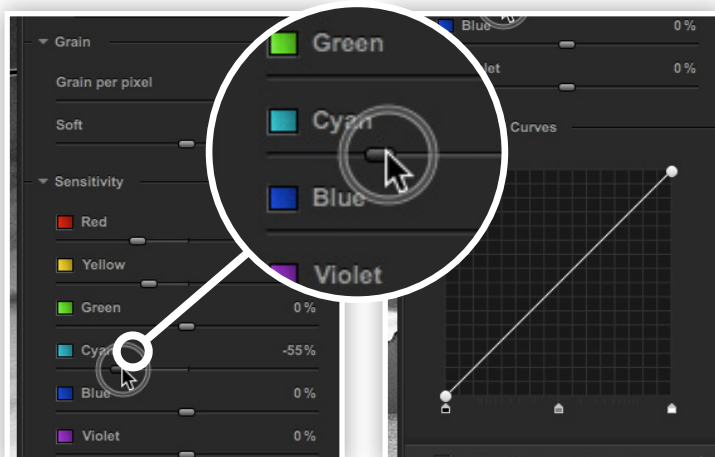


08 Next comes the Selective Adjustments panel. This lets you add targeted control points to the image within a user-specified radius. Each control point has a number of controls you can access such as Brightness, Contrast, Structure, Amplify Whites and Amplify Blacks.

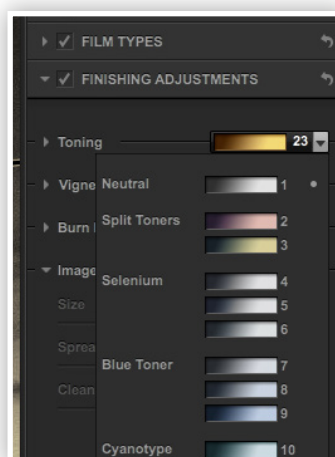


09 Next is the Color Filter panel. This mimics a colour filter used by photographers on their cameras to enhance tones at the capture stage. You can choose the main six preset colours or the Hue slider to pick a colour and adjust its effect using the Strength slider.

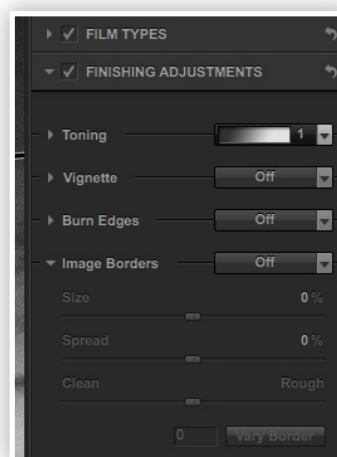
10 Film Types are a series of presets that are used to mimic the look of certain black and white film stocks for older film cameras. You can choose from a number of film types from film stock manufacturers such as Ilford, Fuji, Kodak and Agfa.

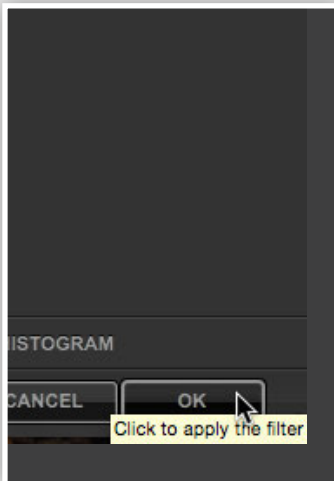


11 You can also add grain to your shots here and there is a Sensitivity section that behaves like the Black & White function in Photoshop. You can also add Levels and Curves adjustments here as well.

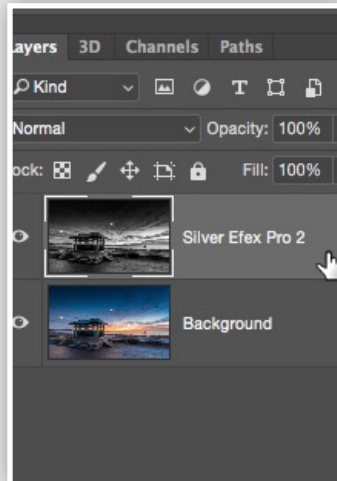


12 The last panel contains the Finishing Adjustments options. This section lets you add colour tints to your photos as well as Vignettes, Burnt Edges and a selection of Image Borders for that final tweak to the conversion.





13 When you have your image how you like it, you can hit the OK button and the image will be converted based on the adjustments you've made. The black and white conversion will appear on a new layer, keeping your original intact.



14 In terms of pure control over your image, Silver Efex Pro 2 is highly recommended. It has the added bonus of being free and is definitely worth having in your photo manipulation arsenal when you feel the need for a black and white conversion.



Amazing black and white images

Dive in and experience the creativity of mono conversions.



Enhance Your Landscapes



AFTER

BEFORE

A few key adjustments can make all the difference

Have you ever been out with your camera, taking shots of some beautiful scene? The light is amazing, the clouds are well defined and lit by the rising sun, there is a glow along the horizon and some cool reflections in the wet sand at your feet. You compose a strong yet simple shot and click off a few frames. When you get home and download them to your computer, you open them up and are surprised how different the images look to how it was in real life. The images are a bit washed

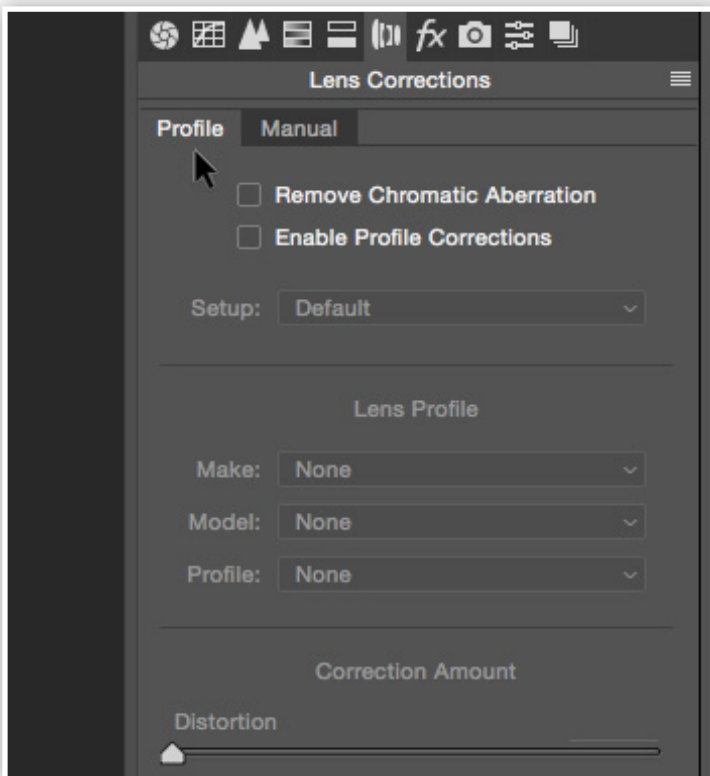
out, the colours seem a little weak. Sometimes what you see with your own eyes is not how the camera will interpret it. Your eyes have greater dynamic range than any sensor and they see more tonal variations. With a few simple steps, you can take that image and enhance to not only match, but surpass, the conditions present when you took the shot. Adding more detail, contrast and saturation is referred to as making them 'pop'. Here's how you can make your own images 'pop'.



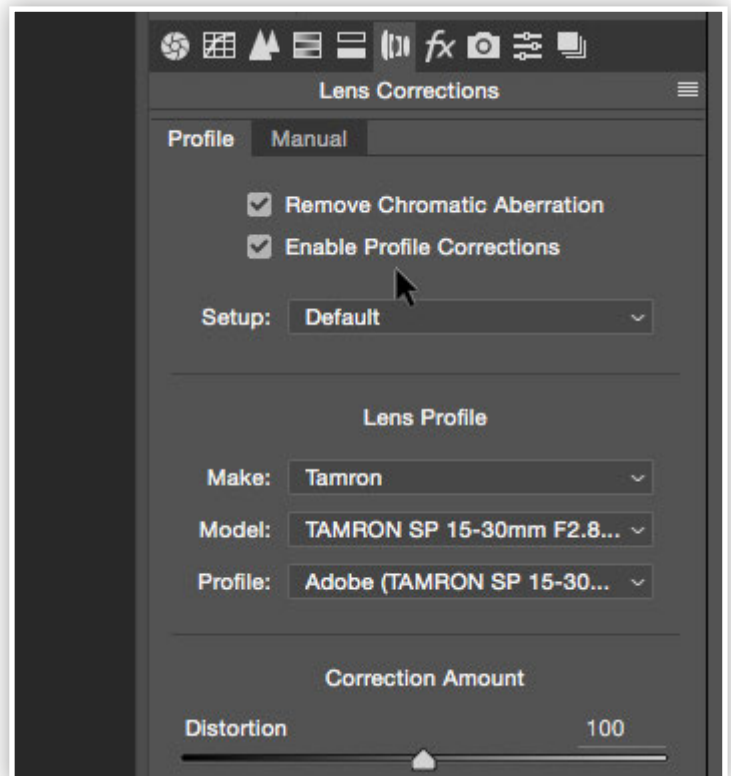
01 Our example is a sunny moorland image. Although the exposure is a little off, it should be quite recoverable. The sky is a little bit overexposed but you'll be surprised what you can do with it.



