Photography Cheat Sheet

Aperture

F1,4 F2 F2,8 F4 F5,6 F8 F11 F16 F22 F32

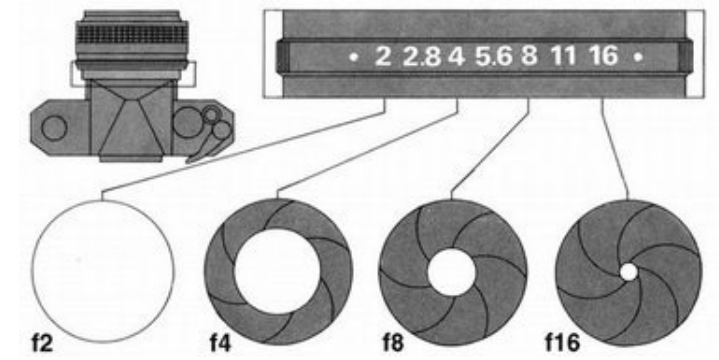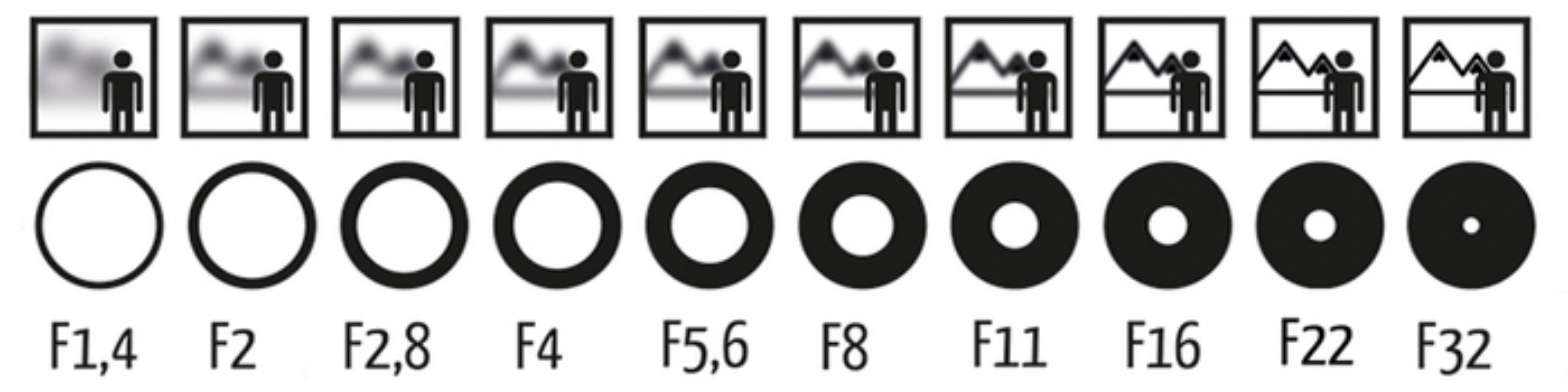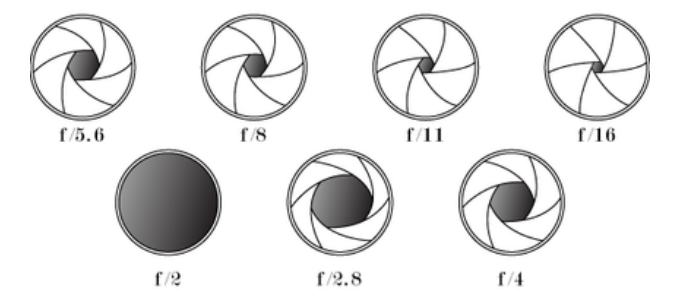**Aperture**
Aperture numbers (f stops) as they appear on the camera.

