

Adobe Photoshop

Photoshop Level 3
City of Sydney Library courses



Contents

Select and Mask	3
Layer Masks	4
Clipping Masks	5
Colour Range	6
Retouching	7
Healing Brush	8
Advanced Retouching	9
Blending Modes	10
Mask Background	11
Adjustments	12
Colour	13
Brushes	14
Shapes	15
Motion	16
Sharpening Images	17
Save and Export	18
Exercise	19

© The Council of the City of Sydney. No part of this document may be modified, copied, reproduced, or republished except with the written authorisation of the City of Sydney.

Disclaimer: This document is intended to provide general information only and does not constitute advice for any specific purpose. No representation or warranty, express or implied, is made as to the accuracy, reliability, completeness or suitability for any specific purpose, of this document, or any of its content including, where applicable, any references to external material. To the maximum extent permitted by law, the Council of the City of Sydney expressly disclaims all liability for loss or damage of any kind (however caused, including by negligence) arising from or relating in any way to any use of, or reliance on this document or any of its content.

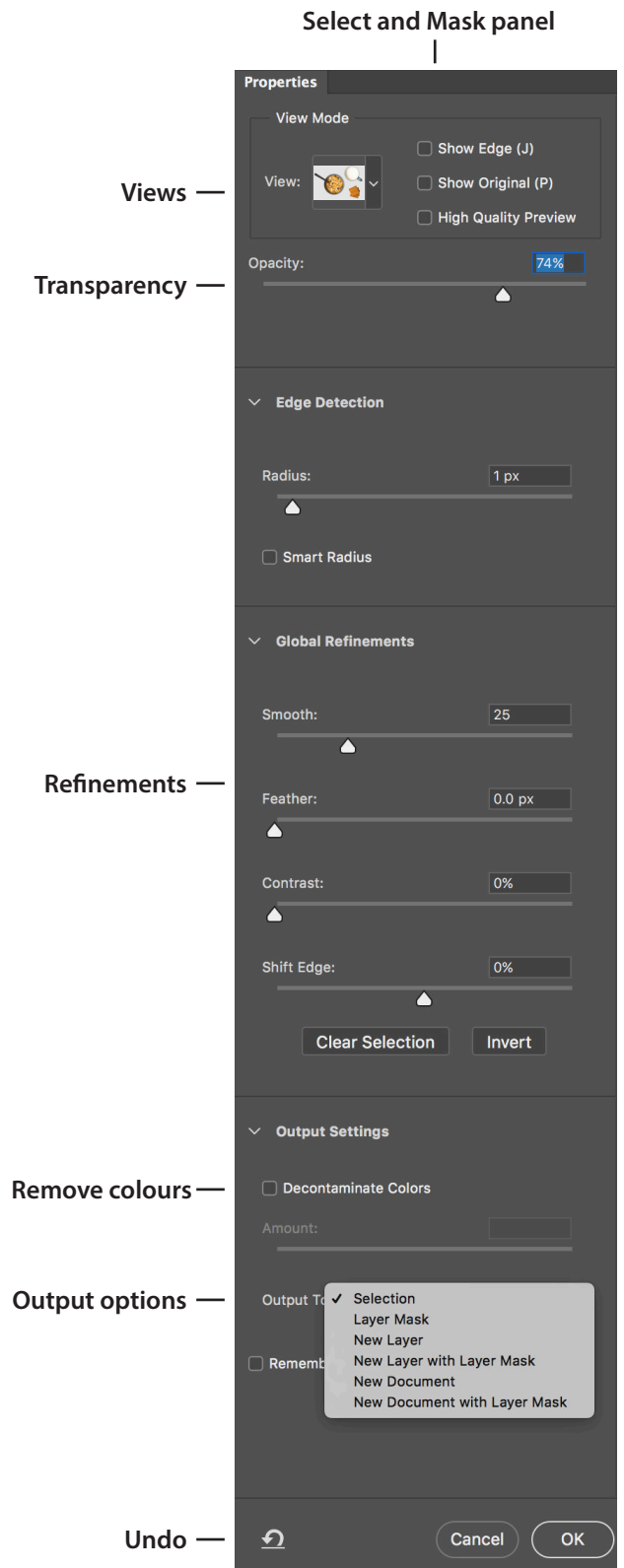
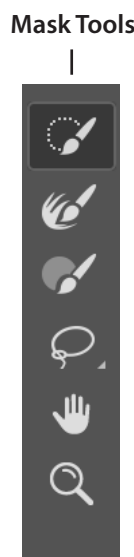
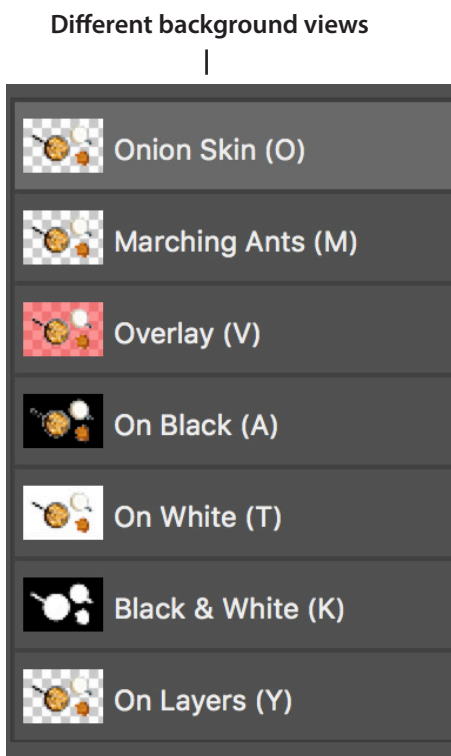
Select and Mask

Refining the Selection

Select and refine complex images with more precision and detail using the select and mask task space. Select hair, smooth edges, decontaminate colours and export.

Select and mask:

1. To refine the selection click select and mask in the options bar. This opens the selection in a new select and mask panel area ready for edge refinements. Note: if you don't see the select and mask button in the options bar make sure you have a current selection and have the selection tool highlighted.
2. Choose a background colour setting that compliments the edge area of the image for refining, view options such as overlay (red), on black, on white, onion skin (translucent) for a more accurate view of your selection.
3. Adjust the global refinements sliders such as smooth, feather, contrast and shift edge to refine and finesse the edge of the image.
4. To finalise choose an output settings > output to > selection as the output type.
5. Click OK to close the select and mask panel.



Layer Masks

Hide Part of the Image Using Layer Masks

Adding a layer mask to an image is a non-destructive technique for hiding or revealing a portion of an image. Masking uses black to hide portions of the image and white to reveal portions of the image. Masks can be added and deleted to a layer preserving the original image. The layer mask is located to the right of the image thumbnail in the layers panel.

Add a mask to the whole image:

1. Choose a layer in the layers panel
2. Click the add layer mask button in the layers panel to add a mask

Select an area and mask:

1. With a selection tool make a selection area in the image that you want to mask
2. Click the new layer mask button in the layers panel
3. The mask is added to your selection

Paint on the mask:

After you add a layer mask you can further adjust the layer mask by painting with black or white on the mask to precisely show or hide portions of the layer.