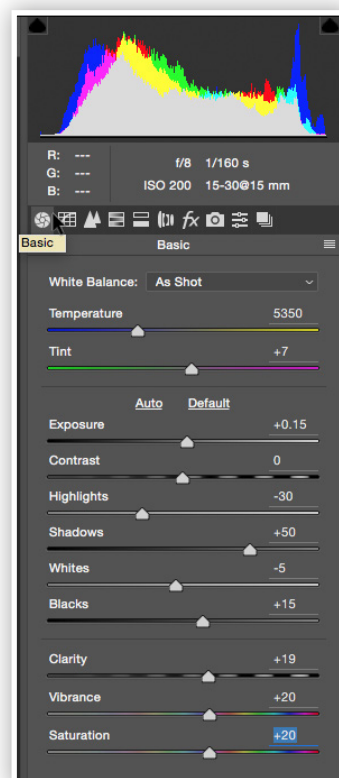
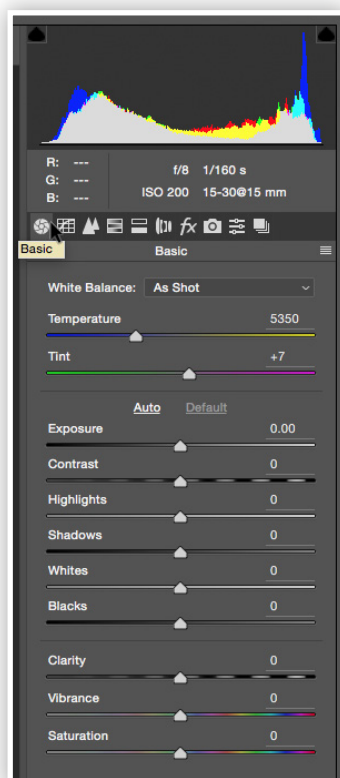
02 Our example is shown here in Adobe Bridge. Since this is a Raw file, we can go ahead and open it up in Adobe Camera Raw (ACR), by right-clicking on it and choosing Open In Camera Raw.



03 The image will open in ACR, ready for editing. One of the first things to do is to click on the Lens Corrections tab on the right and under the Profile tab tick the buttons for Remove Chromatic Aberration and Enable Profile Corrections.

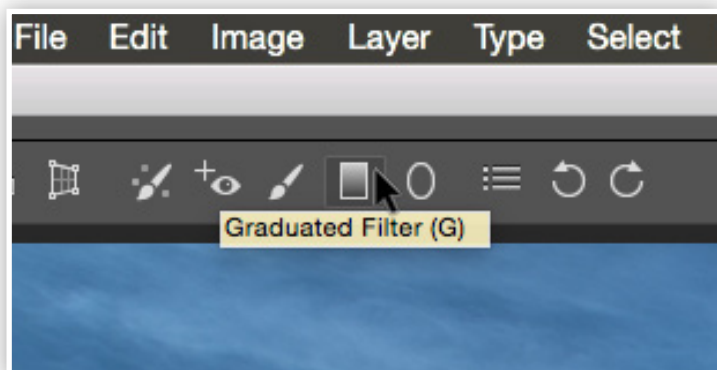


04 This removes any lens distortion from the Tamron 15-30mm lens that was used as well as any purple/green fringing that lenses can sometimes produce.

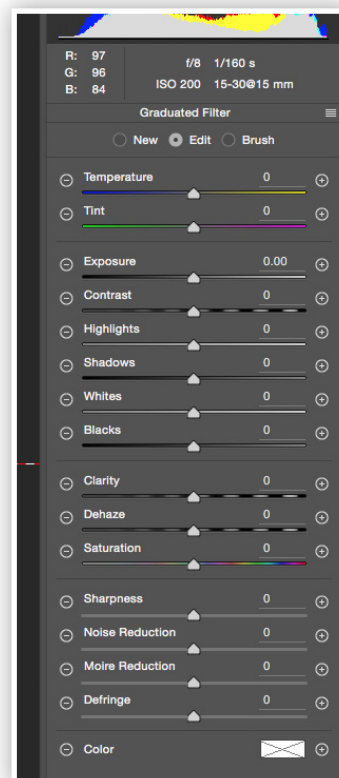
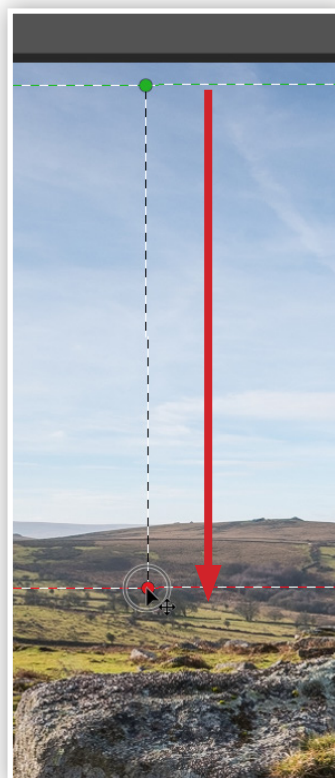


05 Next, click on the Basic tab. This is where the majority of the required adjustments can be made to your image. Things like Temperature, Tint, Exposure, Contrast, Saturation and Highlights and Shadows can be altered here.

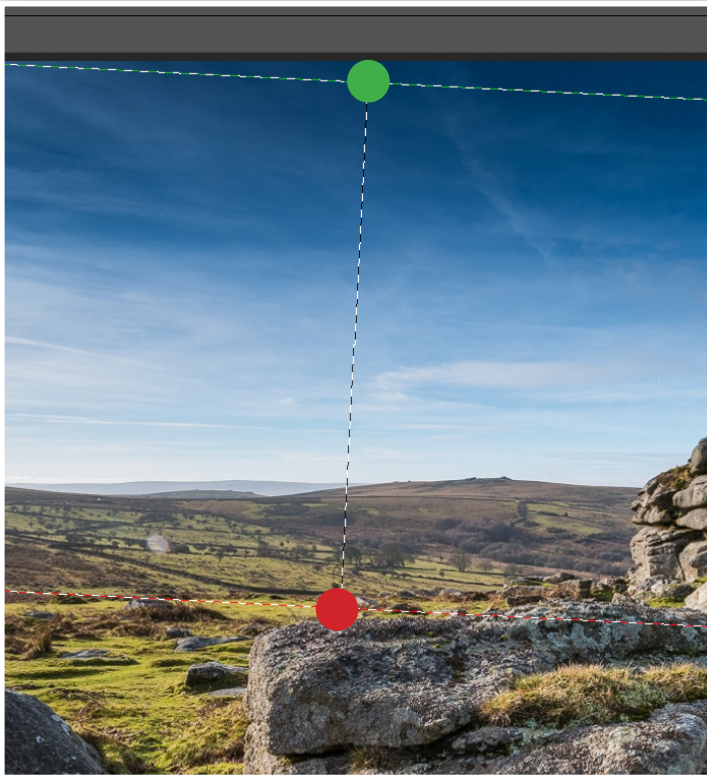
06 We've made some simple changes to the picture. The Highlights and Whites have been reduced to keep detail in the bright areas of the clouds and the Shadows and Blacks have been lightened. Clarity, Vibrance and Saturation have been increased.



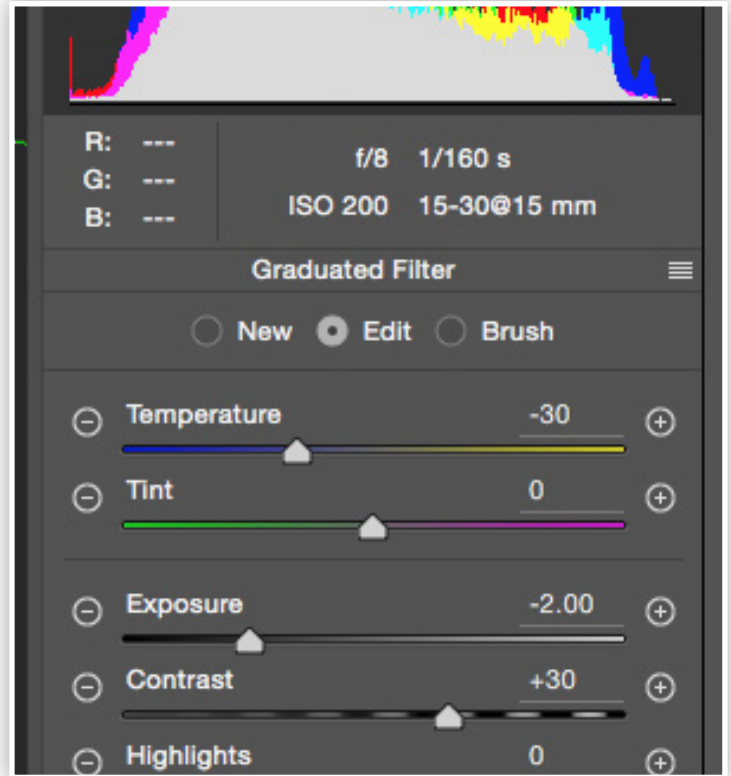
07 The next thing that would be good is to make the sky stronger. Go to the top menu bar and choose the Graduated Filter (G). This can simulate the use of a real grad filter.



