# Introduction to Photoshop (for Animation)

Name: _____ Period: _____

This packet will coincide with the lectures, demos, and tutorials we will be doing in class. It will also help you with the Certiport Certification. You will be graded (given points) for this packet and the tutorials; it will also serve as a reference guide-So keep this packet in a safe place!

Photoshop Anatomy: The Workspace

Get to know the key section in Photoshop's workspace.

_____
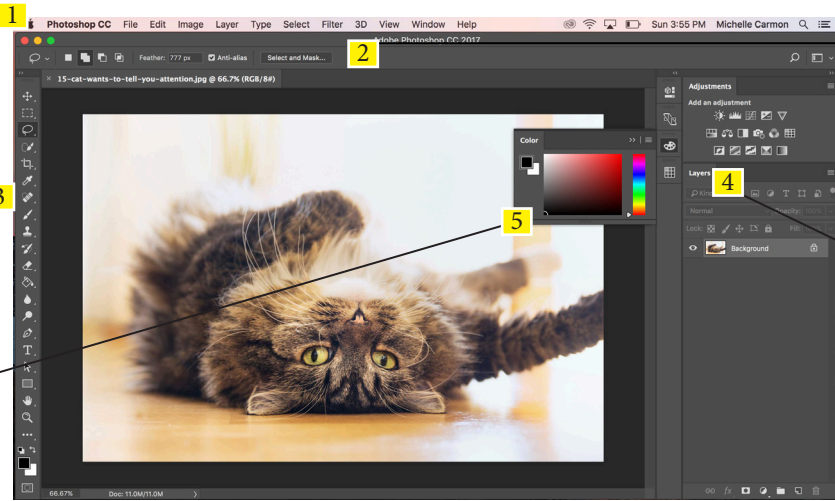
These drop-down menus enable you to use commands and access more tools and filters.

Once you choose a tool to work with, you will be able to change the tool's attributes in the Option Bar.

_____

Here you will find a host of tools designed to enable you to edit and enhance your photos.

By editing in layers you can seamlessly combine different elements together. *You can also make non-destructive changes of an image using adjustment layers.*

The interface takes up very little space, despite the depth of its tools. Many options and controls are displayed in fly-out panels.

*You can customize your Photoshop workspace to suit you or your project -almost everything within your workspace can be repositioned and reconfigured! The two areas can you reset a workspace that has been configured poorly :

_____ or_____

To create a customize a workspace

_____ or_____
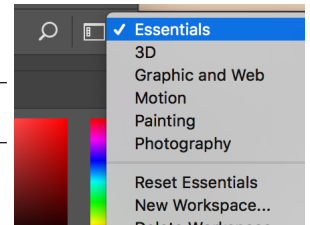
Introducing the Tools Panel

Learn how to uncover more tools and discover the key components of the "Tools" panel.
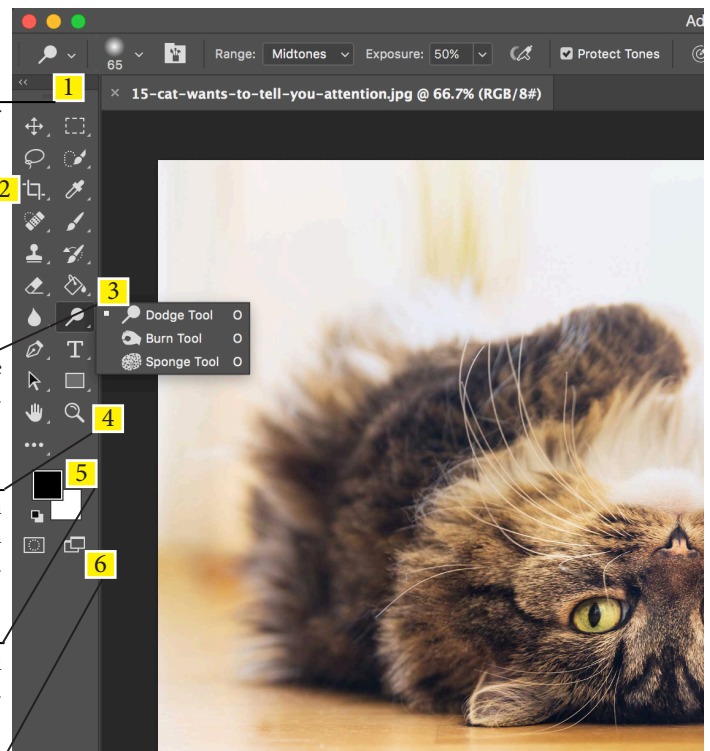
Click the "<<" icon to toggle between a long, single column of tools, or a panel containing two columns.

The tool panel has "20 compartments." This helps keep the panel a manageable size, many related tools share a compartment.

The tools panel contains 66 tools. Click and hold down the mouse and the on compartment to reveal its contents.

The side by side "Zoom" and " Hand" tools work in conjunction with each other. They enable you to zoom in and pan around your picture.

The default foreground and background colors in the tools panel are black and white.

Click here to access the screen modes. Full Screen mode hides all the panels so you can focus on a clutter free image.

