Youth Photography - Week One

Instructor: Roger Buchanan   These notes are at www.thenerdworks.com

Camera Shooting Skills

Image Capture Setting – Aperture, Shutter Speed, ISO are set differently in AUTO, SCENIC and MANUAL modes.

Shutterlag – Press the shutter button part way down to focus, hold until ready, then press all the way to take picture.

Panning – Focus on subject with part press of shutter button, camera follows subject, take picture as camera moves.

Camera Information Activities

Colour Skills Test – PDF Can how we see colours be influenced by the colours we see?

Camera Types- PDF What qualities do the different camera types have?

MetaDATA - PDF What is a digital photography really made up of, and why should we care?

Losing Photographs – PDF What can happen to our digital photographs?

3,2,1 – Backup – PDF How can we keep our digital photographs safe for future generations to enjoy?

Camera Menu Settings

Date. & Time – This is the main method by which computers organize files

File naming – Reset or Continuous? Unless you are a working photographer set to CONTINUOUS

Format - memory cards with the camera before using, and ONLY with the camera

Resolution set to maximum quality & detail – it is easy to make images smaller, very hard to make them larger

Camera Control Buttons

▶ Playback button – used to review an image that you have already taken

⊕ Enlarge button – helpful to review details, ⊖ Reduce button – great for seeing images in groups

ISO 100 ISO – image brightness control, higher numbers create brighter images but risk adding grainy "noise"

⚡ Flash – adds additional light to photograph but also can create red-eye.
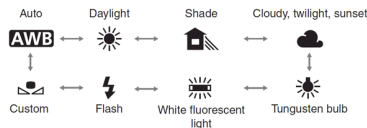
⏱ Self-timer – time delay for shutter release

❐ Drive Mode – taking many photographs in very quick order.

✿ Macro – for taking detailed photographs very close to subjects

🗑 Trashcan (Delete) Using it leads to fragmentation of your memory card and lousy performance. Don't use it!
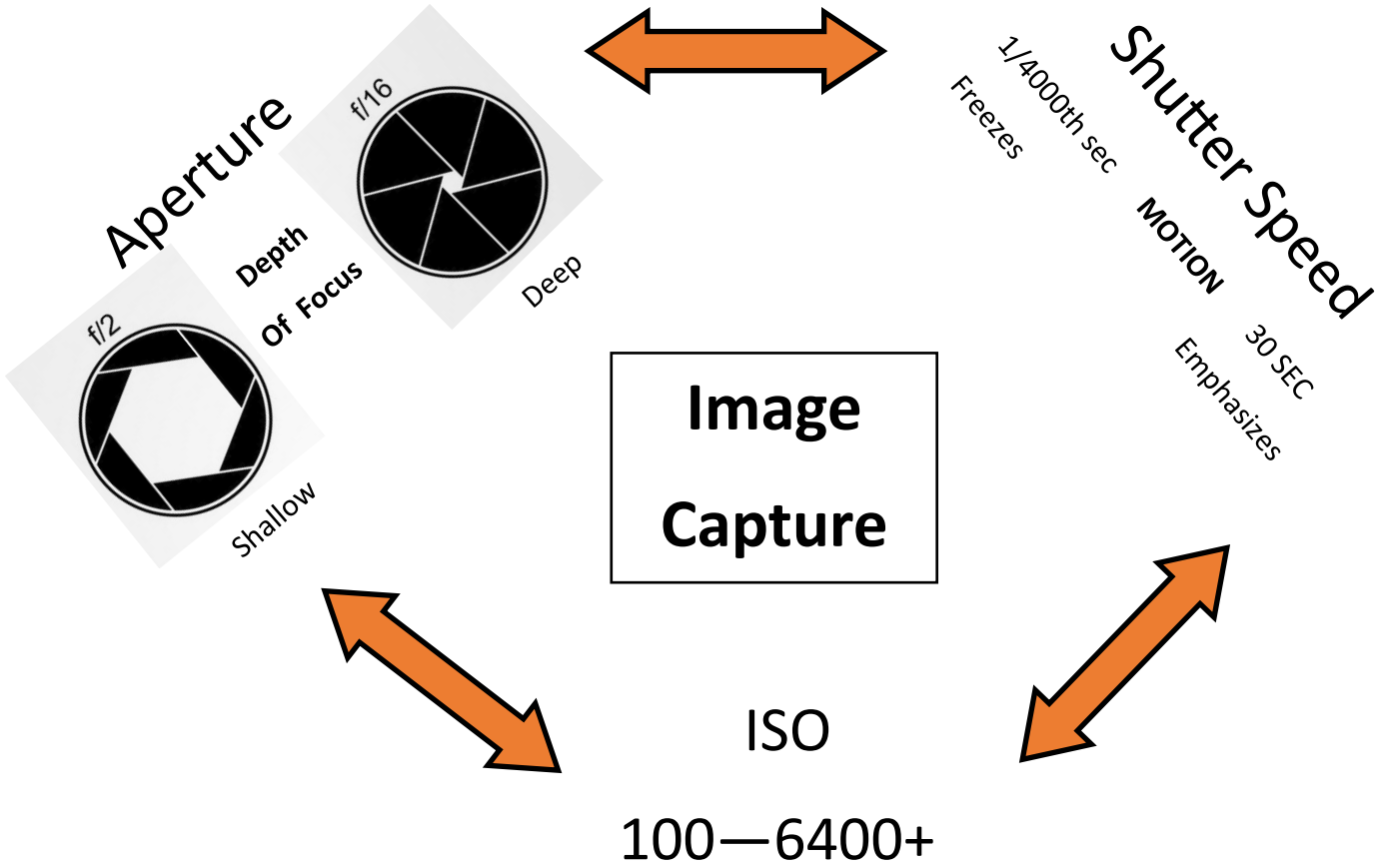
	Auto	Daylight	Shade	Cloudy, twilight, sunset
	AWB	☀	🏠	☁
	Custom	Flash	White fluorescent light	Tungsten bulb