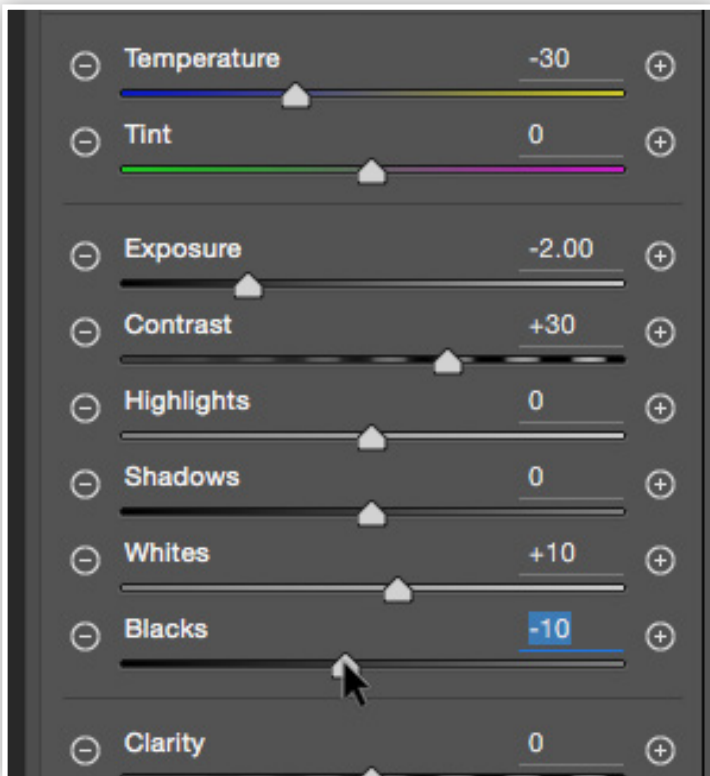
08 With the Graduated Filter chosen, click and drag from the top of the picture to a point just below the horizon. We deliberately zeroed out the values for the filter so there is no apparent change, this is so we can demonstrate the adjustments.



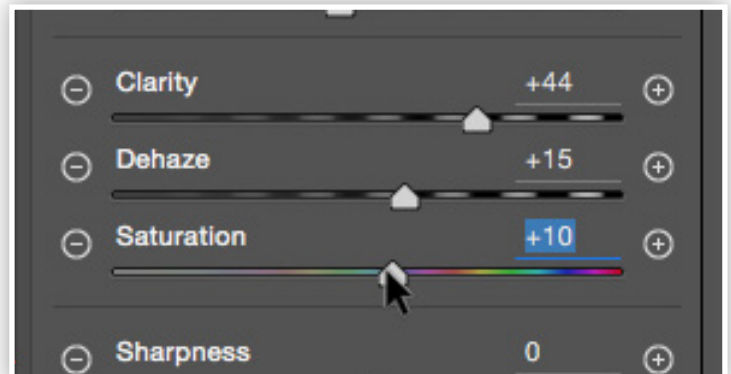
09 When using the Graduated Filter, the start point in green will display the effect at its strongest, fading to zero at the end point in red.



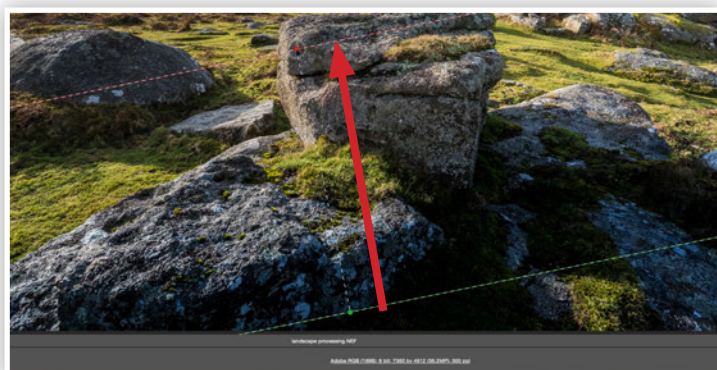
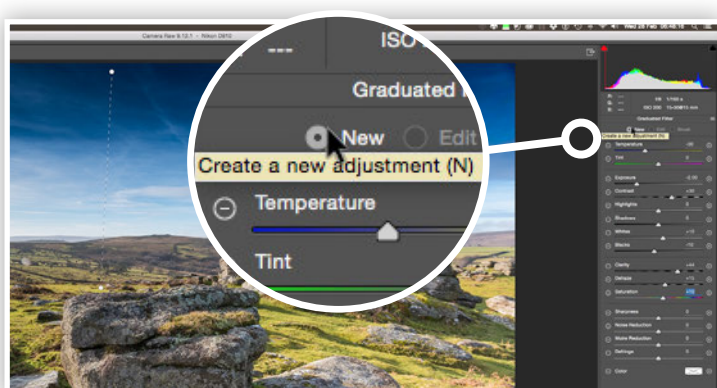
10 When you use the grad filter, its properties will be displayed on the right of the screen. We started by altering the Temperature slider to -30 to add more blue to the sky and Tint was left unchanged so as not to add any green or magenta to the sky.



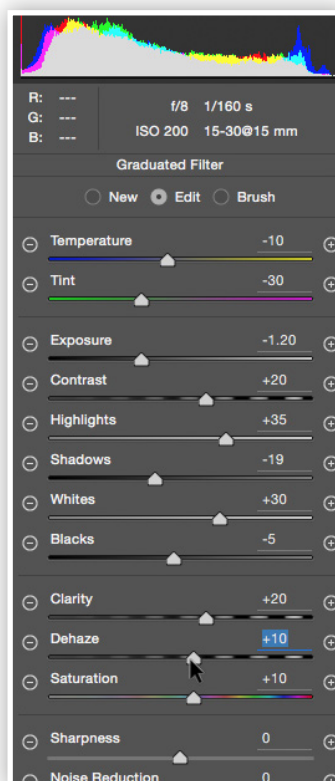
11 We dropped Exposure to -2.0 Contrast was increased to +30 and At this point, Highlights weren't altered. Shadows were also left unchanged. Whites were set at +10 and Blacks -10.



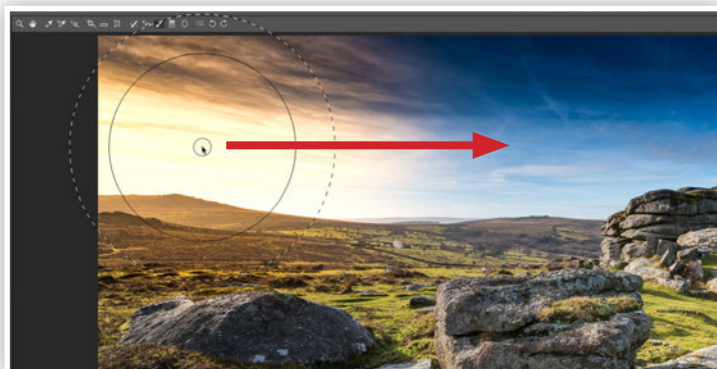
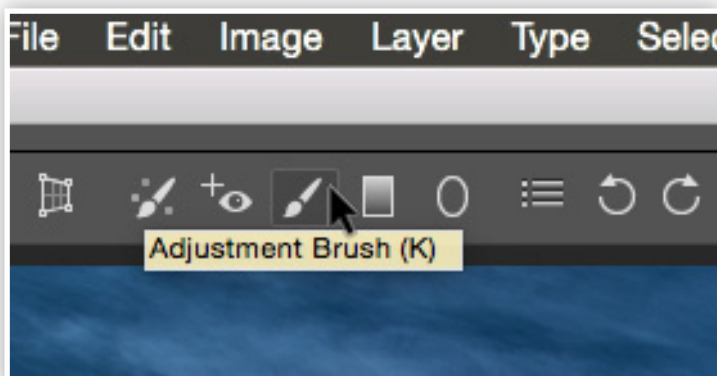
12 Clarity was also been boosted to +44 to add midtone contrast to the clouds and Dehaze is +15 and Saturation +10. Now you can see that the sky is darker now, and the clouds have more colour, definition and contrast.



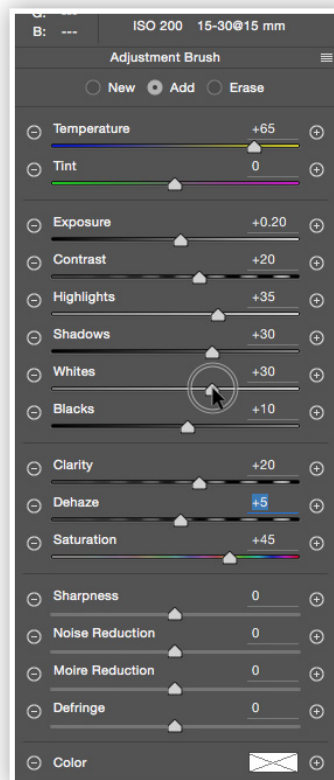
13 You can add more graduated effects to the foreground by clicking on the New button and dragging a new grad with the same properties from the bottom of the screen up to the rocks. The current properties are incorrect but you can alter them.



14 With the new grad active, you can alter all the settings until you have something you like. We've altered Exposure and Shadows to darken the foreground a little as well as increasing Contrast. We also altered Clarity and Dehaze.



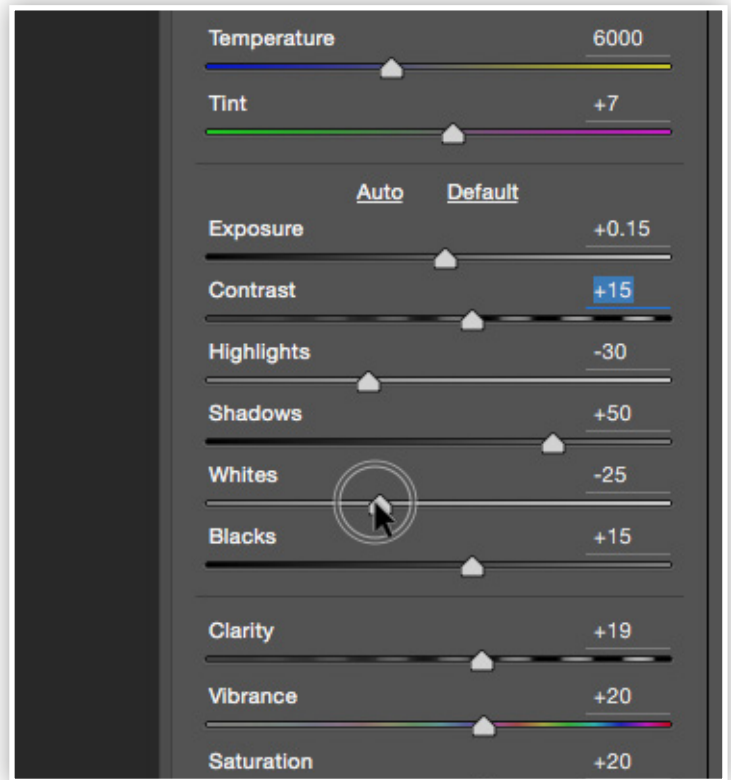
15 You can also make more targeted adjustments using the Adjustment Brush (K). The last settings used for the second grad can be applied using the brush only where you want it. You can alter the size and softness of the brush in the properties panel.