Cont. Introducing the Tools Panel

Learn how to uncover more tools and discover the key components of the "Tools" panel.

Selection Tools

Note - After the "selection" Command D will get rid of the marching ants.

Painting Tools

Drawing Tools

Hand Tool

Zoom Tool

Foreground Color

Switch Foreground / Background Color

Set To Default Color

Background Color

Screen Mode

Photoshop Anatomy: The Option Bar

Discover how to modify the behaviors of the currently active tool.

After selecting a tool you can use the option bar to edit attributes and modify the way the tool behaves.

Many tools, like eraser, are brush based tools. The brush preset picker in the option bar enables you to modify the size and softness of the tool's brush tip.

This icon opens the brush panel. Similar to the brush preset but you can change many more of the tool's attributes.

You can click the mode drop down menu to change the way the brush tip behaves.

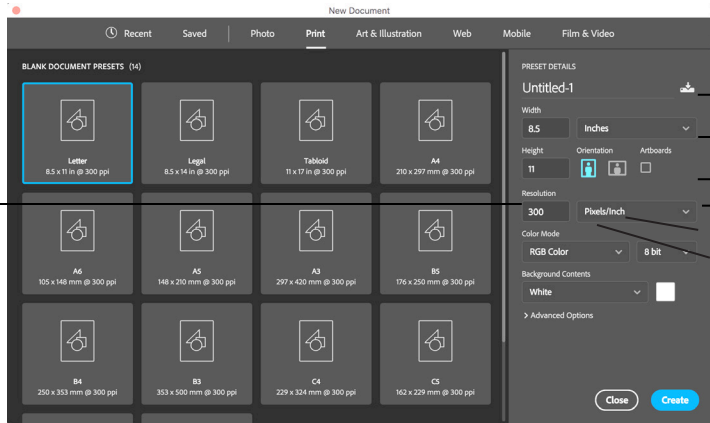This option enables you to reduce the intensity of the tool so you can perform more subtle edits.

Some tools have unique option, such as the eraser's erase to history box.

Working in Photoshop

To create a **new document** in Photoshop by 1.)_____or 2.) _____.

Resolution

Choose 300 dpi for print the project

Or _____dpi for screen.

*All files will be labeld_____otherwise you will loose 5 points.

To **open** a file in Photoshop by: 1.)_____or 2.) _____.

To **save** a file in Photoshop by: 1.)_____or 2.) _____.

Save early, and save often…

Photoshop crashes all too often on these computers. Get in the habit of saving frequently to spare yourself some grief.

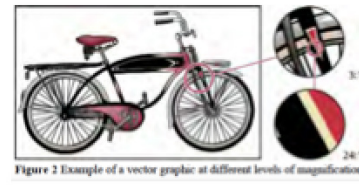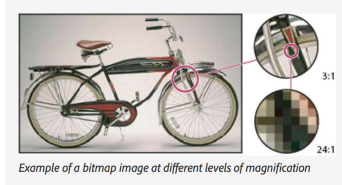What is the best file format to save your work?

.psd - _____.

.jpeg - _____.

.tiff / .png - _____.

Cont. Working in Photoshop

Bitmap or Vector Images

Bitmaps are composed of

_____,
they tend to scale poorly. That is,
when you try to increase their
size, their edges become blurry.

Example of a bitmap image at different levels of magnification

Figure 2 Example of a vector graphic at different levels of magnification

Vector images, on the other
hand, scale well, because they
rely on _____
_____to determine
their appearance.

Image Size and Cavas Size Explained

These are two essential settings that can also be two major cause of confusion!

This section shows you your
photos current size and the
units of measurement.
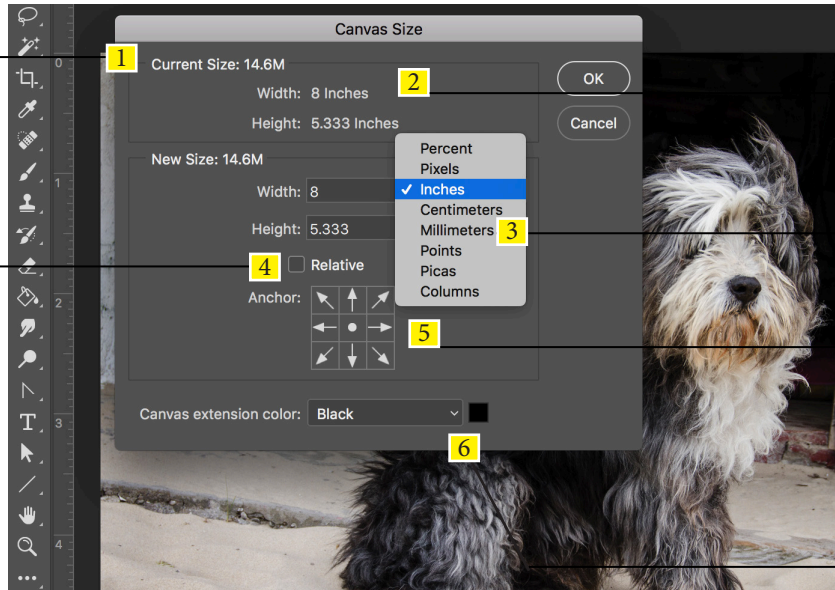
If you leave this unchecked,
the values you type into the
boxes will set the absolute
canvas size. If you check this
box, you type in the amounts
you want to add to the current
size, which is often the easiest
option if you're adding a
border, for example.