1. Select the brush tool in the tools panel
2. Select black or white using the foreground and background colours in the tools panel

Black - hide, white - reveal, grey - transparency

Delete a layer mask:

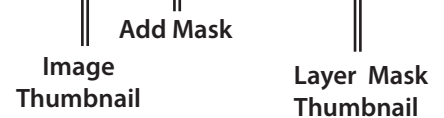
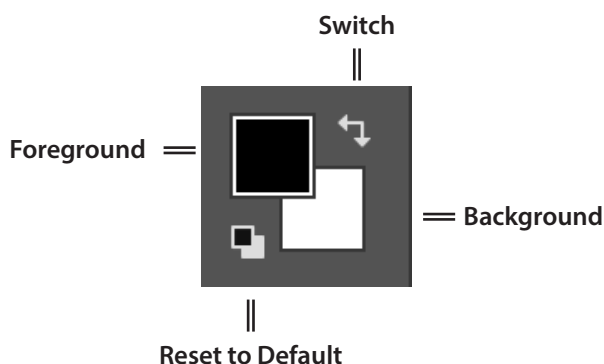
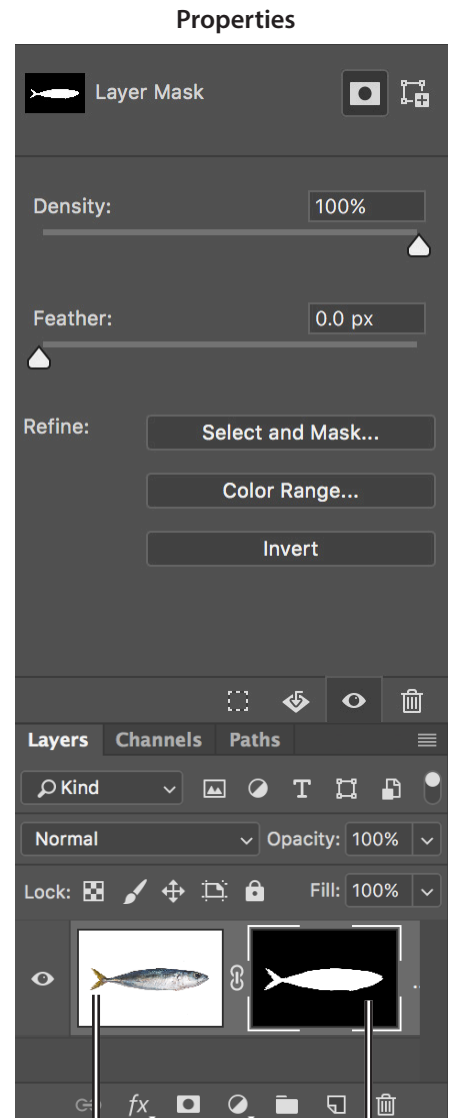
1. Select the mask in the layers panel
2. Click the delete button at the bottom of the layers panel

Invert a layer mask:

1. Select and mask in the layers panel
2. In the properties panel select invert

Select and mask properties:

Select and mask button to precisely adjust the global refinements such as edge detection, opacity, invert and refine the mask feather, smoothness and output settings.



View Modes

Clipping Masks

Use One Image to Cut Out Another

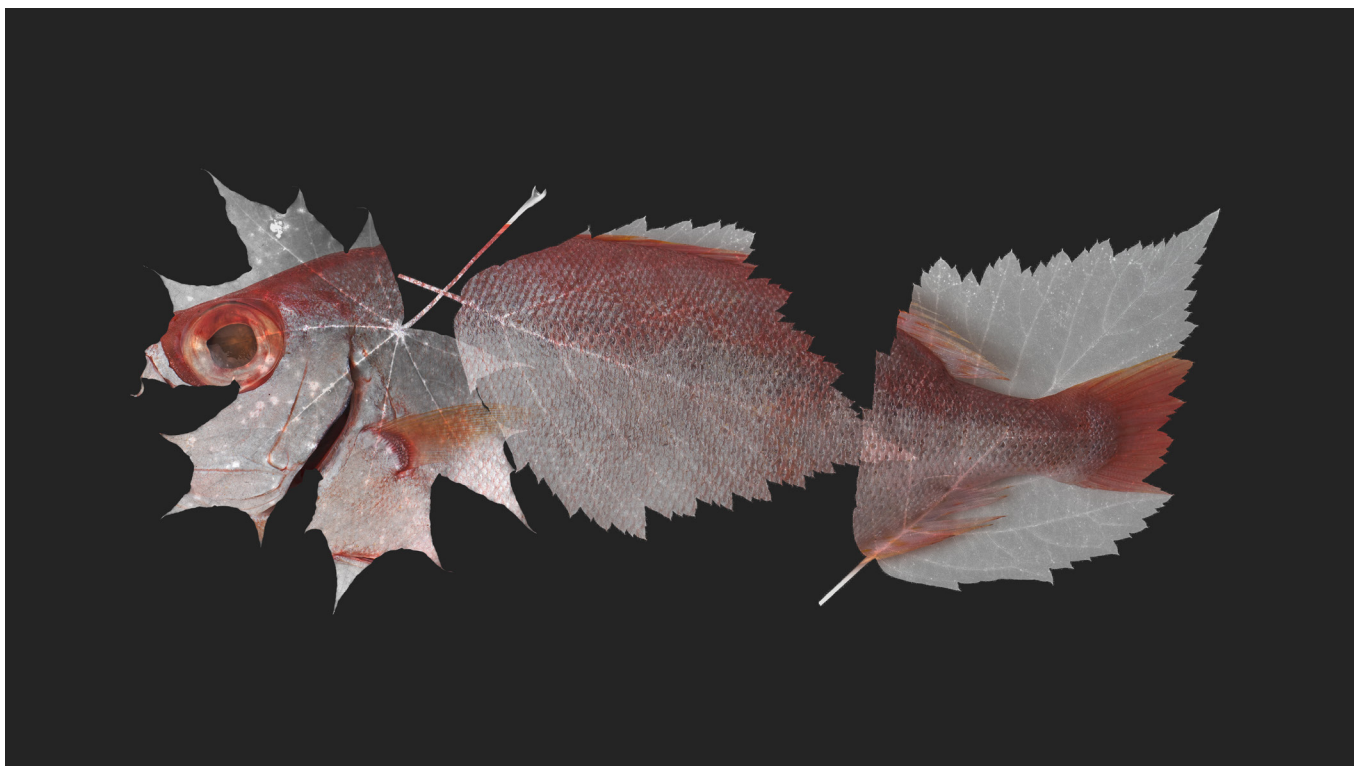
A clipping mask allows you to use the image of the base layer to cut out (mask) the layer above it. The masked base layer has transparent and non-transparent areas that are used to mask the layer above it.