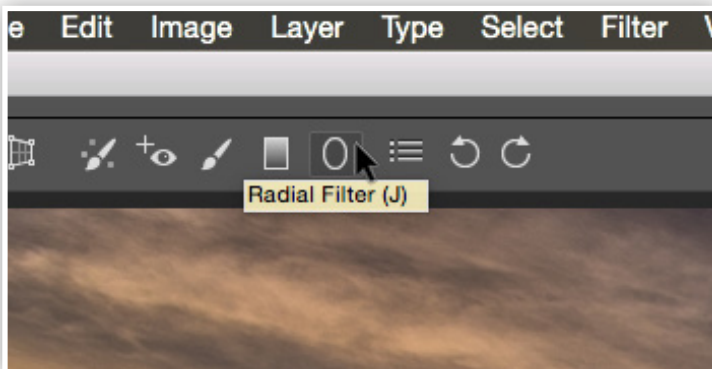
16 With the adjustment brush applied to the clouds, you can set about altering the properties if you wish. We've made the clouds to the left of shot warmer and Boosted the Whites to bring out the lights tones in the clouds without losing detail.



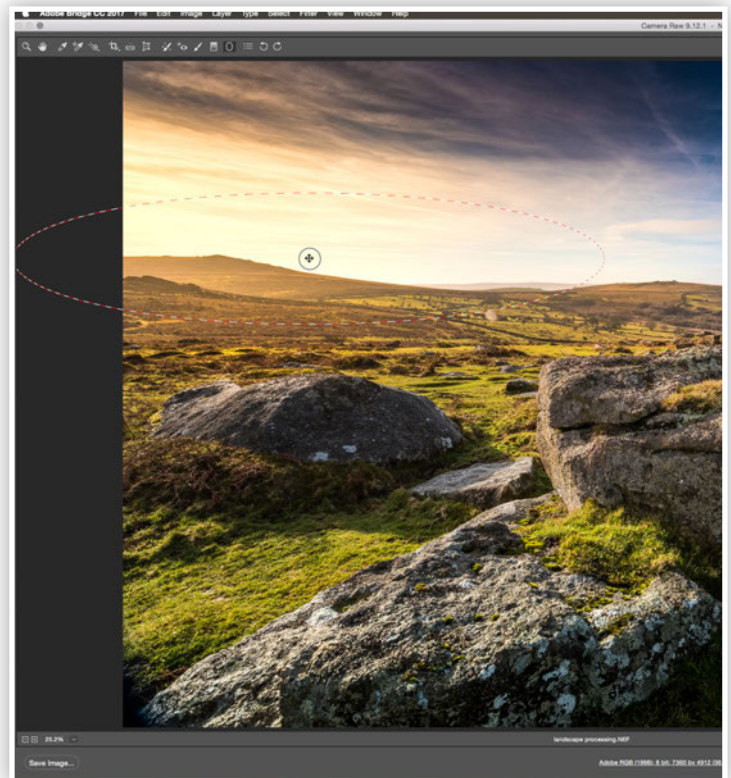
17 Each Graduated Filter or Adjustment Brush you add can be clicked on and the values tweaked at any time. We went back to the Graduated Filter tool (G) and clicked on the top grad and decreased the Exposure value a little more and boosted the cool tones.



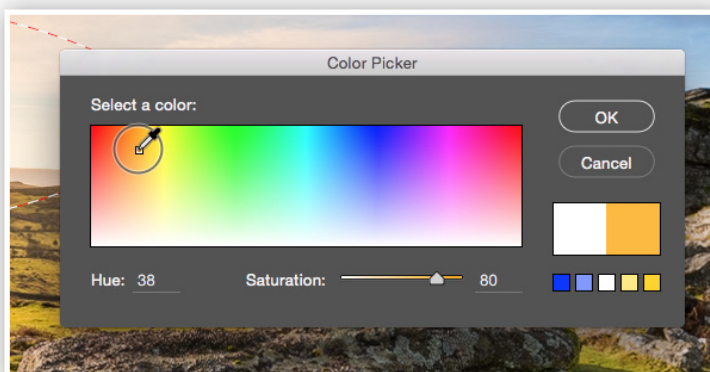
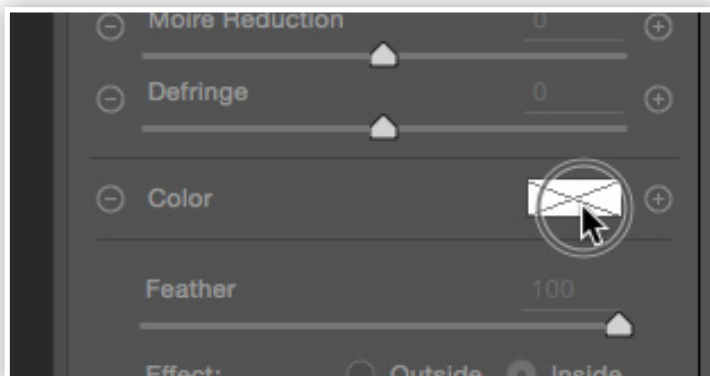
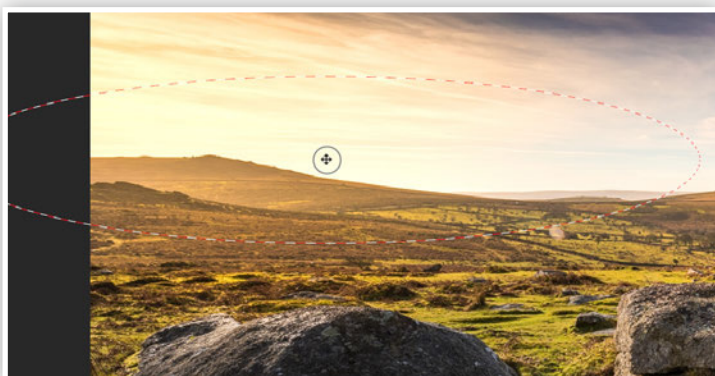
18 The edits are coming along nicely. The image is more tonally balanced and enhances the moody look that was present at the time of shooting. The colour temperature has been increased for warmer tones and the clouds have more detail and contrast.



19 Next, you are going to boost the colours of the horizon using the Radial Filter (J). This is a relatively new feature and behaves like the Graduated Filter, but its effect is circular/elliptical rather than linear.

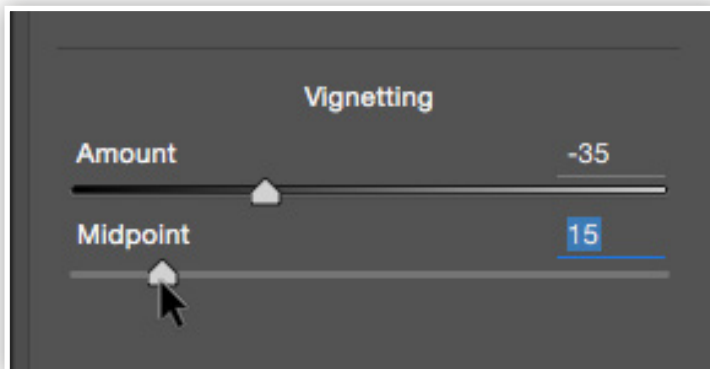
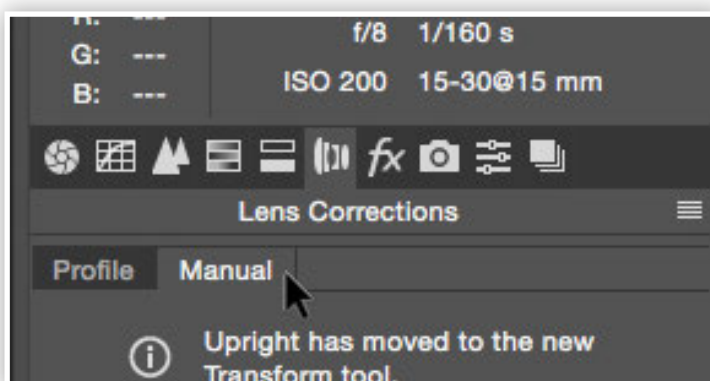
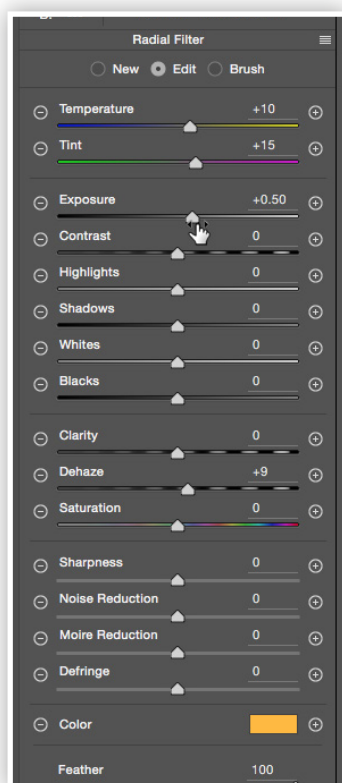
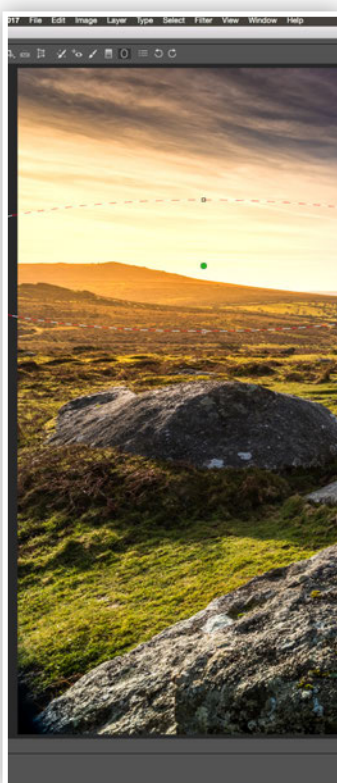


20 With the Radial Filter selected, click and drag out an ellipse along the left part of the horizon. We have zeroed the properties for this again to be able to demonstrate the changes.