White Balance

Homework: Signs – take 1 image of each type of sign: **Icon, Index, Symbol**

Icon	Index	Symbol
(fire extinguisher, telephone)	(pinch point hazard, slippery road)	(no entry, recycling)
Resembles	Implies	Learned
Do your homework Dagnabbit! ⟵ That means I'm serious! Bold means REALLY SERIOUS		

Image Capture settings

Aperture

f/16

Depth

Of Focus

Deep

f/2

Shallow

Shutter Speed

1/4000th sec

Freezes

MOTION

30 SEC

Emphasizes

Image Capture

ISO

100—6400+

Shutter Lag is the delay caused when you try and take a picture with one big press of the shutter button.

One Step Press

Cause of delays

Takes Picture!

Click?

Two Step Press

Use this Method

Focus

Measures Light

Adjust Exposure Settings

White Balance

Prepares to write file Data

Takes Picture!

Click!

Aperture affects Depth of Focus.

NOTE: Each of the below photographs is properly exposed, and yet each photo was taken with different Aperture and Shutter Speed settings These four photographs are examples of what are said to be "**Equivalent Exposures**" (i.e. Properly exposed, but made with different settings)
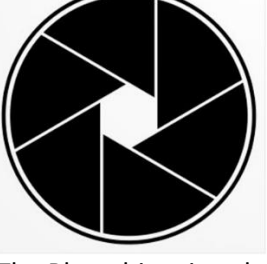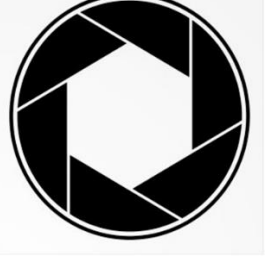

f/16

f/8

f/2.8

f/1.8

# Aperture and Shutter Speed Depth of Focus versus Motion Blur.

Aperture and Shutter Speed	Aperture and Shutter Speed
	f/16@ 1/4 sec The Blue object is completely blurred and all the objects are in focus.
	f/8 @ 1/13 sec The Blue object is only slightly less blurry, yet the Depth of Focus is getting shallower.
	f/2.8 @ 1/100 sec The Blue object is getting some real revealing shape and the Depth of Focus in much shallower.
	f/1.8 @ 1/250sec The Blue object is revealed as a Pin Wheel and only the second figure is still in focus, the Depth of Focus is not extremely shallow.

NOTE: Each of the above photographs is properly exposed, and yet each photo was taken with different Aperture and Shutter Speed settings. These four photographs are examples of what are said to be "**Equivalent Exposures**"

(i.e. Properly exposed, but made with different settings)

Week TWO: Intro to Digital Photography

Judge Your Colour Interpretation Skills.
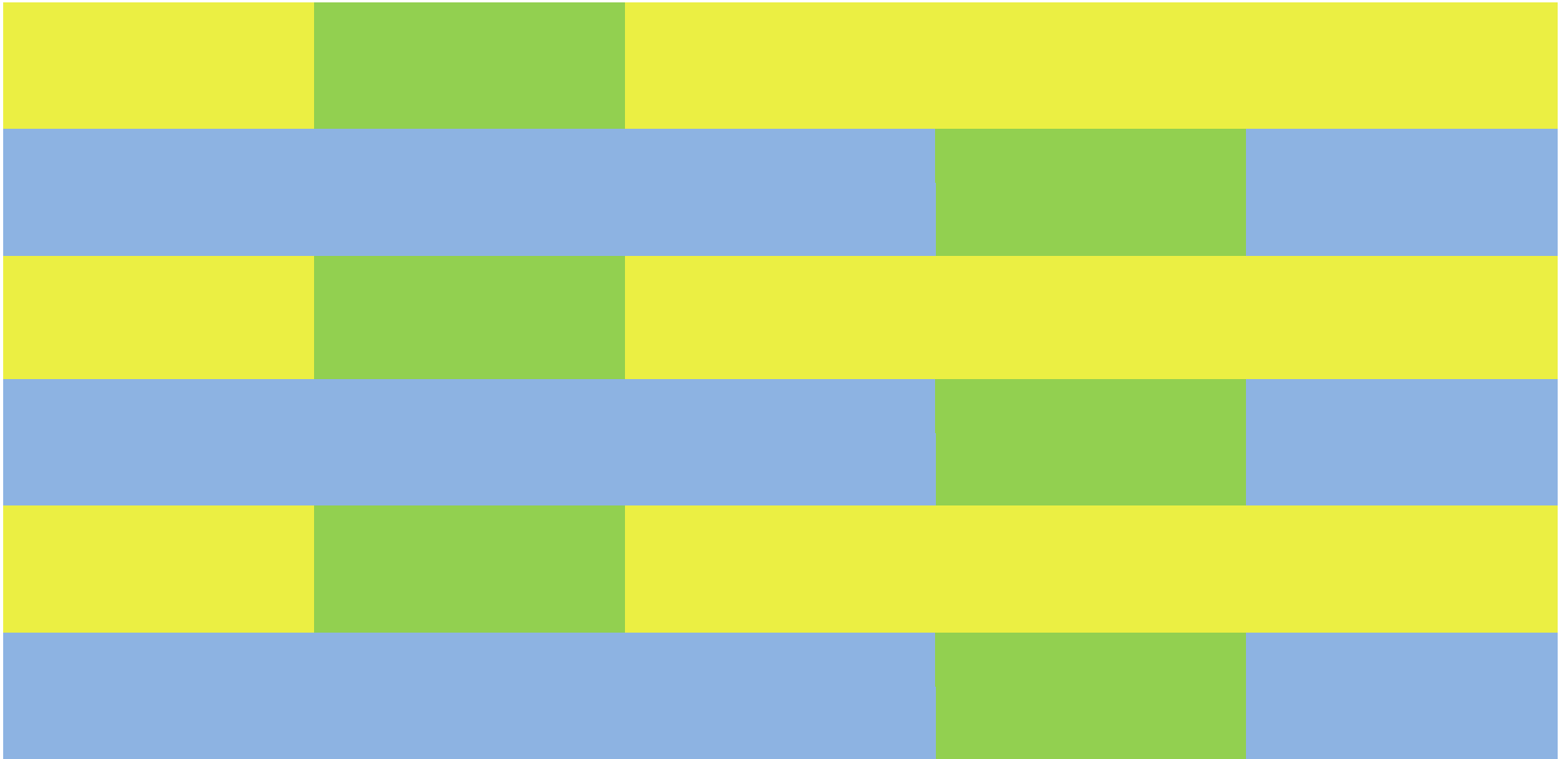
How many specific colours do you see? _____