Create a clipping mask:

1. In the layers panel, put the layer you want to clip, one layer above the masked image
2. Select the layer above the masked layer and choose Layer > Create Clipping Mask

Remove a layer from a clipping mask:

In the layers panel select the clipped top layer and choose Layer > Release Clipping Mask



Base Layer

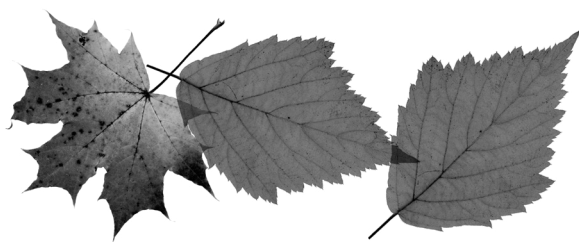
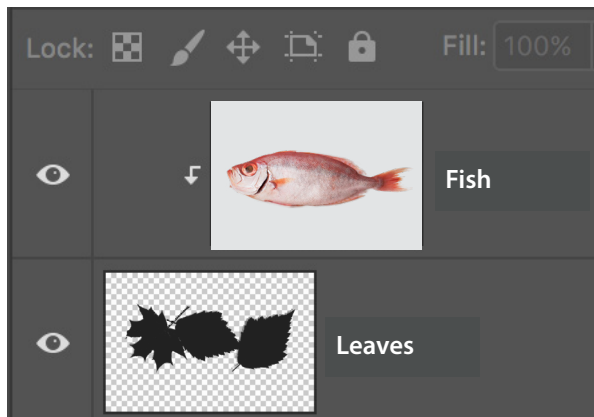


Image clipped inside leaves

Clipped Layer



Colour Range

Select a Range of Colours

The colour range command allows you to select a range of colours within an image. Select a single or range of similar colours. Colour range can select skin tones and can also automatically detect faces.

Sample colours:

1. Choose Select > Colour Range
2. Select sampled colours from the drop down menu
3. Sample the initial colour from the image using the eyedropper tool
4. Add similar colours using the (+) add to sample eyedropper tool
5. Remove colours with the (-) subtract eyedropper tool
6. Adjust the range of colours using the fuzziness slider
7. Click OK

Skin Tones:

1. Choose Select > Colour Range
2. Select skin tones from the drop-down list to select colours of skin
3. Enable detect edges for more accurate skin tones (optional)
4. Adjust the fuzziness slider to broaden the range of colours
5. Press OK

Selection preview option:

To preview the selection in the main image canvas window choose one of the options to help identify the colour selection: none, grayscale, black matte, white matte, quick mask.



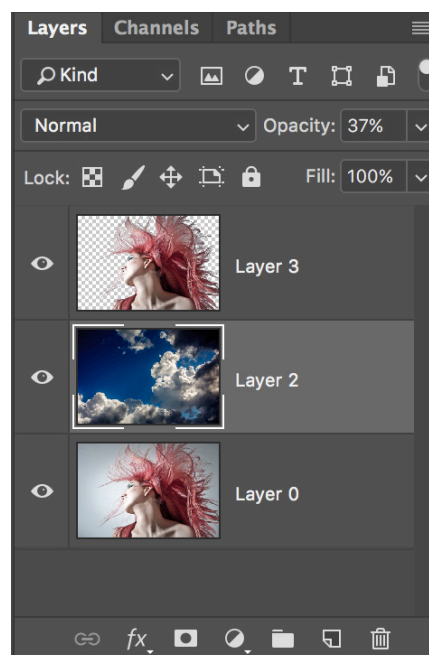
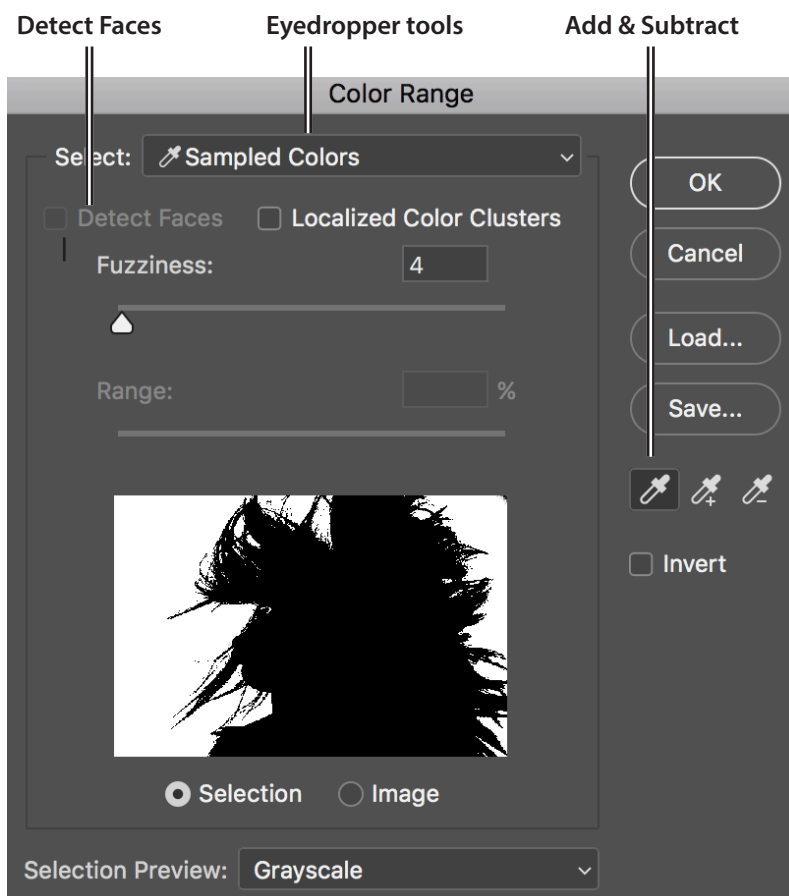
Original Image



Colour Range



New Sky



Retouching

Retouching and Repair Images

The healing brush tools allow you to remove and repair blemishes and imperfections in an image. Newly created pixels match the texture, lighting and shading and blend seamlessly into the surrounding image.

Spot healing brush tool

Using the spot healing brush to remove spots on skin:

1. Select the spot healing brush tool from the toolbox
2. Adjust the brush size in the options bar
3. Click on the spots to remove them
4. Choose between normal or replace mode in the option bar to determine how the brush reacts



Spot Healing Brush

Healing Brush

Healing brush tool

Using the healing brush to copy one part of the image to another:

1. Select the spot healing brush tool from the toolbar
2. Adjust the brush size in the options bar
3. Hold the ALT key down and click to sample part of the image to load the brush
4. Click or drag on the image you want to replace
5. To finish select the move tool

Patch Tool

Replace an area using the patch tool:

1. Select the patch tool in the tools panel
2. Drag in the image to make a selection of the area you want to replace then release the mouse
3. Click inside the selection and drag it to a new destination to replace the selected area
4. To finish either click somewhere else on the image or deselect (Select>Deselect)

Red Eye tool

Remove red eyes in photos of people or animals:

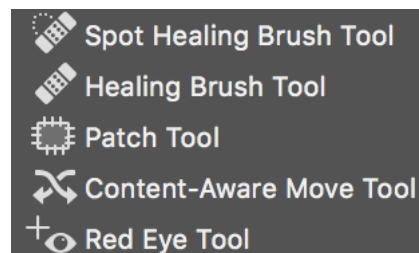
1. Select the red eye tool
2. Increases or decreases the pupil size and darken amount in the options bar
3. Click in the red eye to restore the image

Brush size



To increase or decrease the brush size use the left and right bracket keys []