Canvas Size

Current Size: 14.6M
Width: 8 Inches
Height: 5.333 Inches

New Size: 14.6M
Width: 8
Height: 5.333

☐ Relative

Anchor:

Canvas extension color: Black

Percent
Pixels
✓ Inches
Centimeters
Millimeters
Points
Picas
Columns

OK
Cancel

If you increase the canvas size you create
empty (background) space around the
photo. If you reduce it. you crop off the
edges of the picture.

You can set the new canvas size in
percentage, pixels, inches and etc.

If you leave the center box selected the
extra canvas area is extended equally
around the image, but you can extend the
canvas from the left, right, top or bottom
or from any of the four corners.

This is where you choose the color for the
canvas extension. In our example we've
chosen black to create a black border.

This is for information only. It tells you the image file size
in its uncompressed form.

If you leavethe Resample box unchecked, this too is for
information only. It will display the current image size
according to the units of measurement you choose for the
width and height.

This offers preset image sizes for different purposes:
on-screen display (the top section), regular office paper
sizes (the next section) and common photo print sizes (the
section below). These presets will automatically check the
Resample box because they need to change
the number of pixels.

The chainlink indicates the aspect ratio is locked.

Image Size

Image Size: 103.4M ⚙.
Dimensions: ⌄ 7360 px × 4912 px
Fit To: Original Size

Width: 24.533   Inches
Height: 16.373   Inches
Resolution: 300   Pixels/Inch
☑ Resample: Automatic

Cancel   OK

When the Resample box is unchecked, Photoshop achieves
the dimensions you ask for by adjusting the resolution.
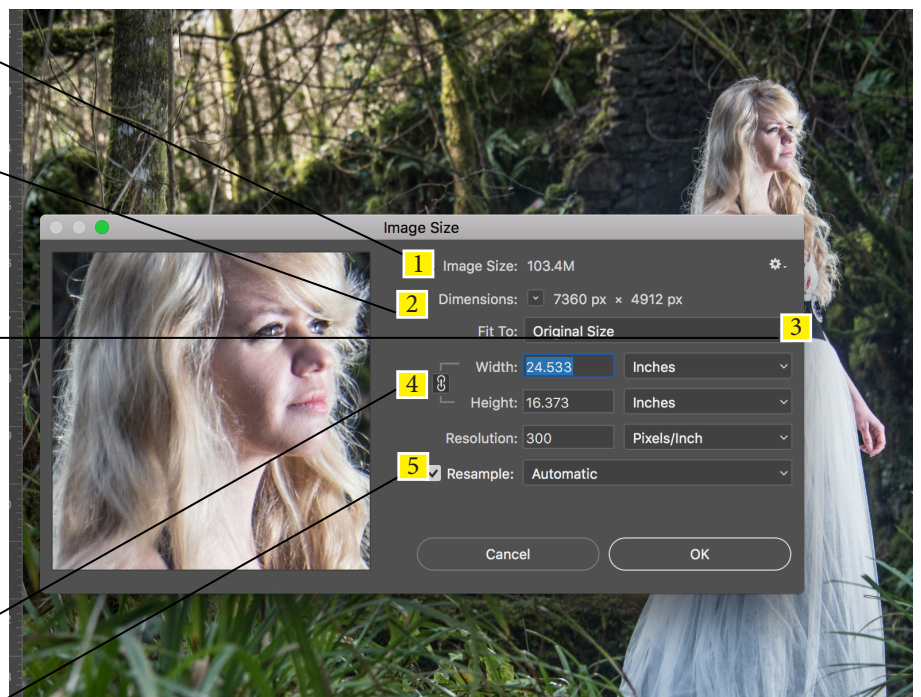
Introducing the Layers Panel

The layers panel is central to most creative photo projects. Get to know the key features of the versatile layers panel.

Like the levitating island, the layer panel can float anywhere in the workspace. Just click on the tab and drag it out of the panel.

By changing layer 3 blend mode to overlay, we are able to make the painted shadows darken the ocean's color while preserving the lighter tones = appearing more realistic.

These useful layer based tool enables you to change the color and tones on the layer below.

Each layer thumbnail provides a preview of the contents. The transparent sections of the layer are indicated by a checkered pattern.

Once you selected a layer, you can adjust the opacity to make it translucent.

By applying a black to a layer mask you can hide the corresponding pixels on the attached layer. White strokes o the mask enable you to reveal hidden content.

You can double click the layer's "lock" icon to unlock the layer. *You should always duplicate the layer thus having the "background" as a the original file.

Some important Photoshop layers short cuts and task to know are:

A _____ grid shows the transparent parts of any layer; allow the layers beneath that layer to show through.

You can show and hide each layer in an image by clicking on its corresponding _____ icon in the layers palette.

Rename layers by _____ on the layer name.

Duplicate a selected layer by pressing _____.