Colour Interpretation.

Camera Designs:

Compact Point and Shoot: Small and self-contained camera with few accessories.	**Hybrid Point and Shoot:** Larger but still an all-in-one, totally self-contained, but with more performance and accessories.
Least expensive system	More expensive system
Mirrorless ILC: (Interchangeable Lens Camera) Camera with separate lens that does NOT use a mirror viewfinder system.	**Digital SLR:** Camera body with separate lens, most capable style of all consumer cameras. Most costly, with most accessories. Uses mirror viewfinder system.
Still more expensive system	Most expensive system

Mirror Viewfinder System vs Mirrorless Design

SLR

Mirrorless

Penta Mirror

TTL Optical View Finder

Main Mirror

Image Sensor

Light

LCD

Image Sensor

Light

LCD
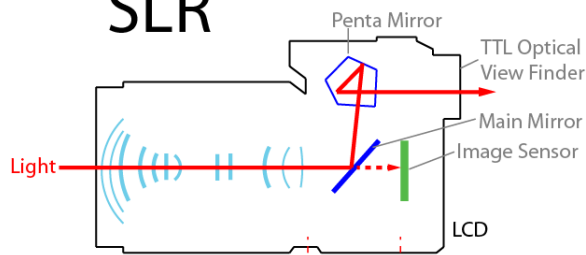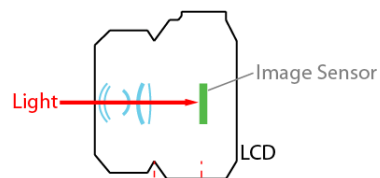
In a dSLR the mirror swings up out of the way when the photo is made

What Makes a Digital Photograph

EXIF: Make & Model
Date & Time
Camera Settings
GPS info
etc…

IPTC: Name
Copyright
Contact Info
Address
Keywords
Rating

Image

MetaData

Losing Photographs: Film vs Digital Loss

Regular 3,2,1 Backups and Prints are your safest way of protecting your treasured photographs!

Print from the early 1970's has faded slowly.

Print scanned and "Restored" to correct the flaws.
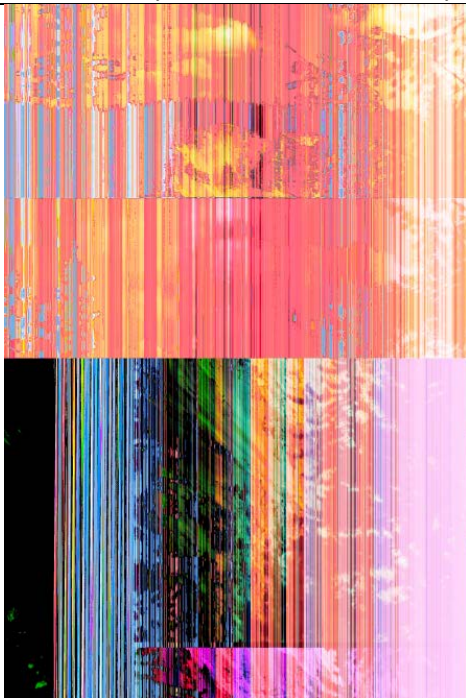
A digital image that was corrupted. Lost instantly. No hope of being "restored".

The image, recovered from a backup. Backups need to be done regularly & need to be validated!

3,2,1...Backup strategy

3 Copies of every photograph

2 different types of storage media

(Prevents loss from obsolescence of technology)

1 set photos at different location

White Balance Colour Settings

Our eyes adjust to the colour of light shining on a subject, the camera needs to be told the type of light.