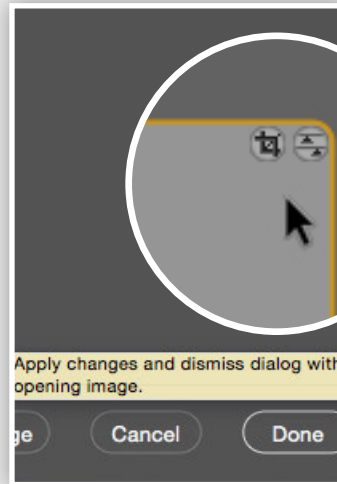
21 If you wish, you can click on the centre pin of the filter and move it around to any part of the picture. We've just positioned it at the horizon where the sun is lighting up the sky and the land.

22 We want to warm up the horizon. You can actually colour the filter by clicking on the Colour Picker from the Radial Filter properties on the right of the screen and selecting a tint.



23 You can also alter the filter's other properties to your taste. We've boosted Exposure to +0.50, Temperature to +10 and Tint is +15 to get a strong sunny glow on the horizon.

24 One final and optional adjustment is to add a small amount of vignette to the picture. If you go to the Lens Corrections section and click on the Manual tab, you can add Vignetting. We've made the Amount -35 and Midpoint 15.



25 Back in the Basic panel, we've made some final edits to the image, boosting Exposure a little, lifting the Blacks slightly and decreasing the strength of the Whites in the shot. We also made a crop of the image. Our adjustments for this image are now complete.

26 You can just click on the Done button and apply all the adjustments you made non-destructively to the file. When you do, the image will show the changes made along with a small icon in the top right of the thumbnail to indicate it has edits attached.



Improve your
landscapes

Great images created in mere minutes!

Wet Plate Portraits

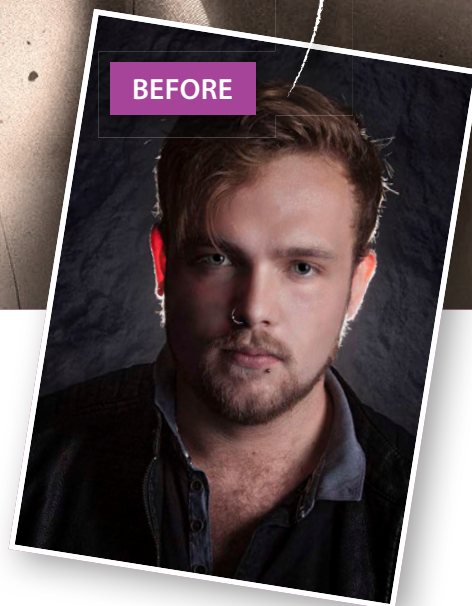
AFTER

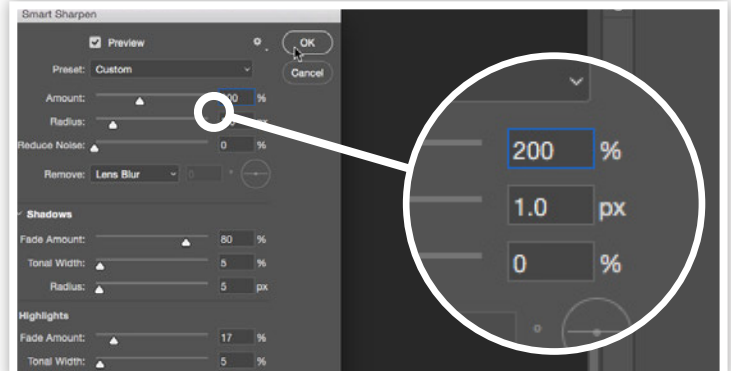
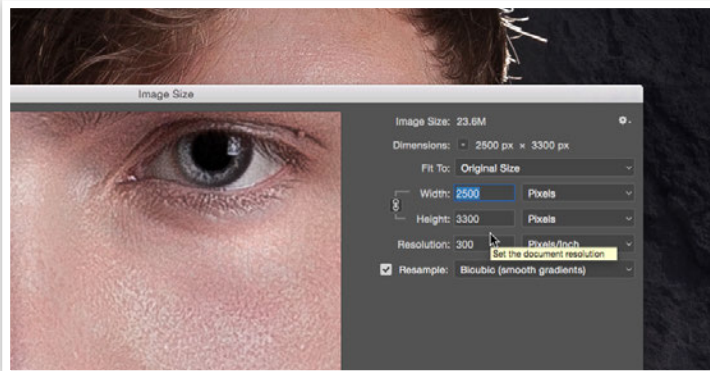
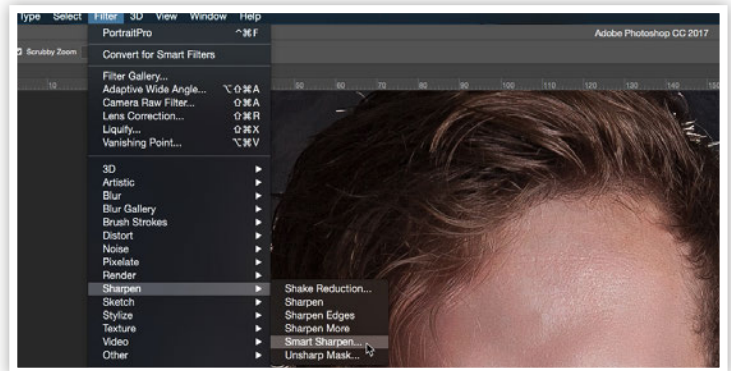
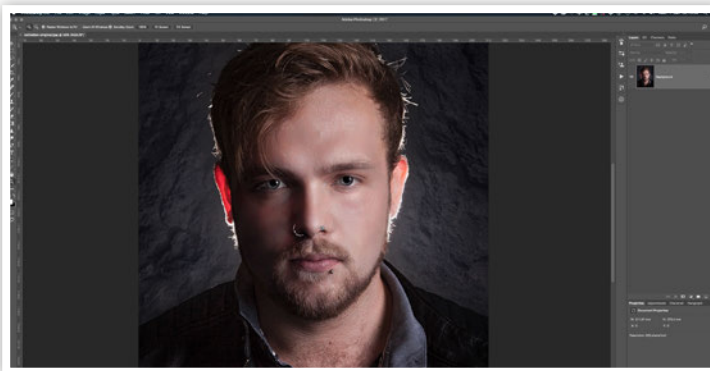
BEFORE

A unique and eye-catching portrait processing technique

When photography was in its infancy, the method by which images were captured was complex, time-consuming and involved a lot of brittle materials and harsh chemicals. That said, some early wet plate images are amazing to behold even now. So great is the lasting impact of these early photographs that today's photographers actively seek out ways to replicate the look. Some actually use the old equipment and process using the old wet plate techniques. Some use a digital approach

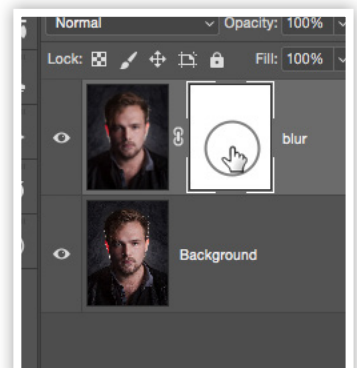
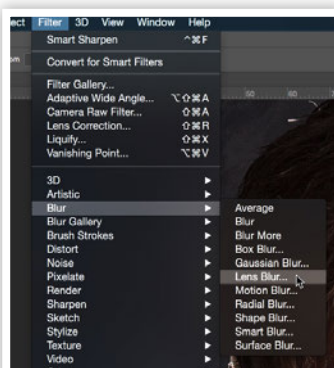
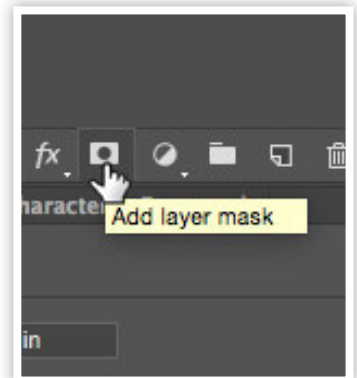
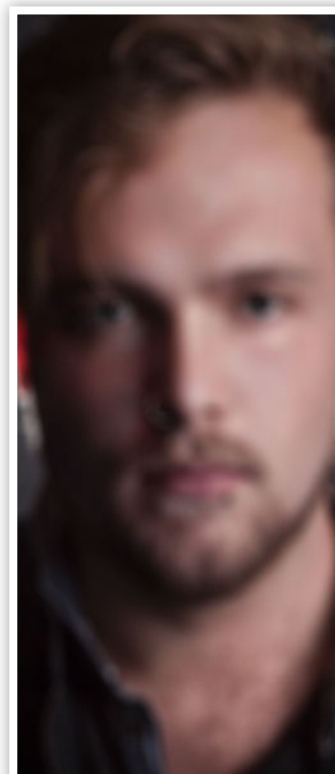
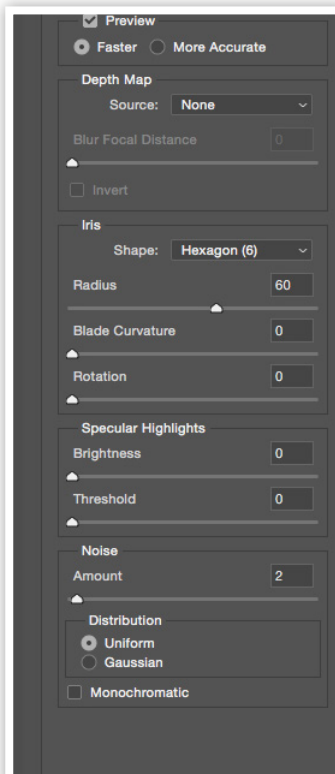
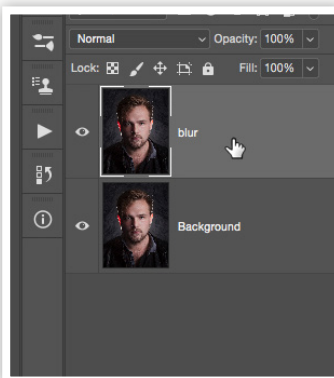
using Photoshop. Safe to say this is only an approximation of the result you would get if you did it for real, but since not to old bellows cameras, darkrooms, plates and chemicals, here is our version of the classic effect given a Photoshop twist.