The aperture is the hole in the lens that the light has to pass though. The aperture is a variable opening between the glass of the lens elements. The aperture never closes all the way and (like the shutter).
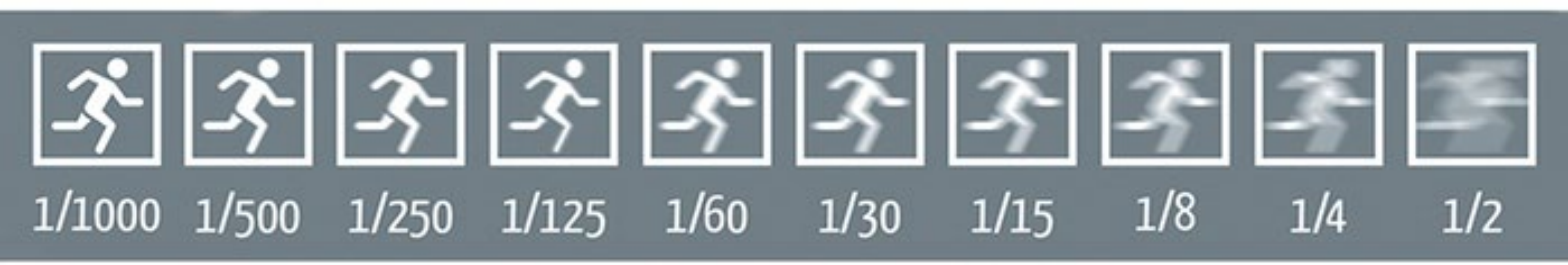
➜ 1.8 2 2.8 4 5.6 8 11 16 getting smaller

Each opening that let's in half as much light as the one to it's left, and is twice as much as the one to it's right.

Exposure:
Darker underexposed
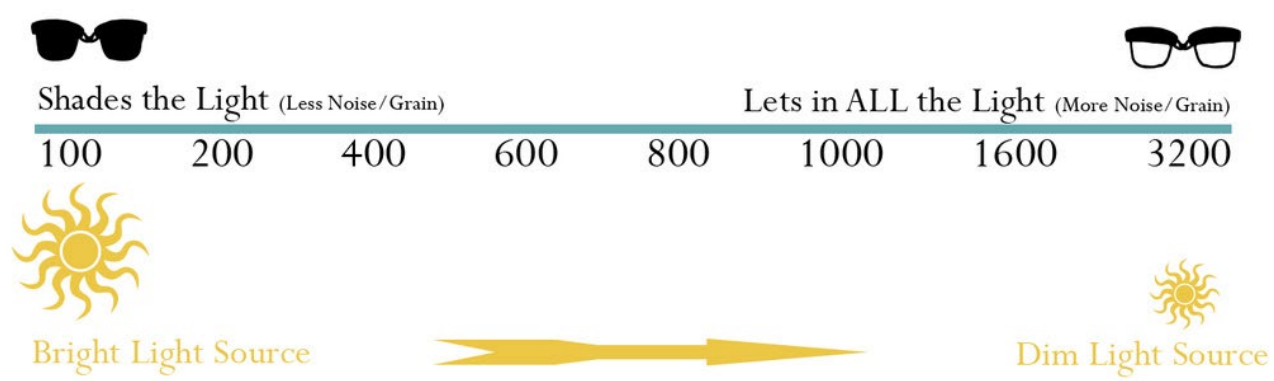Brighter overexposed

Shutter Speed

1/1000 1/500 1/250 1/125 1/60 1/30 1/15 1/8 1/4 1/2

Shutter fast shutter speed ➜
1/1000
1/500
1/250
1/125 1/60 1/30
1/15 1/8 1/4 1/2 slow shutter speed

ISO

Dad's Photo Lessons - Print-Sense Photography & Design
ISO - Light Sensitivity

Shades the Light (Less Noise / Grain)   Lets in ALL the Light (More Noise / Grain)

100   200   400   600   800   1000   1600   3200

Bright Light Source ➜ Dim Light Source

Daylight (well lit) ➜ more crisp photos
Night (dark) ➜ high possibility of noise

ISO low sensitivity ➜
ISO 50 ISO 100 ISO 200 ISO 400 ISO 800 ISO 1600 ISO 3200 ISO 6400 ISO 12800 ISO 25600
➜ to high sensitivity