Select multiple layers by holding down _____ and clicking the layer names.

Rearrange layers by _____ the layer above or below other layers.

Create a new layer by pressing Shift-_____. This will bring up the New Layer dialog box.

To rasterize a layer by _____or _____.

To make a layer a smart object by _____or _____.

1. Introducing the Layer Panels Tutorial:
- ☐ Organize Your Layer Efficiently (1)
- ☐ Photoshop Layers (2)
- ☐ Be Creative with Blending Modes (3)

The Power of Adjustment Layers

With adjustment layers you can stack up as many reversible, non-destructive image adjustments as you like.

Adjustment layers in Photoshop provide a quick, non-destructive way to edit and make changes to your photos. Adjustments layers appear as actual layers in the layers palette made on top of the layer. In the bottom of the layers palette click on the adjustment layer icon You can also make adjustments by going from the Menue>Images> Adjustment but image adjustments are _____ _____.

The different types of adjustment layers:

*Levels - _____

*Curves - _____

Color Balance - _____

Brightness and Contrast - _____

Black and White - _____

Hue Saturation - _____

Channel Mixer - _____

Gradient Map - _____

Photo Filter - _____

Posterize - _____

2. Adjustment Layer Tutorials:

☐ The Power of Adjustment Layer(1)
☐ Basic Fixes with a Levels Layer (2)
☐ Master Curves in Photoshop (3)
☐ Selective Hue/Saturation Tweaks (4)
☐ Convert Color Photos to Mono (5)
☐ Adjustment Layer Masks in Action (6)

Add Effects in Layer Styles

Enhance your photos with simulated depth and lighting effects.

To add your own layer effects, and create your own styles, go to _____ or double click on the layer. This will bring up the Layer Style Options.   Layer styles are _____ _____ that can be quickly and easily applied to _____ layers in Photoshop to drastically change the appearance of something in very little time. They can be preset, customized, or even saved and used for later.

Layer Effects Styles can be built with the following effects:

Drop Shadow – _____

Inner Shadow – _____

Outer Glow - _____

Inner Glow – _____

Bevel and Emboss - _____

Satin - _____

Color Overlay - _____
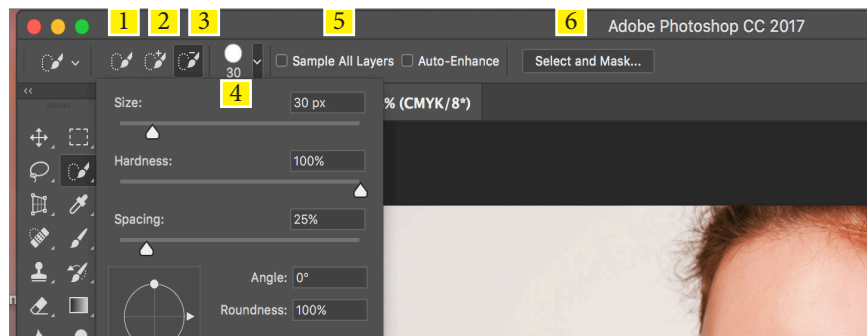
Gradient Overlay - _____

Pattern Overlay - _____

Stroke - _____

> 3. **Add Effects with Layer Styles Tutorial:**
>   ☐ Add Effects with Layer Styles

The Selection Tools

Selections are the cornerstone of creative compositing.

1. _____
Creates a selection marquee independent of any previous selections you may have made. With this highlighted, you can begin brushing over your subject.

2. _____
Once you've created your initial selection, the Quick Selection tool will automatically change over to this option that allows you to add further areas.

3. _____
Enables you to remove unwanted areas from your selection. Select it directly from the Options bar, or hold down Alt to activate it.

4. _____
Gives you access to options such as Diameter , Hardness, Spacing and Shaping that will customize the brush tip of the Quick Selection tool.

5. _____
Check the box to sample pixels from all layers in the document simultaneously; uncheck it to sample pictures only from the currently selected layer.
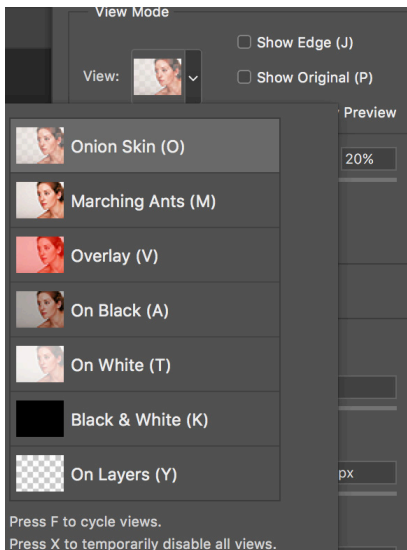
6. _____
The Select and Mask button will give you a variety of choices for defining the work you've already done with the Quick Select ion tool.

_____to restore the image to its original state.

_____will take you back one step.

_____to access your document's history and undo changes.

The Selection Tools Continued

View Mode

•**Onion Skin** (O): Visualizes the selection as an animation-style onion skin scheme.

•**Marching Ants** (M): Your selection will be surrounded by marching ants.