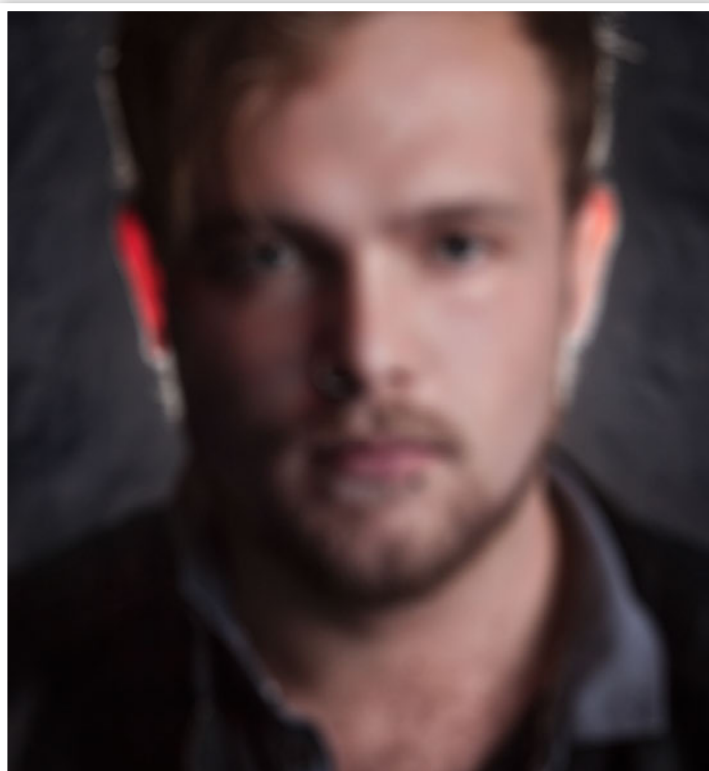
01 We start off with a suitable head and shoulders portrait as typified by so many classic portraits done in this style. Our example is a portrait of Oli. It is 2500 pixels wide by 3300 pixels deep. Our settings are based on an image this size.

02 The first step is to sharpen the image. Go to Filter > Sharpen > Smart Sharpen and set your Amount to about 200%, Radius to 1px and click OK when you are ready to proceed.

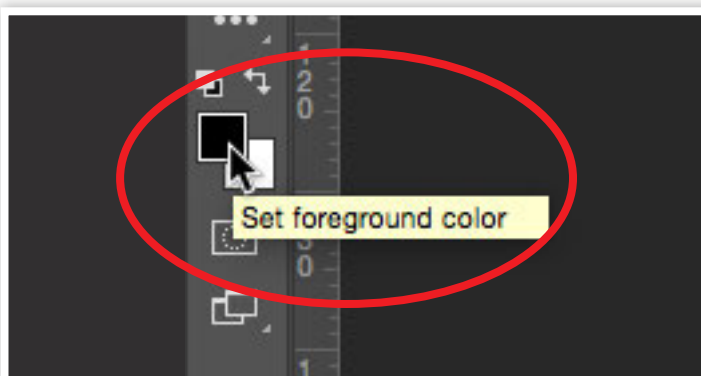
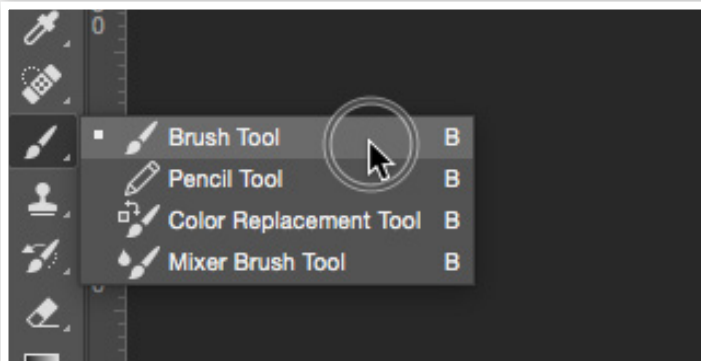


03 Press Cmd + J to create a duplicate layer of this image and name it 'blur'. With the new layer active, go to Filter > Blur > Lens Blur and make your Radius 60 and Noise 2. Click OK and the blur will be applied.

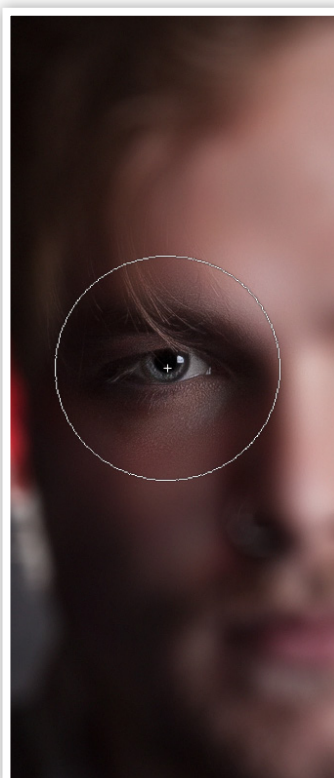
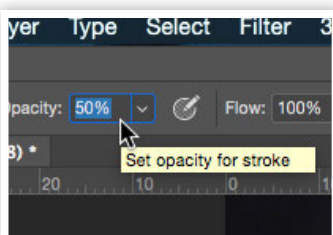
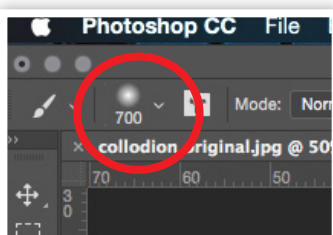
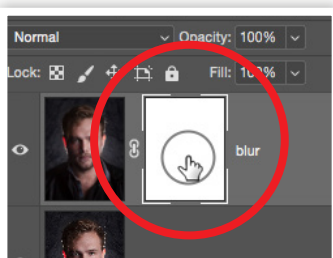
04 With the 'blur' layer active, Click on the Add Layer Mask button at the bottom of the layers palette. A layer mask will be added to the blurred portrait. We now want to combine both the blurred and sharp layers.



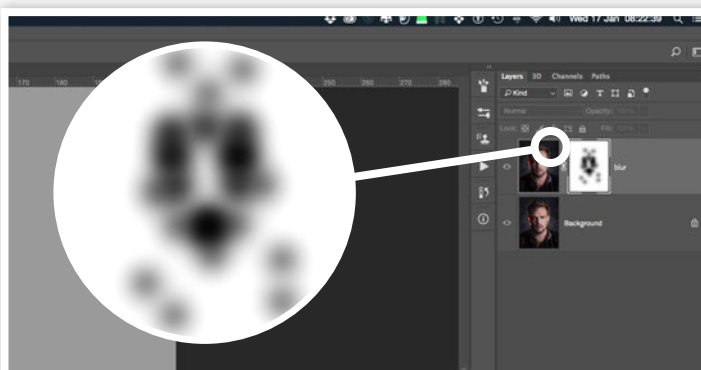
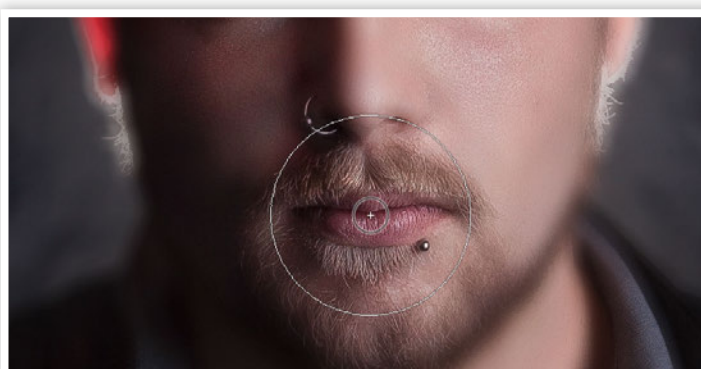
05 Wet plate photographs are characterised by their very shallow depth of field. Normally, just the eyes and some of the facial features are the only things in sharp focus. This is what we are trying to emulate.