Auto	Daylight
Cloudy	Shade
Tungsten	Fluorescent
	TIP: Regarding AWB (Auto White Balance) AWB "calculates" what it thinks is the correct White Balance each time you take a photograph. When taking many pictures *of the same subject* AWB may calculate White Balance differently between shots, thereby altering the colour of your subject slightly. So use a *specific* WB instead!
Flash	

Youth Photography: Week Two

Homework: Signs – take one image of each type: Icon, Index & Symbol

Manual Modes – P, A, S, M

Auto Mode: the camera makes all the decisions about how to get the best exposure.
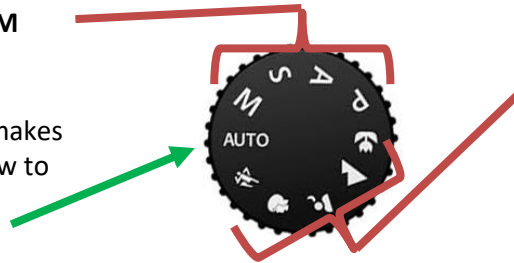
Scenic Modes: the camera chooses the best settings based on a "recipe" for that type of subject.

Using Manual Modes: ACTIVITY – the modes in brackets are for use with Point & Shoot cameras

A or Av = <u>Aperture</u> Priority mode

(Portrait)

(Landscape)

Aperture affects Depth of Focus

Shallow

Deep

S or Tv = <u>Shutter</u> Priority mode

(Night time)

(Sports)

30 sec

1/8000th sec

Shutter Speed is how motion is captured

ISO

100

Controls brightness

3200

In bright light

Darker places

ISO
100   ISO – image brightness control, higher numbers create brighter images but risk adding grainy "noise"

⚡   Flash – adds additional light to photograph but also can create red-eye.

⏱   Self-timer – time delay for shutter release

🗗   Drive Mode – taking many photographs in very quick order.

Auto   Daylight   Shade   Cloudy, twilight, sunset
AWB   ☀   🏠   ☁
Custom   Flash   White fluorescent light   Tungusten bulb
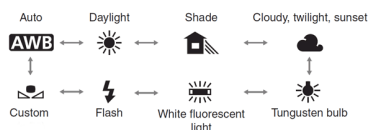
<u>White Balance</u>   White balance matches the light for accurate colour in your photo.

Activity: Take a photo of your partner using each of the white balance setting (**but NOT CUSTOM**)

Cropping vs Zooming: is the choice you make of how to isolate your subject from the background elements. However, both cropping and zooming have their strengths and weaknesses.

Activity: From a medium distance use zoom on your subject so that they almost fill the frame. Next, reduce the zoom completely and move the camera (cropping) closer to the subject to obtain the same framing. Compare how the photos each affect the shape of your subject at the different zooms

Panning: Refers to focusing on your subject and following their movement **while you take the photo**. This keeps your subject sharp and shows the effect of motion by blurring the background

Activity: Put your camera in "S" or "Tv" mode. Use a shutter speed between ¼ & 1/15th of a sec at ISO 100. Make sure to **keep the camera moving evenly aligned with the subject** while you take the photo (i.e. follow-through)

Perspective: Perspective refers to how you show the shape of a subject. "One-Point" perspective just shows one side of an object, "Two-Point" shows Two sides, and "Three-Point" Three sides.

Activity: Use the box provided, with different coloured dots on each side, to capture an image in "One-Point" perspective (ONLY ONE dot is visible). Then continue to take another image in "Two-Point" (ONLY TWO dots are visible) , then "Three-Point" perspective (THREE DOTS visible)

Shadow Details: The angle of light shining on a subject affects how the details of the subject are seen..

Activity: Using the flashlights and sponge cubes provided photograph the cubes from many different lighting angles. (Keep your camera in ONE POSITION ONLY and move the flashlight around)

Manual Focusing: Low Light

dSLR or Mirrorless		Usually it's a sliding switch found on the side of the lens.
Point & Shoot or Hybrid		Usually shown on the back of the camera as "MF". Sometimes you may need to go into the camera menu.

Painting with Light: In a low light situation you can add artificial light.

Activity: Set your camera in Shutter Priority at 6 seconds (6") and ISO 100. Have your subject sitting, trigger the shutter, and then quickly illuminate them by shining the **constantly moving light** on them.

Light Trails: Make photographs with a moving light source!

Activity: Set your camera in Shutter Priority at 6 seconds (6") and ISO 100. **One person at a time only!** Slip the glow stick onto string. Crack the glow stick and shake it until bright. Start the glow stick spinning and then have the other people take the picture.

Youth Photography Week Three

Guest Speaker: Mercedes Young - Photographer

ACTIVITY: Pet Interview

Pretend that you are your pet and have someone ask you the following.

What is your Name? _____ (Important for voice cues)

Age? _____Yrs.