Healing brush Tools



Before



After



Patch Tool

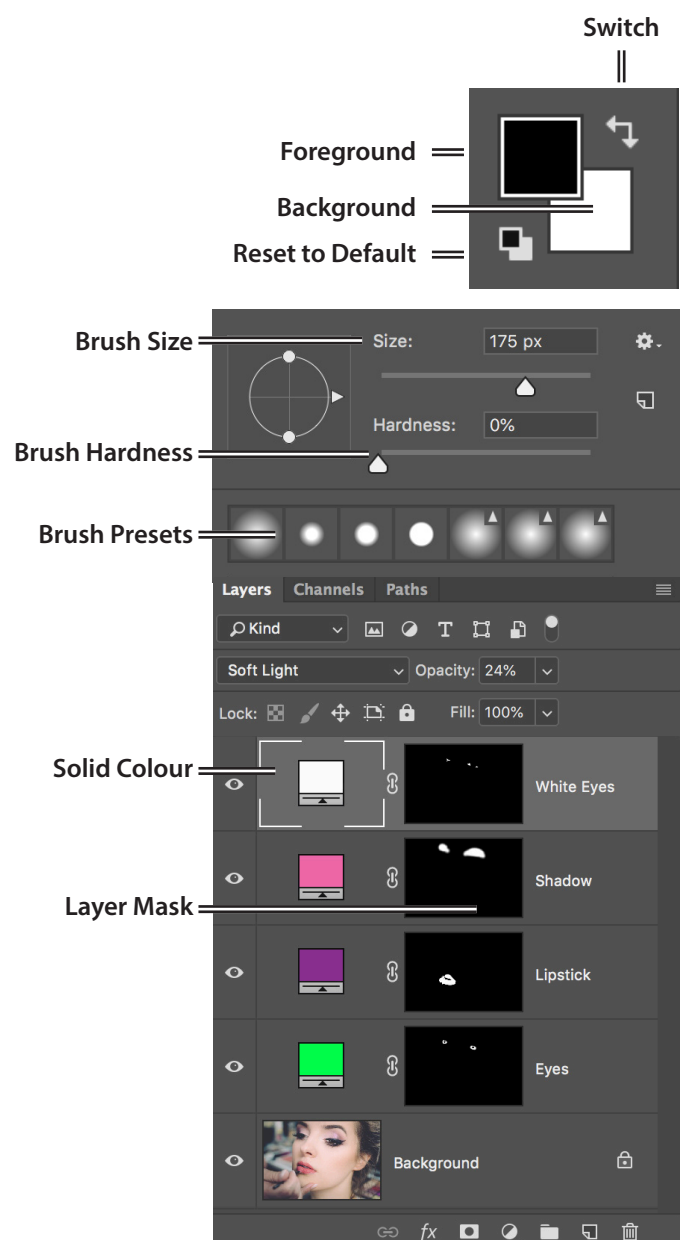
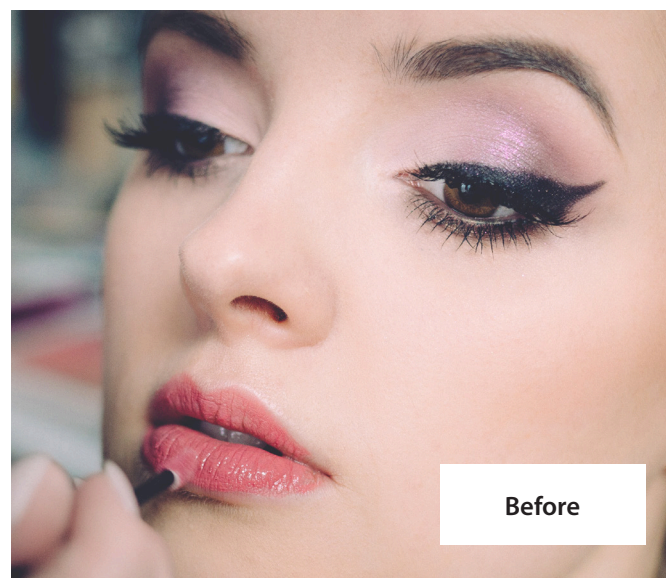
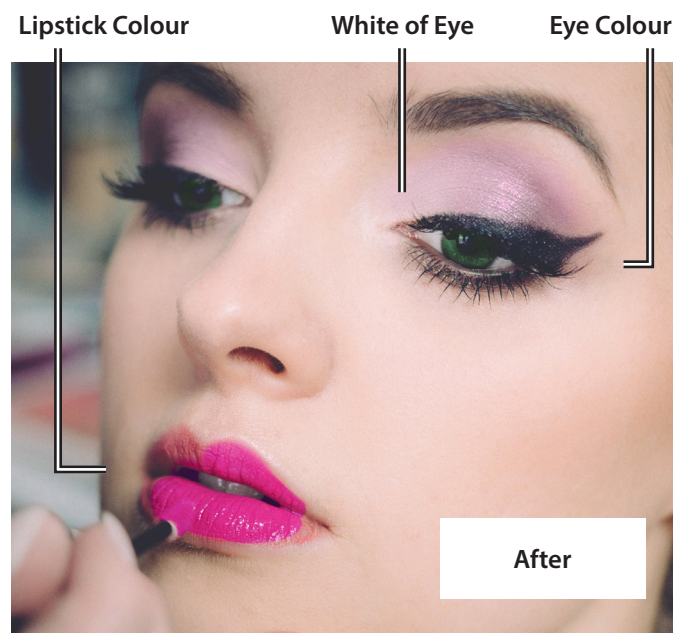
Advanced Retouching

Adding Makeup

There are many ways to recolour an image or part of an image with Photoshop. You could use an adjustment layer such as hue & saturation or colour balance or you could use the paint brush and paint it in exactly where you want it. Each method has its advantages and disadvantages. This example is painting with the brush tool using a solid colour.

Paint in the makeup colours:

1. Open the image you want to work on
2. Choose Layer>New Fill layer> Solid Colour, which has a mask
3. Choose a colour (Lipstick colour)
4. Select the mask and choose invert from the properties panel (the shortcut is CTRL - i)
5. Choose a soft brush and select the layer mask
6. Paint with white to reveal the (lipstick) colour
7. Paint with black to hide the (lipstick) colour
8. Choose a blending mode such as hue, colour, overlay to blend the colour into the underlying image
9. Adjust the opacity to get the final result



Blending Modes

Transparency and Blending Modes

The blending modes allow you to blend the active top layer with layers below in all different ways. With more than 20 different types of blending modes available the best way to get started is to experiment by trying the different modes. The most popular blending modes are screen, multiply and overlay. Blending modes are non-destructive.