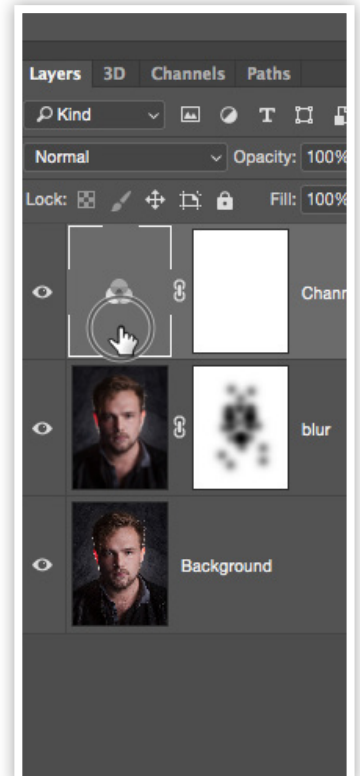
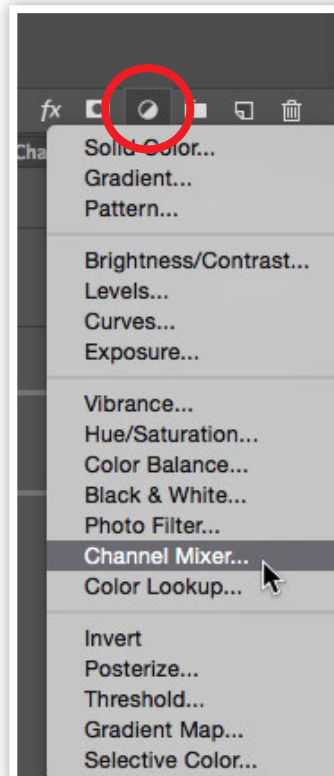
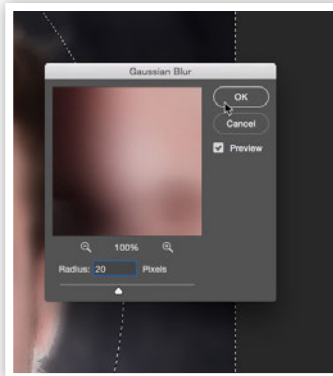
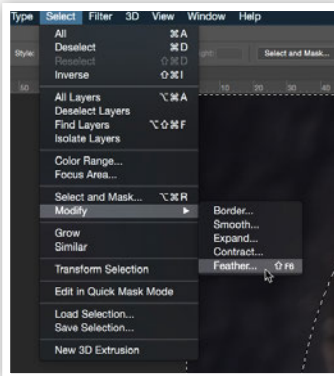
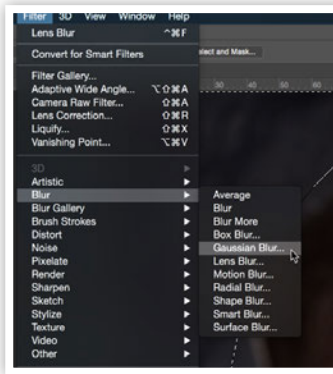
06 Go to your toolbar and select your Brush Tool. Make sure your foreground colour is set as black. You can press D to default the colours to black and white and press X to toggle which is the foreground colour.



07 Click the 'blur' layer mask thumbnail to make it active and use a large, soft, black brush with its Opacity set at 50%, and begin painting in the eyes, nose and mouth of the man's face.

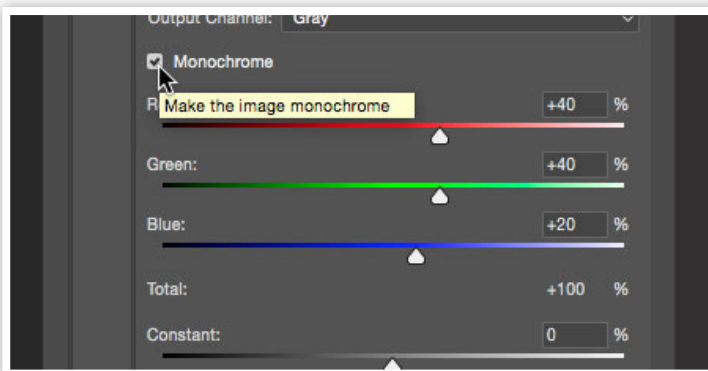
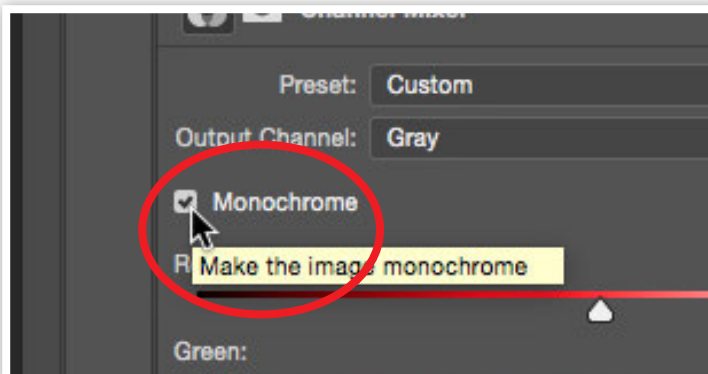


08 With each click of the brush, you will see more and more of the sharp layer below starting to show through. When you are done, you should have a shallow depth of field effect with just the eyes and the face in focus.

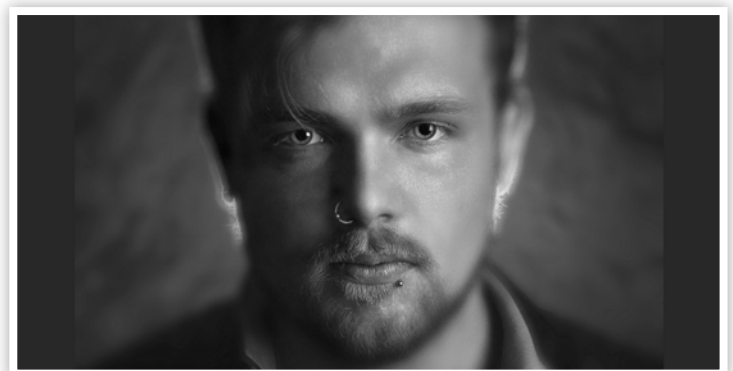


09 You can make the top 'blur' image softer by putting an elliptical marquee (M) around the face, inverting the selection (Shift + Cmd + I), feathering the selection by about 200 pixels and then using Gaussian Blur with a Radius of about 20 pixels.

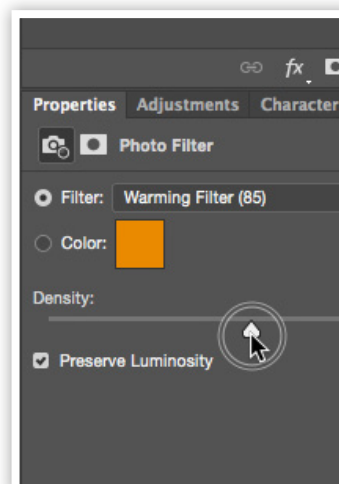
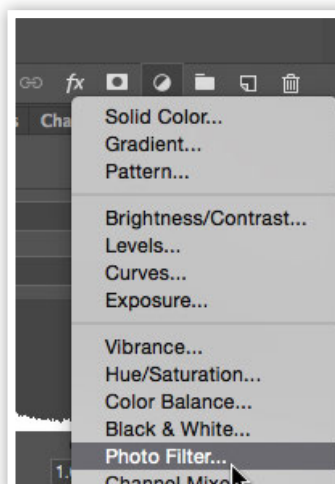
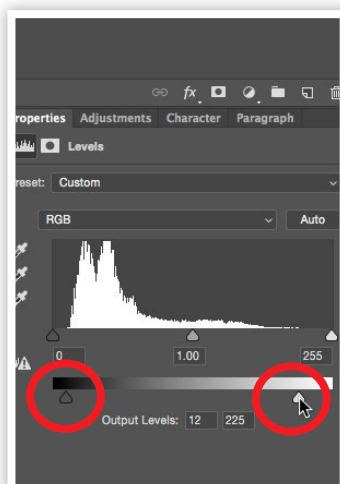
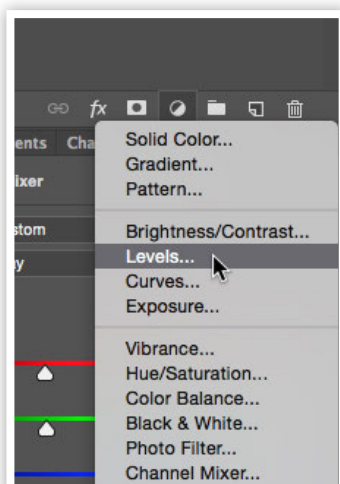
10 Next, click on the Adjustment Layer button and select Channel Mixer from the dropdown menu. Make sure the new Adjustment Layer is at the top of your layer stack. Click on it to make it active if it isn't already.



11 From the Channel Mixer Properties panel, make sure the Monochrome button is checked. Now you need to adjust the Red, Green and Blue sliders to adjust the image to give it a more authentic wet plate look.