What Breed are you? _____ (Important for historical context)

Do you have a favourite Toy?_____ Treat?_____

Can you do any Tricks? _____

What Commands do you respond to? _____

At what times are you most Active? _____am/pm Resting? _____am/pm

Do you have a "special place" where you go to Rest/Relax/Hide? _____

Do you have any "Unique" behaviour that you are known for? _____

Are you "Notorious" for any type of Bad behaviour? _____

Are you patient or easily startled? _____ (important for time/noise constraints)

Do you have any special animal friends? _____

What about people friends? _____

After you have eaten, are you more relaxed, or do you get playful? _____

What is a favourite Activity of yours? _____

What is your signal that you are getting cranky and want to be left alone?_____

ACTIVITY: Perspective

Take photos with One, Two and Three Point perspective using the supplied cardboard boxes

ACTIVITY: Photographing "The Pet". (remote controlled pet)

Set your camera to: Shutter Priority (1/125th second) or Action mode.

Make the following images of the moving subject:

- Panning;
- Spot Focus – focus on a spot on the floor in advance and take the shoot when the pet passes by;
- Point of View – take shots from different camera positions.
    - ☐ Above
    - ☐ Side
    - ☐ Head on
    - ☐ Rear

ACTIVITY: Accessories: - Show and Tell

List the ones you'd like:

Youth Photography Week Four: Editing

All of these edits were done using Photoshop Elements 2020

Demo laptop is 2GHz i7 with 16GB Ram and twin Solid State Drives and is used to demo video editing.

Sit at the same distance from the monitor with the room lighting at the same level of brightness.

If using a laptop keep the screen at the same distance, brightness, and the same angle.

Calibrate your monitor every couple of weeks for color accuracy (watch demo).

Do NOT edit jpep's! Change them to an editing friendly file like a PSD or Tiff first using the command "Save As…"

Colour Theory:

Additive Colours (Colours recorded by your camera)	Red	Green	Blue	
Subtractive Colours (Colours made with the Ink in your Printer)	Cyan	Magenta	Yellow	Black

Remove a colour by adding the opposite colour. **Create a colour** by adding the two not directly across from colour.

Skill	Description
Remove a Person	Save Image as a PSD and work on a background copy. Select, Erase and Clone.
Background change	Save Image as a PSD and work on a background copy. Go to Guided, Special Edits, Replace Background.
How to make Layers for different things	Save Image as a PSD and work on a background copy. From the Menu bar click on "Layer", chose the type of Layer you want.
Special Effects and Filters	Save Image as a PSD and work on a background copy. Go to the menu bar and click on "Filter", then choose the filter. Adjust layer strength by adjusting "Opacity".
Funny Editing	Save Image as a PSD and work on a background copy. Just play with Filters and various Tools.
Face Editing	Save Image as a PSD and work on a background copy. Spot Healing or Spot Healing Brush to remove blemishes, and control the strength of the edit by adjusting the "Opacity" slider.
Make an image Scary	Save Image as a PSD and work on a background copy. Search the internet for parts of an image in the "png transparency" format. These will have a white/grey checkerboard background which lets the rest of your image show through as you build it.

These techniques and more are in the PDF notes online at www.thenerdworks.com

"Photo Editing" – Tips for Processing Outlined

NOTE: In many cases there is more than one way to do a similar adjustment.

The following is a list of "How To…" editing descriptions.

Process a "RAW" file

- ☐ Select the RAW file
- ☐ Click on the "Editor" icon in the toolbar at the bottom of the screen & Camera RAW opens
- ☐ At the bottom of screen "Depth" select 16 Bits/Channel
- ☐ Turn on "clipping warning" by clicking on the two triangles in the top of the Histogram
- ☐ Start with the White Balance slider at the top right and work your way down
- ☐ Click on the Details Tab just below the Histogram
- ☐ Adjust Colour Noise & then Colour detail
- ☐ Adjust Luminance Sliders going top to bottom
- ☐ Increase the View to 100%
    - ☐ Apply Sharpening settings for Amount (125), Radius (1) and Detail (as needed)
    - ☐ Hold the "Alt-key" and Adjust Masking slider to affect only the Edges in your image
    - ☐ Click on "Open Image" to continue editing in Photoshop Elements.

Properly work on a jpeg image:

- ☐ Open jpeg file
- ☐ Go to File>Save As> and choose "psd" from the file format drop down list, Click "Save"
- ☐ Edit and adjust your photo as you want
- ☐ ONLY when you are finished do you go To File>Save As… and choose jpeg.

Crop Image to Size: In the Editor, select the Crop tool (C)

- ☐ If you want to use a resolution other than that of the original photo, select one of the following options from the Aspect Ratio menu or specify new custom values in the Width and Height boxes in the options bar
- ☐ No Restriction Lets you resize the image to any dimension
- ☐ Photo Ratio Displays the original aspect ratio of the photo when you crop. The Width and Height boxes show the values that are used for the cropped image. The Resolution box allows you to change the image resolution
- ☐ Preset size Specifies a preset size for the cropped photo. If you want your final output to be a specific size, such as 4 x 6 to fit a picture frame, choose that preset size
- ☐ Note: When you specify values for the Width and Height boxes, the Aspect Ratio menu changes to Custom
- ☐ Drag over the part of the image you want to keep. When you release the mouse button, the crop marquee appears as a bounding box with handles at the corners and sides
- ☐ Click the green Commit button to finish the cropping or click the red Cancel button.

Add More Canvas to Photo with the Crop tool:

- ☐ Select Crop tool (⬚ press C) make small crop area, DO NOT press Enter or click OK just yet
- ☐ Drag the corner "handles" outside the image area to add canvas
- ☐ Now press ENTER to finish.