•**Overlay** (V): Your selection will be overlaid by the layer mask that default color is light red.

•**On Black** (B): In this mode the area that is not selected is filled with black color. It gives you high contrast so its easy for you to select the image.

•**On White** (W): Just opposite of "on black" mode. The area that is not selected will be filled by white color.

•**Black & White** (K): In this mode the area that is selected will be filled by white color and that is not selected will be filled by black color.

•**On Layers** (L): In this mode the area that is not selected will becomes transparent. Note that you may see check board pattern. That pattern indicates the transparent layer.

Once you have chosen you "view mode," you need to play with the slides till it looks good.

Edge Detection

•**Smart Radius**: By turning this setting on, Photoshop will decide weather the selection is hard (selection of table, chair) or soft (hair, fur). I totally recommend you to turn on this setting every time.

•**Radius**: It determines how far should your refine edge tool should go to refine your edge.

Global Refinements

•**Smooth**: It smoothens your selection. I recommend not to use it while selecting hair, fur, trees(in this case).

•**Feather**: It softens the selection. It helps a loot when you are creating vignette effect to your photo.

•**Contrast**: This setting sharpens your edge even if you soften it by using feather or smooths it by using smooth.

•**Shift Edge**: This setting shifts your edge. It can either contract your selection or expand your selection. By adjusting these 4 adjustments you can make your selections ever better.

In the **Output Settings** section you see various drop down menus.

•**Selection**: Basically when you press OK after refining the edge, then your output will be just a selection in your activated layer. It leaves you with marching ants.

•**Layer Mask**: Add a layer mask to the selection.

•**New Layer**: Creates a new layer that contains only the selection. It deletes the background.

•**New Layer with Layer Mask**: Creates a new layer with layer mask.

•**New Document**: Create a new document/file that contains only the selected image.

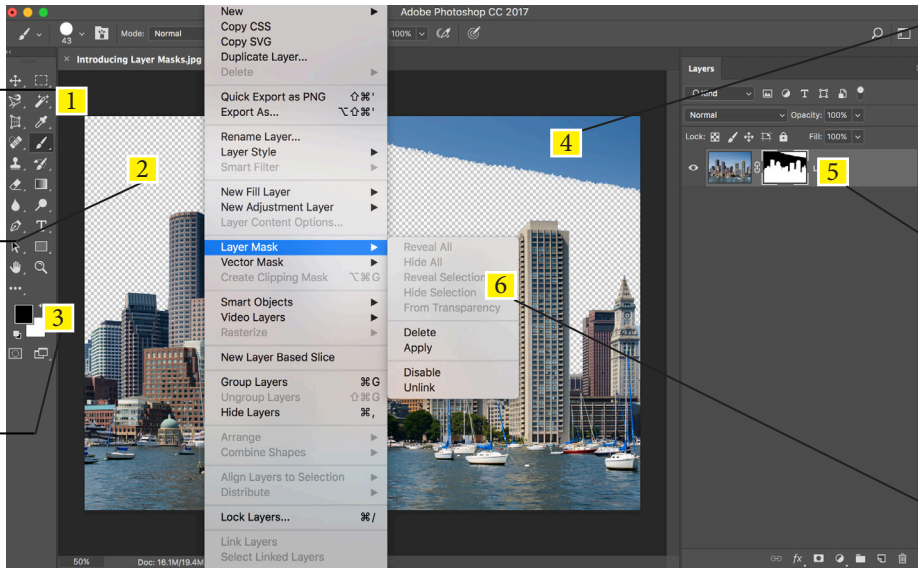•**New Document with Layer Mask**: Creates a new document with layer mask that only contains the selected image.
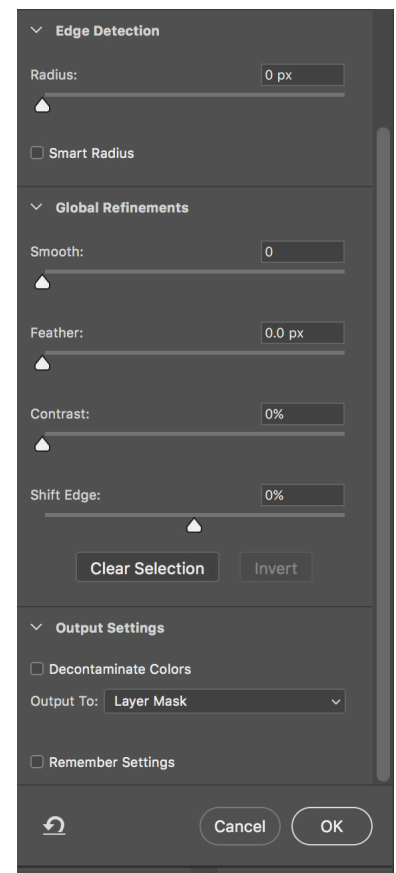
4. The Selection Tool Tutorials:
☐ The Selection Tools (1)
☐ Coloring Line Art (2)
☐ More Advanced Selections (3)
☐ Replace a Background (4)

Introducing Layer Masks

Hide or show details of an image layer in a non-destructive way.

To select the sky in the starting image, grab the Magic Wand tool from the Tools panel.