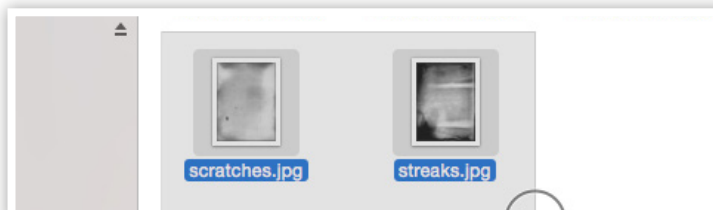
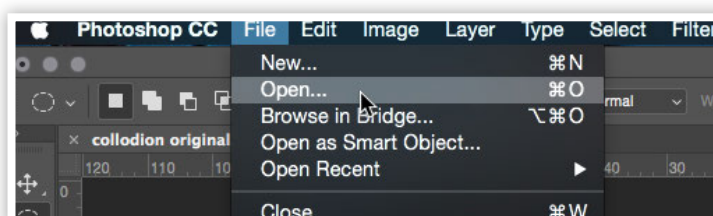
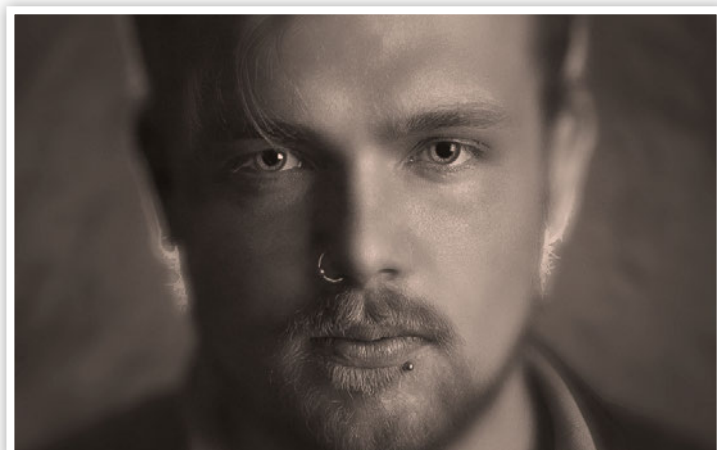


12 This kind of portrait requires that the RGB sliders are adjusted in such a way to bring out texture in the skin. This image requires the sliders be set at Red -35%, Green -34%, Blue +184% and Constant +3%.



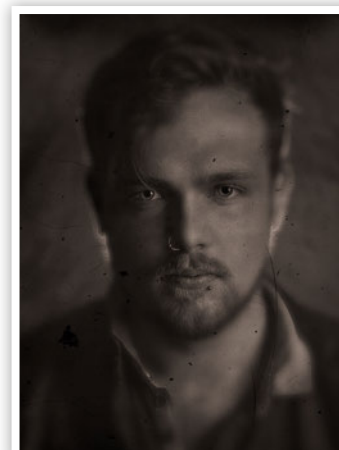
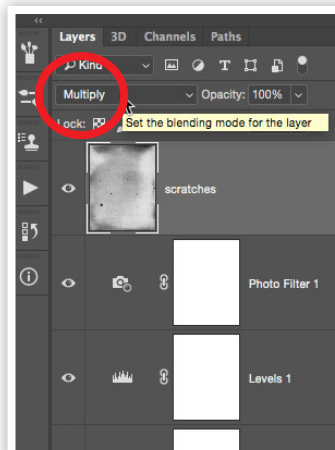
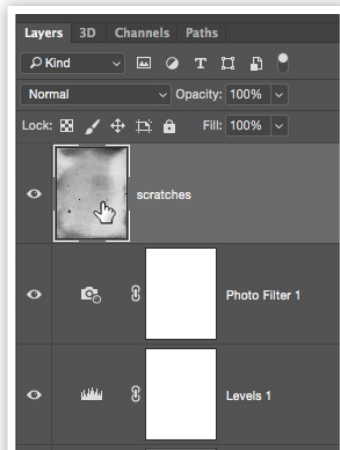
13 Next we need to add a Levels Adjustment layer and adjust the Output Levels to Black 12 and White 225 to reduce overall contrast slightly and brighten the darkest parts of the image by a small amount.

14 Now we can add a Photo Filter Adjustment Layer. Make the filter colour Sepia. Make the Density about 50% and make sure the Preserve Luminosity button is checked. This gives the image quite an antique feel.



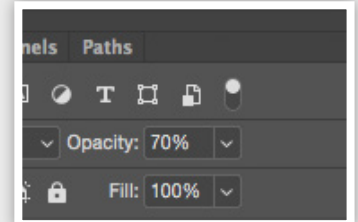
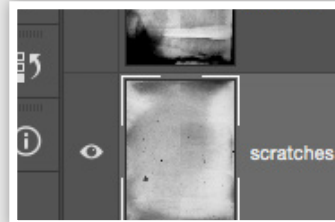
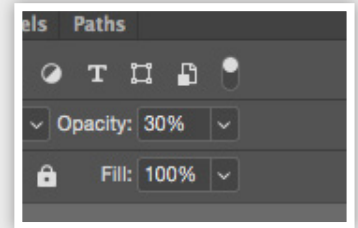
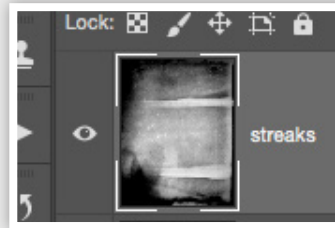
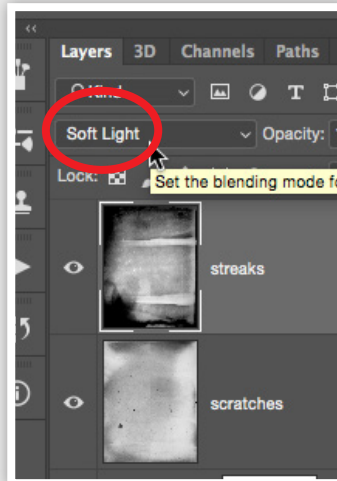
15 At the moment the image looks too new. We need to add some effects to give it a distressed feel. The old wet plate process also had an inherent amount of dust and scratches involved which we can add next.

16 For our example, we will go to File > Open (Cmd + O) and browse to the location of a couple of images that can add the authentic distressed look. We have two examples here called 'scratches' and 'streaks'. Select them both and click Open.



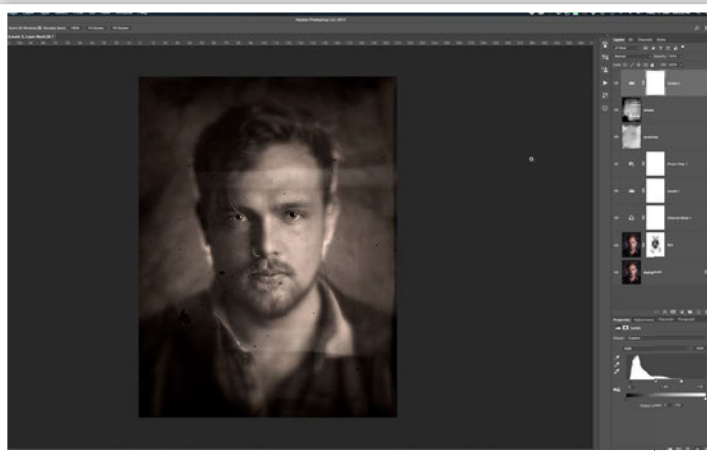
17 Start with the 'scratches' image. Press Cmd + A to select the image and then press Cmd + C to copy it to your clipboard. Click back on your document and press Cmd + V to paste it on a new layer which you can call 'scratches'.

18 With the new 'scratches' layer active, go to the Blend Mode button and set this layer's blend to Multiply. The 'scratches' layer will now blend into the layers below giving a great antique feel to the image.

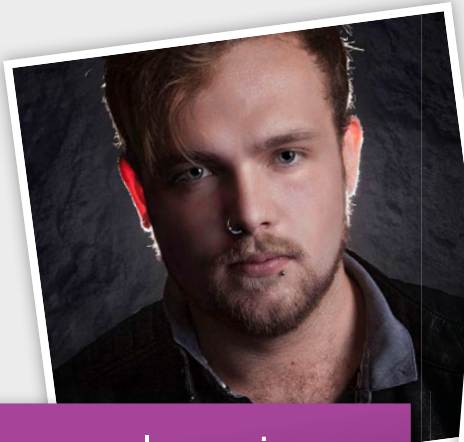


19 Go to the 'streaks' image and copy and paste this one into your wet plate portrait document. This time, set the 'streaks' layer Blend Mode to Darken.

20 Finally, make the Opacity of both the 'scratches' and 'streaks' layers about 45%. This will ensure they don't dominate the image too much but add to the overall effect of an old style wet plate image.



21 After adding a Levels Adjustment to brighten the image a little, there is your final image. A classic photographic process has been given a modern digital update.



Emulate a classic photography style

You can create wet plate portraits with no need for chemicals!





Photo Editing For Photographers

The power to create is at your fingertips. Fire up Photoshop, open up this magazine, download the free tutorial images and follow along. You will soon be editing your digital photos and manipulating images just like a pro. Photoshop is powerful but it is not a scary program to work with. Once you have the basics under you belt, you will realise that if you can imagine it, Photoshop can help create it for you.



Your skills, improved

If you love photography, art or design, Photoshop has the tools to help you take it to the next level, giving you the potential to express yourself more with your artwork than ever before. Such is the appeal of Photoshop, that it is being utilised by beginners and professionals alike the world over. There are no hidden secrets to using it effectively, it's just a case of understanding the basics and taking it from there.

Concise tutorials

Photoshop is a layer-based image editing program that takes the main concepts developed by traditional photographers and artists, while presenting them in a digital form on your computer. Our guide shows you how it all works with a series of tutorials that you can follow at your own pace. These concise tutorials are broken down into easy-to-follow stages, so before you know it, you will be up and running and ready to take on more challenges in no time.

Go further

When you're ready and you're feeling a little more ambitious, we have a series of interesting and diverse projects to help get you in a creative mood. Even though they are more involved, our easy to follow guides will be there every step of the way, as you learn about Luminosity Masking, Monochrome Conversions, image assembly and how to create your own fantastic surrealist artworks.