Blending modes:

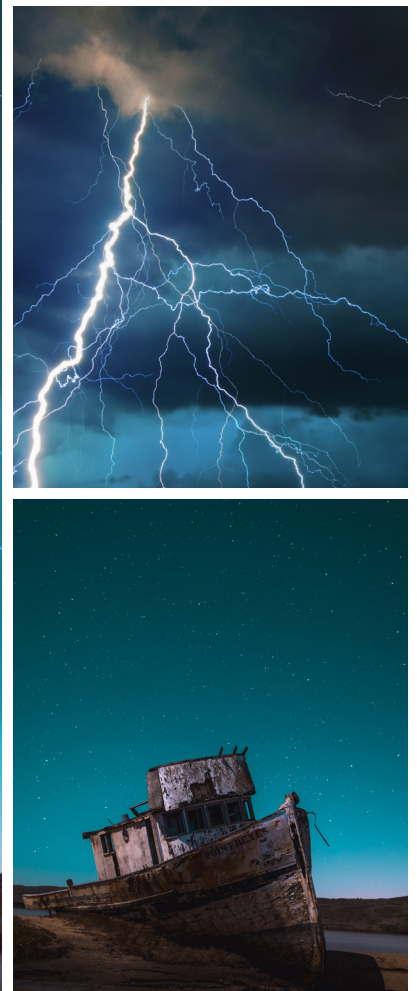
1. Select the top active layer
2. In the layers panel click where it says normal and change the mode
3. To reset the mode put the blending mode back to normal mode

Blending Modes

Screen blending mode



Original images



Mask Background



Adjustments

Adjusting Colour and Exposure

Automatic adjustments - auto colour, auto contrast and auto tone

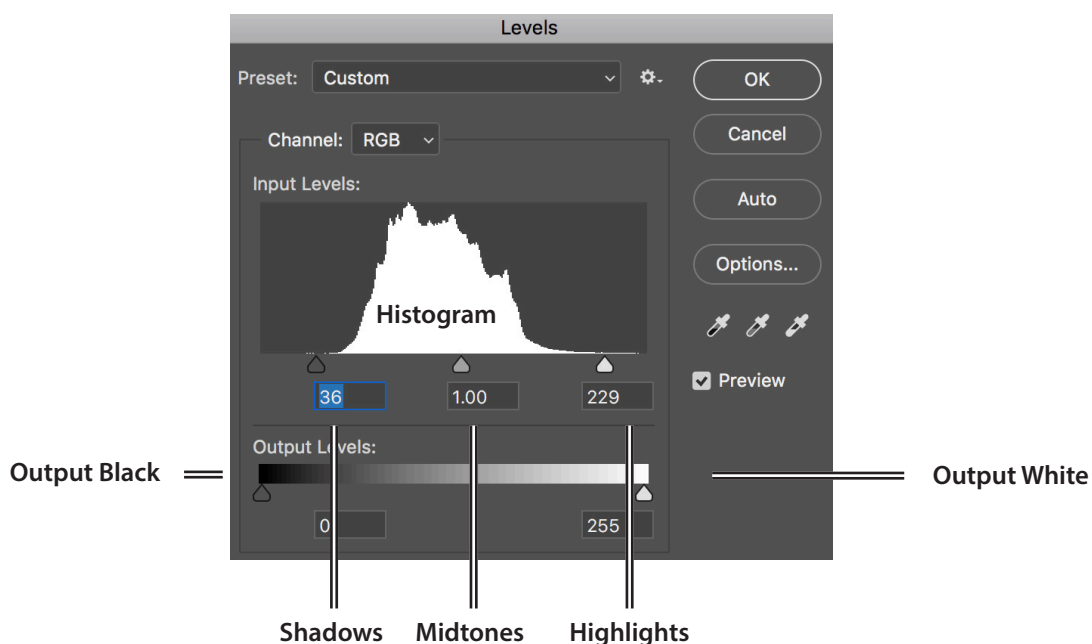
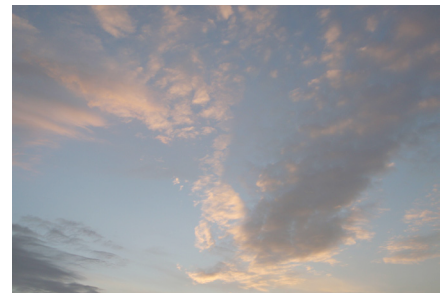
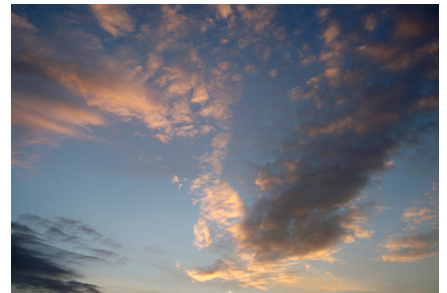
The quickest way to start correcting contrast and colour of an image is to use Photoshop's automatic adjustments, including, auto contrast, auto colour and auto tone. Automatic adjustments are located from the image menu.

- Auto contrast - adjusts image, contrast or lighting
- Auto colour - adjusts the colour
- Auto tone - uses a different method to adjust both colour and contrast

Custom adjustments

You can also adjust the image yourself with a range of adjustments under Image > Adjustments Menu. To adjust the exposure of an image including shadows, midtones and highlights try the levels adjustment. Levels uses the histogram to show a visually representation of the tonal range to help make the correct adjustments. The histogram (white area within the levels control) shows where the shadows (black) and highlights (white) of the image are currently located.

1. Open your image in Photoshop
2. Choose Image > Adjustments > Levels
1. As a starting point move the input black and input white sliders to the ends of the histogram (white area) to adjust the exposure of an image
2. To increase shadows adjust the input black slider to the right
3. To increase highlights adjust the input white slider to the left
4. After you have set the shadows and highlights adjust the mid-tone slider as desired
5. To decrease shadow and highlight adjust the output controls at the bottom



Colour

Creating Colours in Photoshop

Setting foreground and background colours

Photoshop uses the foreground and background colour boxes at the bottom of the tools panel to store colours. Colours can be set when using the text tool, shape tools and the paint brush tools. To set foreground and background colours use either the eyedropper tool, colour picker, colour panel or swatches panel.

Using the colour picker:

1. To open the colour picker click on the foreground or background colour box in the tools panel
2. To set the hue drag the hue slider up or down to choose the colour
3. Drag in the larger colour box to choose the saturation and brightness
4. Alternatively, set exact colour percentage amounts in the HSB, RGB, Lab, CMYK or hexadecimal fields
5. Click OK

Using the Colour panel:

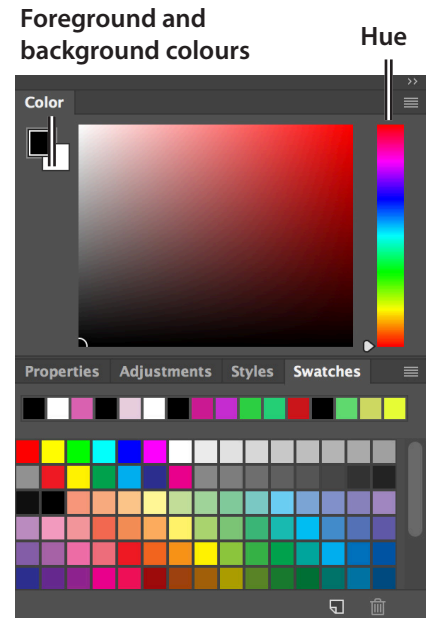
Similar to the colour picker, the colour panel is open by default in the panels dock for quick access.

To pick a colour from the swatches panel:

1. Click on a colour swatch in the swatches panel to change the colour.

Eyedropper tool:

1. Select the eyedropper tool in the tools panel and click on an image to select the foreground colour.
2. You can also use the eyedropper tool when using the colour picker, move the mouse outside of the colour picker and onto the image to sample a colour. The cursor turns into an eyedropper.