Once you turn a selection into a layer mask, the masked (or hidden) pixels are replaced by a checker board pattern (transparent).

If you want to restore any pixels hidden by the selection tool 's initial layer mask, set the Brush tool to white and paint.

In this example the Magic Wand has failed to select all the sky. By painting with a black brush on the layer mask you can hide the remaining unwanted pixels.

After converting a select ion into a layer mask, the black parts of the mask hide the corresponding pixels (sky). The white parts of the mask make the unselected buildings on the image layer solid.

After selecting most of the sky you can hide the unwanted pixels by choosing Layer>Layer Mask> Hide Selection.

5. Introducing Layer Mask Tutorials:
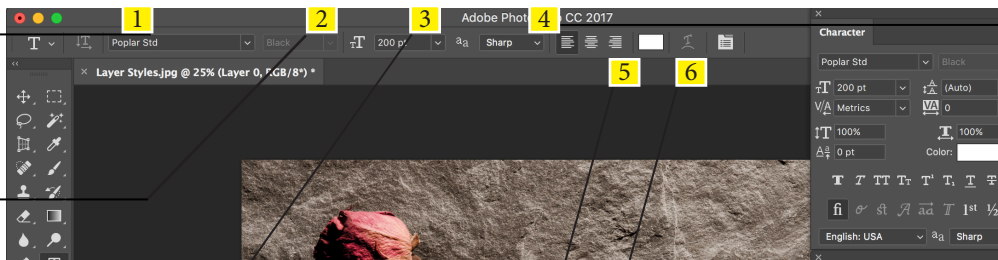☐ Introducing Layer Masks (1)
☐ Make Better Layer Masks (2)

What is a mask? _____

What is a layer mask? _____

How do you apply a layer mask? _____

What are the advantages of using layer masks? _____

_____

Type Tool

Displays all the fonts you have on your computer inside the system's Fonts folder.

This menu has the font styles and weights built into the font itself. It includes options like Regular, Italic, Bold, Condensed, etc.

Anti-aliasing is a technique for rendering smooth edges of the text (or bitmap images).

The levels are: Sharp, Crisp, Strong, and Smooth.

The familiar left align text, center text, and right align text options.

When you click the icon, the color picker dialog box will appear so that you can choose any color you like.

You can also use the "Character Window." From the menu bar go to

_____.

Transform Tools

Distort, scale, rotate and even warp layer content with the transform command's suite of tools.

Transforming scales, rotates, skews, stretches, or warps an image. You can apply transformations to a selection, an entire layer, multiple layers, or a layer mask. Transforming affects image quality when you manipulate the pixels. To apply non-destructive transformations to raster images, use Smart Objects. To transform an image from the menu bar go to _____.
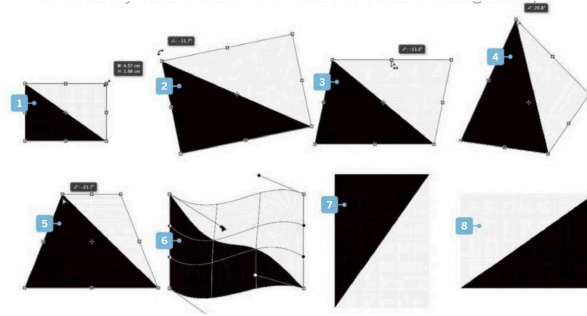
1. Scale - _____

2. Rotate - _____

3. Skew - _____

4. Distort - _____

5. Perspective - _____

6. Warp - _____

7. Rotate 180, Rotate 90 CW, Rotate 90 CCW - _____

8. Flip - _____

"Command T" so you can scale an item but remember to hold down the _____ to keep the image in proportion.

6. Transform Tutorials:
☐ Transform Tools (1) - 4 planes with labeled layers
☐ Perspective Transformation (2)

Master the Pen Tool

Isolate A Complex Object from a Busy Background Using the Pen Tool

Photoshop also enables you to produce content from scratch using tools such as the Pen tool. This tool enables you to draw graphic components for design projects (for example an icon or logo). The Pen tool uses _____to

describe the _____ shapes that it produces. A vector shape consists of a series of _____ _____. Between these moveable points are _____ that you can bend to change the filled vector shape. The vector shape's mathematical nature enables you enlarge a shape without any drop in quality, whereas a bitmap photo can look a bit fuzzy if you enlarge the image.
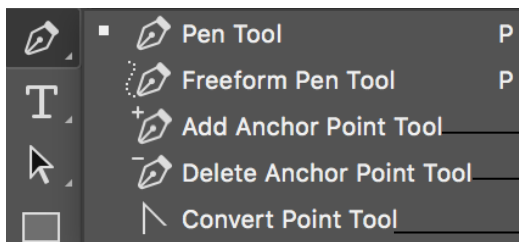
7. Master the Pen Tool Tutorials:
☐ Master the Pen Tool (1)
☐ Create Basic Line Art from Your Photos(2)
☐ Become a Master of the Pen Tool QUIZ (3)

The Crop Tool
Maximize the potential of your photographs by cropping them to improve their compositons.