Straighten Horizons: 🖥 In the Editor, select the Straighten tool (P).

- ☐ To straighten all of the layers in the image, select Rotate All Layers, and then choose an option from the Canvas Options menu (this menu is available only if you select Rotate All Layers)
- ☐ Grow or Shrink Canvas To Fit Resizes the canvas to fit the rotated image. Straightening causes corners of the image to fall outside of the current canvas. The straightened image will contain areas of blank background, but no pixels are clipped
- ☐ Crop To Remove Background Crops the image to remove any blank background area that becomes visible after straightening. Some pixels will be clipped
- ☐ Crop To Original Size Keeps the canvas the same size as the original image. The straightened image will include areas of blank background and some pixels will be clipped. Do one of the following to straighten the image
- ☐ To align horizontally, draw a line in the image to represent the new straight horizontal edge
- ☐ To align vertically, hold down Ctrl and draw a line to represent the new straight vertical edge.

Do Basic Exposure Adjustment with Layers:

- ☐ In the Layers palette, select the topmost layer you want to affect
- ☐ To affect all the layers below the adjustment layer, click the Create Adjustment Layer button at the top of the Layers palette, and choose one of the following adjustment types. (The first three options in the menu are fill layers, not adjustment layers.)
  - Levels Corrects tonal values in the image.
  - Brightness/Contrast Lightens or darkens the image.
  - Hue/Saturation Adjusts colors in the image.

Exposure Issues

Underexposed
- ☐ Click on Image "Layer"
- ☐ Ctrl-J to duplicate layer, blend mode = Screen
- ☐ Ctrl-J to duplicate screened layer, repeat as necessary, adjust opacity to taste.

Overexposed
- ☐ Click on Image "Layer"
- ☐ Ctrl-J to duplicate layer, blend mode = Multiply
- ☐ Ctrl-J to duplicate screened layer, repeat as necessary, adjust opacity to taste.

Open Shadows

- ☐ Enhance>Adjust Lighting>Shadows/Highlights, Lighten Shadows = 25%

Dodge and Burn

- ☐ Alt-click new layer icon
- ☐ Mode = Overlay and check Fill Overlay Neutral Gray 50%, Click OK, a new layer filled with Gray is added;
- ☐ "B" for Brush tool, med size, soft edge, 15% Opacity, Press "X" to set colours to Foreground White
- ☐ Paint on area to highlight (Dodge) Strength of effect is controlled by Brush Opacity

☐ To darken press "D" to make Black foreground colour and paint areas to be darker.

Subject is too Dark

☐ Click on Image "Layer";
☐ Ctrl-J to duplicate layer;
☐ Enhance > Adjust Lighting > Levels > midtone slider goes to left;
☐ Ctrl-click create new layer;
☐ Click top layer, Ctrl-G
☐ Click Blank layer, "B" for brush, Soft edge;
☐ "D" for foreground colour, paint areas to lighten
☐ Adjust opacity to taste.

Edge Contrast Enhancement

☐ Duplicate Background Layer (**Ctrl+J**)
☐ Apply large Gaussian Blur
☐ Set duplicate layer **blend mode to Difference (Shift + Alt + E)**
☐ Stamp/Merge Visible (**Ctrl+Shift+Alt+E**)
☐ Turn *OFF* the visibility of the blurred layer
☐ Invert the merged copy (**Ctrl+I**), set **blend mode to Colour Burn**
☐ Add Hue/Saturation layer as needed.

Quick Selection Tool

☐ Open Image, "A" for Quick selection tool;
☐ Check box "Auto-Enhance" = ON
☐ Paint squiggle on selection, Alt-click to remove areas
☐ Make adjustment, then Ctrl-D to deselect.

Make Selections with Brush

☐ "A" for Selection Brush, soft edge brush
☐ Click on Image "Layer"
☐ Click and drag to paint selection, Alt-click to deselect areas, Alt+S, F, Feather Radius = 15 to soften edges.

Irregular Shaped Selections

☐ "L" key to get Magnetic Lasso tool, trace along edge, if you miss an edge "backspace" and try again.

Smooth Selection Edges

☐ Select->Refine Edge->Adjust Edge-> Smooth

Extract Object from Image

☐ Open Image, "A" for Quick Selection
☐ Paint over object to extract, Alt-click to remove, "Z" = zoom tool
☐ Open New image, "V" for move tool, Ctrl-T for Free Transform
☐ Hold Shift and drag corner to resize, "Enter" to commit.
☐ Make selection, then Select > Feather 5 pixels.

Select by Colour:

- ☐ Choose Magic Wand (Press A) check off a) anti-alias and b) contiguous
- ☐ Click in coloured area of choice
- ☐ Shift+Click to add areas to selection; (if not enough is selected increase the "tolerance" option.)
- ☐ To change the selected area of colour Press Ctrl+U
- ☐ Change the colour and press OK
- ☐ Press Ctrl+D to deselect.

Remove Dust and Marks: In the Editor, select the Healing Brush tool .