Gradient

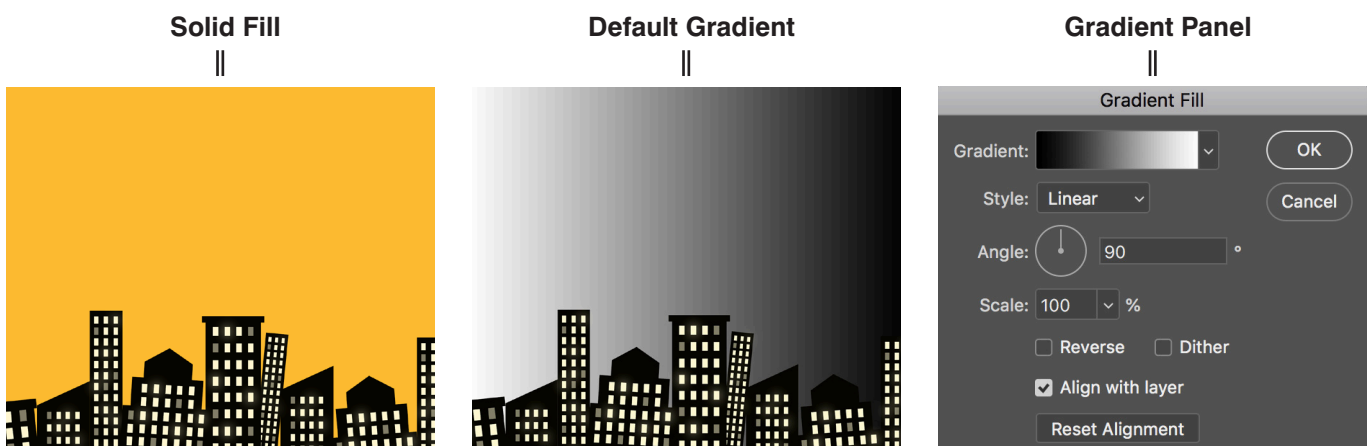
Create a smooth gradual colour change using a gradient fill layer. Gradients use a number of square colour stop points at which the colour changes gradually to the next stop point. You can add and remove colour stop points and set colours for each.

Create a gradient using the gradient layer:

1. Choose Layer>New Fill Layer>Gradient
2. The gradient panel opens where you can set the gradient style such as linear (line) or radial (circle)
3. There are also options to reverse the orientation and scale the gradient

To set the colour of a gradient stop, do one of the following:

1. Click on the gradient colour to open the gradient editor
2. Choose a preset or select the square colour stops in the gradient and set the colours



Brushes

Paint Brushes

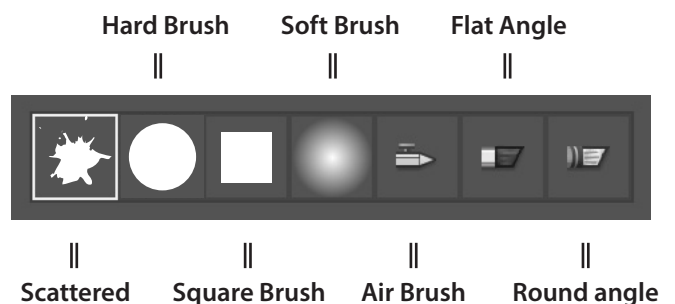
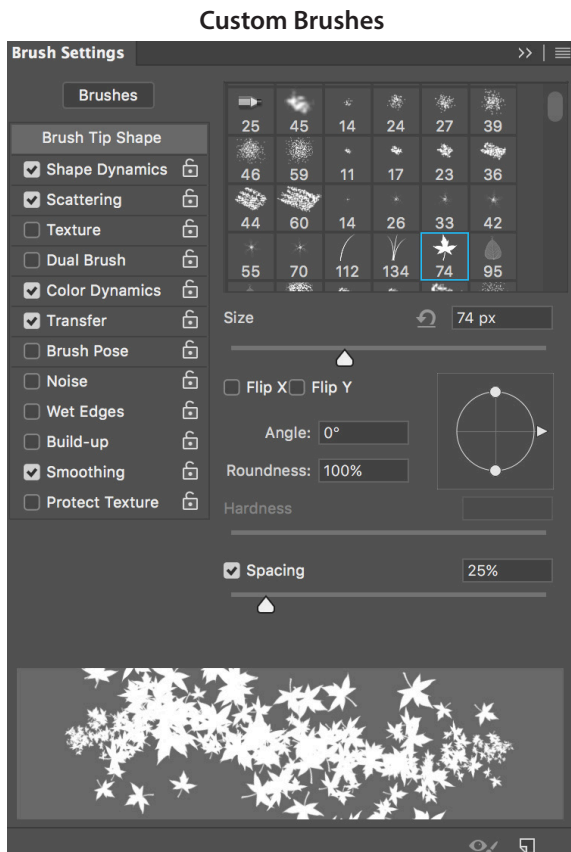
The Photoshop brush tool works just like a traditional paint brush being able to choose colour and type of brush tip. Choose a brush preset from the options bar, set the colour, adjust the size and hardness of a brush. You can also simulate different types of brush tips such as spray painting and scattering as well as adjusting the way the colour flows onto the canvas.

Select a Brush:

1. Select the brush from the tools panel
2. Choose a brush type from the options bar
3. Choose a brush Size []
4. Choose the hardness of the brush
5. Set a flow amount
6. Choose a fill colour from the various colour panels
7. Start painting

Painting workspace:

To see more indepth brush presets and settings choose Window>Workspace>Painting



Shapes

Creating a Shape Layer

Photoshop shapes are mathematical defined objects also known as vector graphics. Vector graphics are resolution independent, which means they can be resized without losing any quality. Shape layers have adjustable paths, fill and stroke colour, stroke width and type options.