1._____
You can use these presets to make the Crop tool resize the cropped image to fit specific dimensions and resolutions.

2._____
Click this icon to swap a preset's width and height.

3._____
Click here to add a composition-Click here to add a composition friendly rule of thirds grid to the Crop box, or a more conventional grid.

4. _____
Reduce the opacity sett ing to make Reduce the opacity seting to make the contents of the shielded areas more visible. You can change the colour of the shield, too.

5. _____
When cropping photos of architecture , you can use this option to manually straighten converging verticals at the same time.

The _____is used to make an appealing layout by placing image elements on _____ lines.

They are the lines laid out by 2 _____ dividers, 2 _____dividers, creating _____ equal sized boxes.

8. Crop Tool Tutorials:
☐ Use the Rule of Third Overlays(1)

The Healing Tools
Master the Healing Brush, Spot Healing Brush, and Clone Stamp tools for speedy image tidying and flawless retouching.

Spot Healing Brush and Healing Brush are commonly used to tidy up images:, **both tools are texture replacement tools.**

Healing Brush - _____

Spot Healing Brush -_____

The two healing tools are powerful enough to give you superb results; they occasionally slip up around areas of detail. When this

happens switch to the _____ tool, hold _____ to define the source.

Used together, the three tools constitute a formidable retouching team. The Clone Stamp tool might not be as clever as the healing ones, but it does make it far easier to predict what your stroke will do. (Note: On portraits, the Cone Stamp Tool works best when set at a low opacity of about 20% to allow for a more seamless blending.)

9. The Healing Tools Tutorials:
☐ The Healing Tools (1)
☐ Get Clever with Content Aware (2)
☐ Content Aware Move Tool (3)
☐ Fix Photos with Fill and Patch (4)

From the tutorials above what tool did you use to move a part of the image and Photoshop automatically filled the area with

matching elements form the existing background? _____

What is the difference between content aware fill and regular fill?

Content Aware - _____

Regular Fill - _____

Filter Gallery

Add creative effects to your photos.

Photoshop's Filter Gallery is basically a one-stop place for working with filters in your documents. In the Filter Gallery, you can browse through many different types of filters, apply them individually to your image, or even stack them on top of one another like you would with layers. You can get to the Filter Gallery by going to _____.

For more non-destructive editing options you can convert an image file into a _____.

Most images in Photoshop are rasterized. If you transform a s image it changes the pixels thus the quality suffers.

Smart Object (the ones that appear with a square icon on the lower right of the thumbnail)
Smart Objects preserve an image's source content with all its original characteristics, enabling you to perform nondestructive editing to the layer.
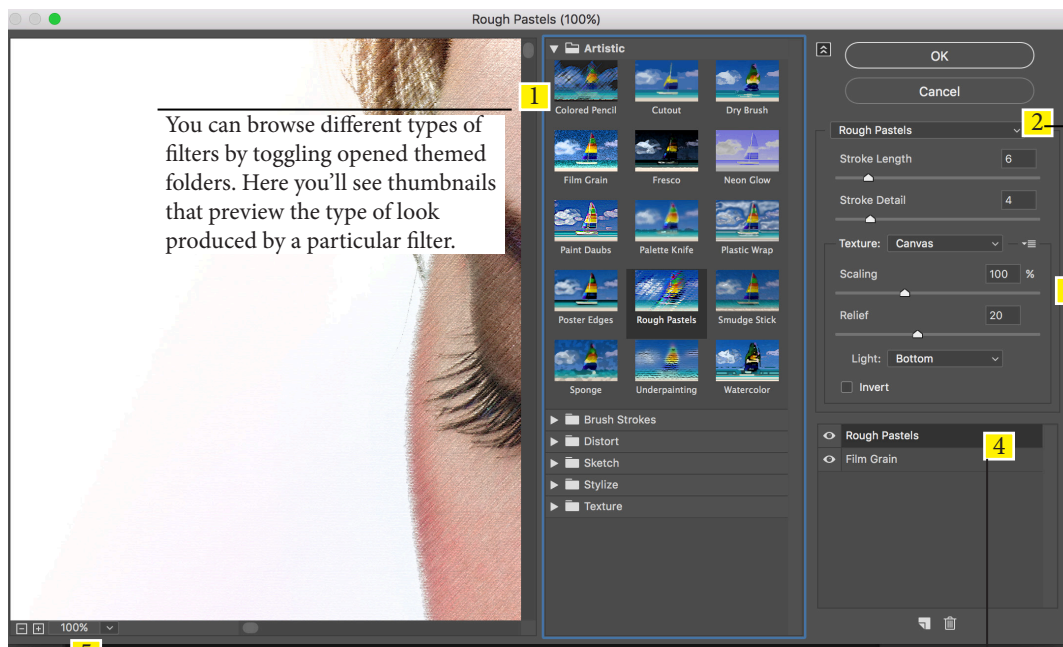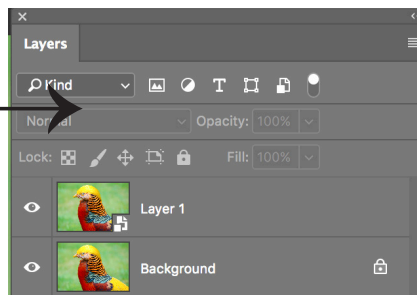
1 You can browse different types of filters by toggling opened themed folders. Here you'll see thumbnails that preview the type of look produced by a particular filter.