- ☐ Choose a brush size from the options bar and set healing brush options
- ☐ Mode Determines how the source or pattern blends with existing pixels. **Normal mode** lays new pixels over the original pixels. **Replace mode** preserves film grain and texture at the edges of the brush stroke
- ☐ Source Sets the source to use for repairing pixels. Sampled uses pixels from the current image. Pattern uses pixels from the pattern you specify in the Pattern palette
- ☐ Aligned Samples pixels continuously without losing the current sampling point, even if you release the mouse button
- ☐ Deselect Aligned to continue using the sampled pixels from the initial sampling point each time you stop and resume painting
- ☐ Sample All Layers Samples data from all visible layers. Deselect Use All Layers to sample only from the active layer
- ☐ Position the pointer in any open image and Alt-click to sample data
- ☐ Note: If you are sampling between images then both images must be in the same color mode
- ☐ Drag in the image over the flaw to meld existing data with sampled data. The sampled pixels are melded with the existing pixels each time you release the mouse button.

Clone parts of Image: In the Editor, select the Clone Stamp tool .

- ☐ (Optional) Set options in the options bar
- ☐ Brushes pop-up menu Sets the brush tip. Click the arrow next to the brush sample, choose a brush category from the Brushes pop-up menu, and then select a brush thumbnail
- ☐ Size Sets the size of the brush in pixels. Drag the Size pop-up slider or enter a size in the text box
- ☐ Mode Determines how the source or pattern blends with existing pixels. Normal mode lays new pixels over the original pixels
- ☐ Opacity Sets the opacity of the paint you apply. A low opacity setting allows pixels under a paint stroke to show through. Drag the pop-up slider or enter an opacity value
- ☐ Aligned Moves the sampled area with the cursor as you begin to paint, regardless of how many times you stop and resume painting. Selecting this option is useful when you want to eliminate unwanted areas such as a telephone line across the skyline or a rip in a scanned photo. If aligned is deselected, the Clone Stamp tool applies the sampled area from the initial sampling point each time you stop and resume painting. Deselecting this option is useful for applying multiple copies of the same part of an image to different areas within the same image or to another image
- ☐ Sample All Layers To sample (copy) data from all visible layers, select Use All Layers. To sample data from only the active layer, deselect this option
- ☐ Position the pointer on the part of any open image you want to sample, and Alt-click. The tool duplicates the pixels at this sample point in your image as you paint
- ☐ Drag or click to paint with the tool. Clone from similar area and sample often to avoid patterns repeating.

Free Transform a Selected Object

- ☐ Duplicate Layer
- ☐ Select item in Duplicate Layer
- ☐ Press - Ctrl-T
- ☐ Drag Bounding box to resize Item
- ☐ Position Item
- ☐ Click the Okay Arrow or Cancel
- ☐ Use Eraser tool to clean up margins of transformed selection.

Do A Panorama

- ☐ Tripod, Aperture priority, 30% overlap, name shots in order
- ☐ Edit >Photomerge > Photomerge Panorama

Add Text to Image: ⊤ the Horizontal Type tool or the Vertical Type tool .

- ☐ To create a single line of text, click in the image to set an insertion point for the type
- ☐ To create paragraph text, with the Text tool drag a rectangle to create a text box for the type
- ☐ The small line through the I-beam marks the position of the type of baseline. For horizontal type, the baseline marks the line on which the type rests; for vertical type, the baseline marks the center as of the type characters. (Optional) Select type options, such as font, style, size, and color, in the options bar.);
- ☐ Type the characters you want. If you did not create a text box, you can press Enter to create a new line.;
- ☐ The text appears on its own layer, which is called a type layer
- ☐ Commit the type layer by doing one of the following
- ☐ Click the Commit button in the options bar
- ☐ Press the Enter key on the numeric keypad
- ☐ Click in the image, outside of the text box.

Gray Skies are going to clear up!

- ☐ "W" for Magic Wand tool to select sky
- ☐ "L" for Lasso tool and alt-click to UN-select extra areas
- ☐ Open image with good sky and Ctrl-C to copy
- ☐ Go to original image, New Layer, Edit > Paste into Selection
- ☐ Ctrl-D to deselect and adjust Opacity to taste.

Neutral Density for Sky

- ☐ Open landscape and press "D" foreground colour Black;
- ☐ Layers palette > Create Adjustment Layer > Gradient, Dbl-click 2nd Gradient "Foreground to Transparent"
- ☐ Click "Reverse" checkbox, Click OK
- ☐ Layer Blend Mode = Overlay, Adjust Layer Opacity to taste

Sharpening

- ☐ View at 100% for sharpening!
- ☐ Click Enhance > Unsharp mask (Alt-N, Unsharp Mask)
- ☐ Apply settings based on Image Content (see "Workflow Outline: Photo Style of Sharpening")
- ☐ Amount = Amount of sharpening applied
- ☐ Radius = How many pixels out from edge sharpening affects
- ☐ Threshold = how different a pixel must be to be called and EDGE pixel

Extra Fine Detail Sharpening

Step 1. Sharpen image

Step 2. Click on Image "Layer"

Step 3. Ctrl-J to duplicate image

Step 4. Ctrl-F to apply same sharpening to image

Step 5. Ctrl-click on Create New Layer icon

Step 6. Click on over sharpened layer and press Ctrl-G to group it

Step 7. "B" and soft edge brush, "D" for foreground to black

Step 8. Click on blank layer and paint areas to sharpen.

Luminosity Sharpening

Step 1. Open Image;

Step 2. Click on Image "Layer" and Ctrl-J;

Step 3. Enhance > Unsharp Mask, Apply settings;

Step 4. Layer blend Mode = "Luminosity", Flatten image.