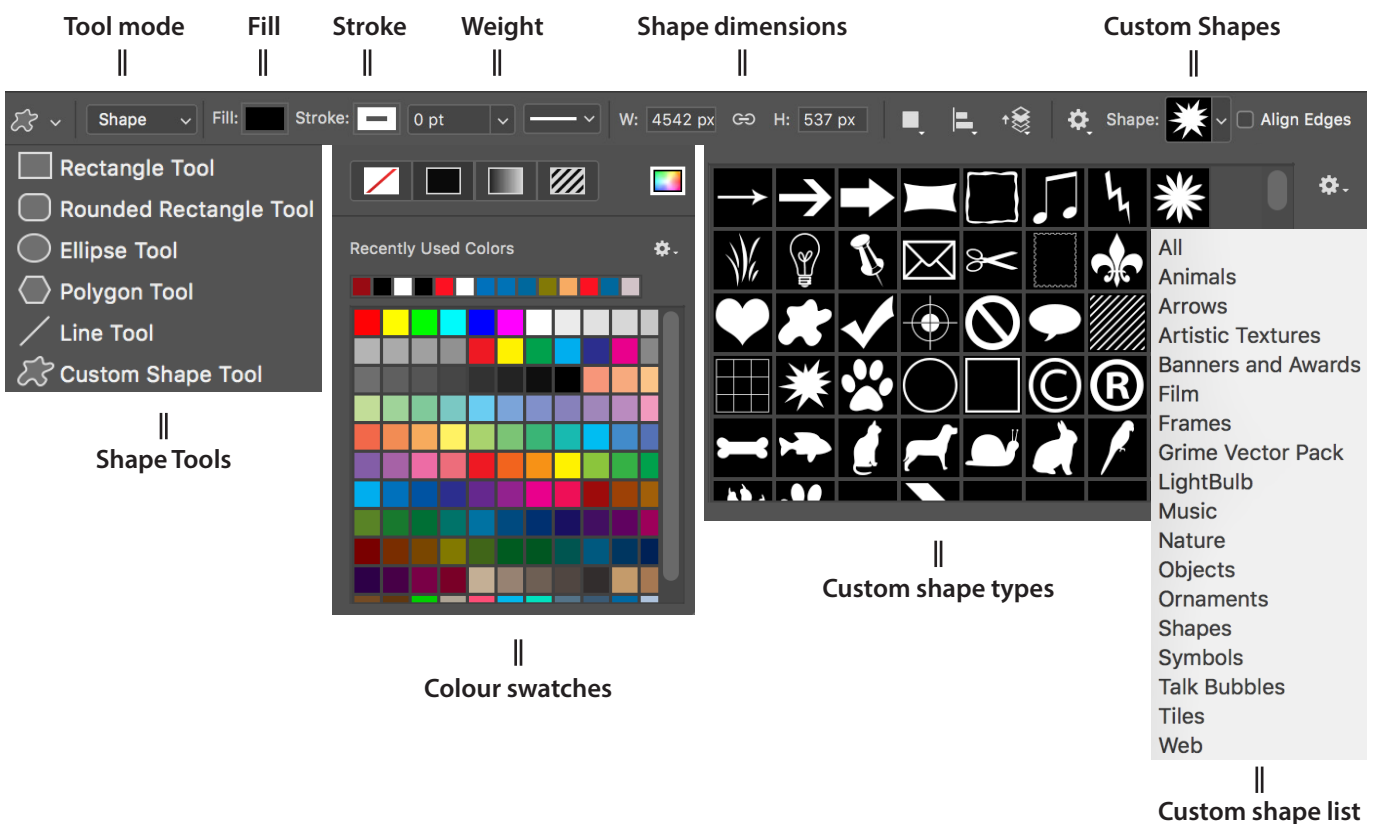
Create a shape:

1. To view the different shape types click and hold on the rectangle tool in the tools panel.
2. Choose a shape (example ellipse tool).
3. Click and drag in the canvas to draw the shape (hold shift to keep the proportions).
4. The new shape layer is created in the layers panel.
5. To adjust shape options such as colour fill and stroke choose from the options bar. Alternatively double-click the shape thumbnail in that layers panel to open the colour picker. Then click OK to apply the colour.
6. To reposition the shape in the canvas, select the move tool and reposition the shape.
7. Adjust transform properties such as scale or rotate, choose Edit > Free Transform or pressing Control+T (Windows) or Command+T (macOS). Then press enter.

Custom shapes

To add a custom shape:

1. Click and hold on the rectangle tool in the tools panel and select the custom shape tool.
2. Choose a custom shape from the drop down arrow in the options bar. To see all the custom shapes that come with Photoshop click on the gear icon to reveal all.



Motion

Create an Animated GIF & H264 Video

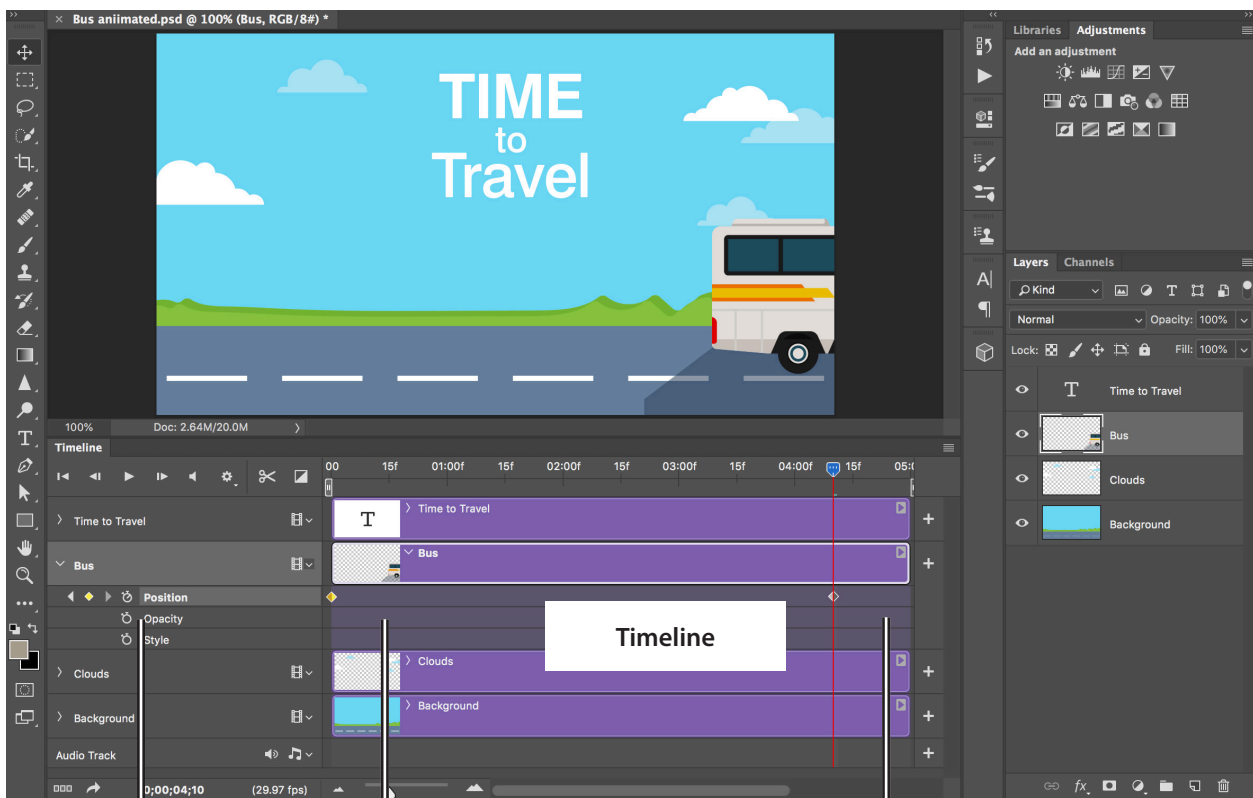
Photoshop allows you to create an export animated GIF's and H264 video files suitable for web banners and online video formats. To create an animation you set keyframes in the timeline panel for a layer property such as position, opacity and style. Start by adding the first keyframe for the desired layer property, then move along the timeline using the current time indicator to a different frame. Then modify the same layer property and Photoshop automatically adds the second keyframe creating an animation between the two keyframes.