2 You can replace a currently selected filter with something new by clicking this drop-down menu.

3 Once you select a filter by clicking its thumbnail, any editable properties will appear in this section. Altering these is the key to producing more convincing art effect.

5 It can be difficult to see the filter effect when looking at the entire image. Click here to zoom in for a closer and clearer look at the filtered image.

4 You can create more convincing artistic looks by combining multiple filters. Drag a filter up or down in the layer stack to change the art effect.

10. Filter Gallery Tutorials:
    ☐ Add Creative Effects to Your Photos (1)
   ☐ Apply Editable Filter Effects (2)

Anatomy Timeline Options

Discover which Photoshop features can be animated using the Timeline's attributes.

The Timeline panel automatically opens when you import a video clip. To animate image layers, from the menu bar go to Window > Timeline.

Toggle this arrow to access the layer's editable attributes. You can animate a layer's position, opacity and any Layer Styles that have been added.

The Timeline enables you to split a clip at the playhead by clicking here. You can also use the adjacent icon to add a video transition (such as a cross fade).
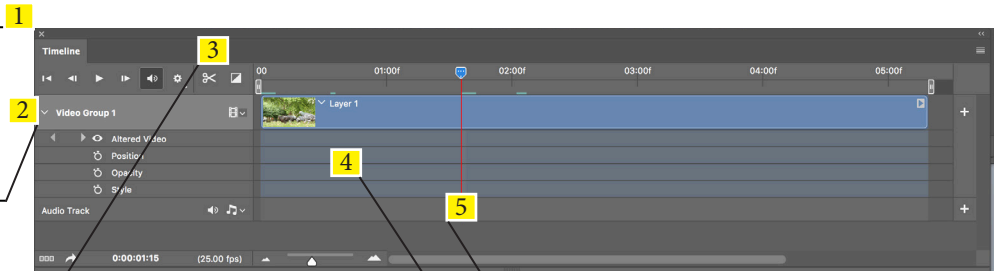
Two adjustable grey sliders enable you to define the start and end points of your animated video sequence.

Drag the playhead back and forth to preview a frame. Tap the space bar to play the video. The green bar below the playhead indicates rendered frames.
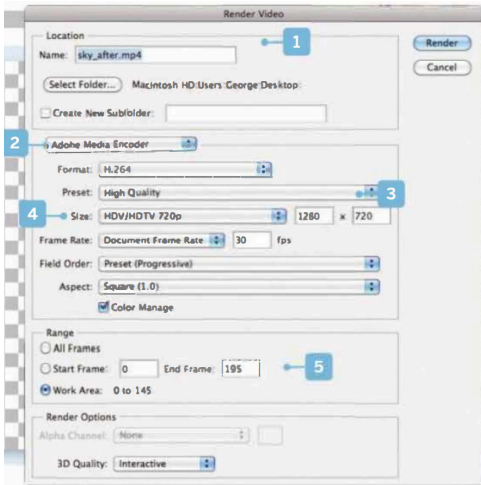
Understanding Video Rendering

When you watch a preview of your animated project in Photoshop, it looks fuzzy and low resolution. To see a high-quality version, from the menu bar go to _____ > _____ > _____.

The Render Video window will appear:
[l] Location menu enables you to name the video and select the location where it will be saved.
[2] Choose a Format from this drop-down menu H.264 enables you to produce high definition videos that don't use lots of disc space.
[3] The Preset drop-down has a wide range of output formats, including YouTube-friendly options.
[4] Size enables you to choose an aspect ratio such as HOV/ HDTV 720p, enabling the clip to play as HD footage.
[5] You can render the entire work area, or choose a range of frames from here. You'll probably want to use All Frames.

Understanding Animatable Properties

[l] Click here to toggle open the targeted _____'s animatable properties and set keyframes.

[2] The _____ channel enables you to add keyframes that make the layer's content move from A to B over a specific duration.

[3] The _____ channel records the opacity value of a layer. By changing this value you can make a layer's content fade in or out.

[4] You can add keyframes to introduce _____ _____ , such as the Outer Glow on our text.

[5] You can animate the _____ _____ option to make text change shape as it moves about.
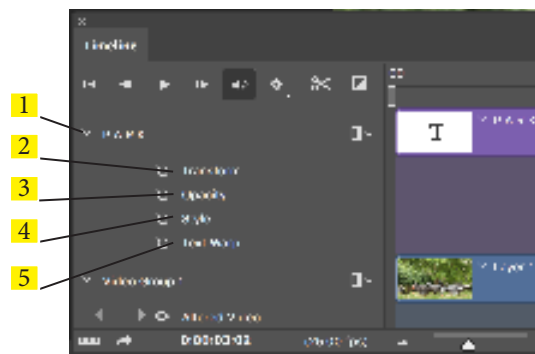
11. Anatomy Timeline Options Tutorials:
☐ Enhance a Video Clip