Edge Sharpening

Step 1. Open Image

Step 2. Click on Image "Layer"

Step 3. Ctrl-J to duplicate

Step 4. Filter > Stylize > Emboss

Step 5. Angle and Amount at default, Increase Height

Step 6. Layer Blend mode to Hard Light, use Opacity to taste.

Workflow Outline Using "Camera RAW"

In Camera RAW click on the "preview" box, and activate the Clipping warning triangles above the histogram.

Order	Task	
Crop and Align Image from toolbar		
BASIC TAB		
White Balance: **Use one of these three options.**	a) As Shot – Drop Down List b) Eye Dropper Tool – Click on Grey c) Temperature & Tint Sliders	**Notes**: **Temperature** balances Cyan – Yellow, **Tint** balances Green – Magenta
Exposure:	**Notes**: Be sure to activate the Highlight/Shadow warnings by clicking on the black triangle above the Histogram. "**Alt-click**" the exposure slider to get a better view of the clipping area	
DETAIL TAB – View Image at around 300% for Noise Reduction (3ʳᵈ Party Plug-ins Rule!)		
Luminance:	**Notes**: This reduces the blotchy noise found in shadow areas of the image. Detail slider preserves detail.	
Colour:	**Notes**: This reduces all other types of noise. Detail slider protects fine coloured detail edges.	
BASIC TAB - in the order to be used (not as displayed in Camera RAW)		
Contrast:	**Notes**: Increasing contrast will highlight detail but will also increase colour saturation.	
Blacks:	**Notes**: Drag right to lighten blacks. In a washed out photo use this before the exposure slider. Use of Blacks slider often causes colours to have an increase in saturation.	
Shadows:	**Notes**: Adjusts the darker pixels, but not the blacks, and can recover detail in the shadow areas.	
Whites:	**Notes**: Use this AFTER Exposure/Blacks adjustments	
Highlights:	**Notes**: Do your "Whites" adjustment first!	
Clarity:	**Notes**: Adds "Pop" to the image by increasing only mid-tone contrast.	
Vibrance:	**Notes**: Saturates the pale colours much more than the already vivid colours, and mostly leaves skin tones alone.	
Saturation:	**Notes**: Saturation is best done "modestly" staying under 15%	
DETAIL TAB – View Image at 100% when Sharpening		
Stage	Task	
Amount:	**Notes**: Controls how strong the sharpening will be applied. Shown as a percentage, with 100% a recommended starting value	
Radius:	**Notes**: Controls the size of the edges you sharpen, a smaller radius value sharpens smaller-scale detail. The smaller the detail in your image the smaller you set the starting Radius value.	
Detail:	**Notes**: Avoid Sharpening Halos, "**Alt-click**" the slider to get a better view. Controls the relative sharpening of fine versus coarse detail (within a given radius value) Higher values emphasize fine detail, but also increase the overall sharpening effect. You will likely need to adjust this setting in conjunction with the amount/percent setting.	
Masking:	**Notes**: Drag right to reduce sharpening on non-edge areas, also works with the "**Alt-click**" technique.	
Open Image:	**Notes**: Click on "Open Image" button to have image open in the Photoshop Elements Editor.	

Regular Image Workflow Outline

Camera RAW (if needed)	Process RAW files	Process steps from Top to Bottom
Notes: Photoshop Elements will not let you do a lot of editing while the file is still in 16-bit mode. When you are done processing the RAW file to change the file to 8-bit mode click "Open Image" then click Alt+I, M, A.		
Basic Edits	Save as Photoshop File	File> Save As> Format> down arrow select "PSD"
	Reduce Bit-Depth from 16 --> 8	Image, Mode, 8-Bits/Channel
	Align Horizon	Straighten Tool (P)
	Crop	Crop Tool (C)
Notes: Remember to Align before Cropping so you won't have to Crop a second time.		
Global Edits: Full Adjustments	Adjust Exposure	Blend Mode: Multiply = Darken, Screen = Brighten
Notes: You control the strength of the adjustment using the Opacity slider.		
Local Edits: Adjust Select Area	Tone Contrast Colour Saturation	Alt+L, New Adjustment Layer, or
	Dodge, Burn or Sponge	O
Notes: Adjustment Layers come with a Mask, which allows them to be selectively applied		
Clean & Retouch Click "Expert"	Healing Brush	J
	Clone Stamp	S
Notes: Remember to sample by "Alt+Clicking" and use several short brush strokes.		
Special Effects	Selection Tool	a
	Transform Tool	Ctrl + t
Notes: Apply Special effects by using these tools on specific parts of the image.		
Add Border	Crop a small box INSIDE image, then Drag handles OUTSIDE of image	
Notes: The colour of the border will be the current foreground colour indicated.		
Add Text	Select Text tool, font, size	
	Click tool on image and enter text	
Notes: Do NOT resize the photo after adding the Text to the Image.		
Output	Sharpen	Alt+N, Unsharp Mask…Enter
	Get Creative with the Image!	

Notes: For sharpening there are some things to know.

Photo Style of Sharpening	Amount %	Radius pixels	Detail
Average	125	1	
Soft fuzzy subjects	150	1	
People up close	75	2	
Medium Scenic's	225	0.5	Adjust Detail to your Taste
Edges, lots of edges	65	4	
General Purpose	85	1	View Image at 100% while adjusting
Web at 72ppi	400	0.3	
DIY	50-150	1-2	