Create the timeline animation (Window>Timeline)

1. Create a new document with a video preset size of 1920px by 1080px and arrange the artwork
2. With all the layers selected click the create video timeline icon in the middle of the timeline panel
3. To create the animation add a keyframe at the start of the timeline by clicking the enable keyframe button next to the desired property (such as position)
4. Move along the timeline by dragging the current time indicator to the position you want to add the second keyframe and then modify the property which will automatically add the keyframe

Export GIF and H264 Video

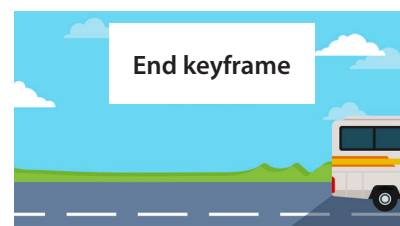
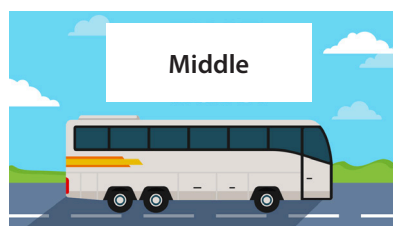
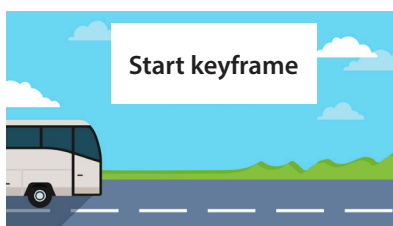
5. To export an animated GIF choose File>Export>Save for Web
6. Choose GIF for the file format and select a looping option at the bottom right of the panel
7. To export a H264 video file choose File>Export>Render Video then select H264 for the file format
8. Press render or save depending on the method used



Enable keyframe

Start keyframe

End keyframe



Sharpening Images

Sharpen an Area or the Whole Image

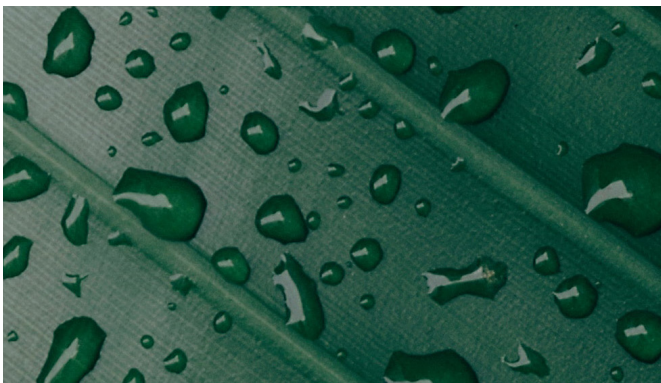
Sharpening increases the contrast of an image creating the illusion that sharpening is occurring.

Sharpen an area with the sharpen tool

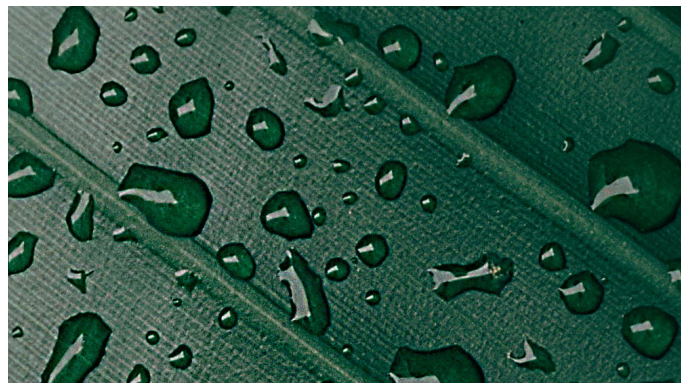
The sharpen tool lets you paint in sharpening to a specific area of an image. To increase the sharpening amount paint again over the same area:

1. Select the sharpen tool
2. Choose a brush tip size and strength
3. Drag over the part of the image you want to sharpen

No Sharpening



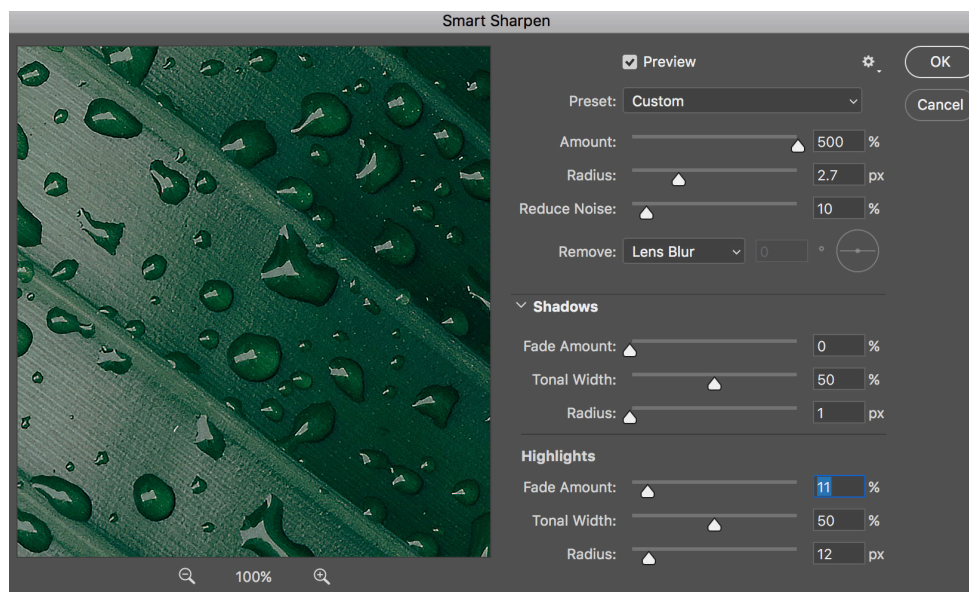
Sharpen Tool



Sharpen the whole image with the Smart Sharpen filter:

1. Select Filter > Sharpen > Smart Sharpen
2. Set the amount of sharpening
3. Set the amount of edge pixels to be sharpened using the radius
4. Set the fade amount to adjust the amount of sharpening in the shadows & highlights
5. Press OK

Smart Sharpen



Save and Export

Save and Export your Document

Photoshop allows you to save and export your artwork to different formats. Saving a Photoshop document as a layered PSD file allows you to save changes to your artwork and re-edit at a later stage. PSD files can contain multiple layers and adjustments making the file size large. Exporting flattens all the layers into a smaller optimised file size ready for the web and print formats.

To save your Photoshop document:

1. Choose File > Save as
2. Name your document a title
3. Choose Format > Photoshop PSD

To export for web:

1. Choose File > Export>Save for Web (Legacy)
2. Choose a file format (Compression formats)
 - JPEG- Best format for photographic images (does not support transparency)
 - PNG-24 - Best for images contain transparency.
 - GIF - Limited to 256 colours, good for line art, or to make an animated GIF
 - PNG-8 - Limited to 256 colours
3. Adjust the compression quality
4. Click save

To export for PDF print:

1. Click File > Save as
2. Choose Photoshop PDF from the format list
3. Choose a name and location, select file-saving options, and click save
4. In the Adobe PDF dialog box, select a PDF preset
5. Click Save PDF



Exercise

Create a Sydney Classical Music Flyer Design

1. Create a A4 size document
2. Add the main image and cut out the fish
3. Duplicate and transform the fish (rotation & scale)
4. Add drop shadow layer style to the fish
5. Add circle shape layer and apply transparency
6. Add the text
7. Export for the web