Same shutter speed and aperture, different ISO
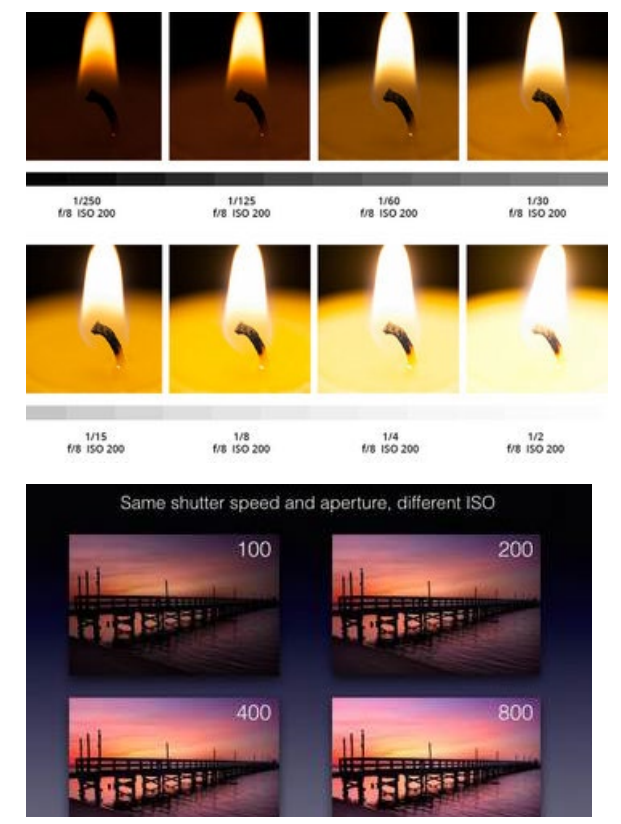
Parts of the Camera (General)

White Balance
*auto * daylight * shade *tungsten * fluorescent

White balance (WB) is the process of removing unrealistic color casts, so that objects which appear white in person are rendered white in your photo. Proper camera white balance has to take into account the "color temperature" of a light source, which refers to the relative warmth or coolness of white light. Our eyes are very good at judging what is white under different light sources, but digital cameras often have great difficulty with auto white balance (AWB) — and can create unsightly blue, orange, or even green color casts.
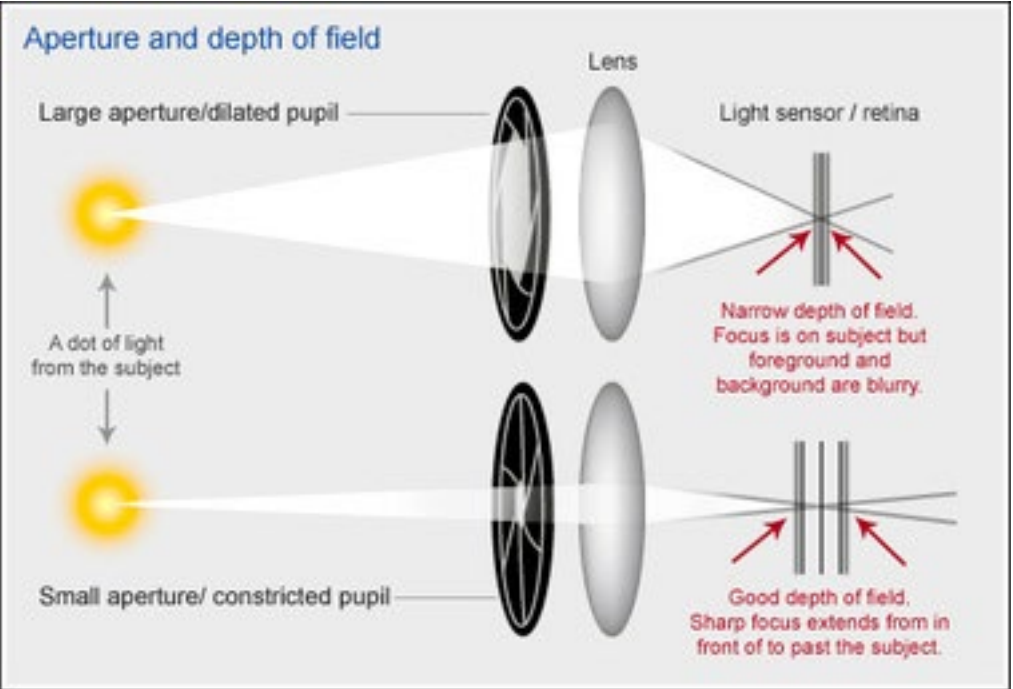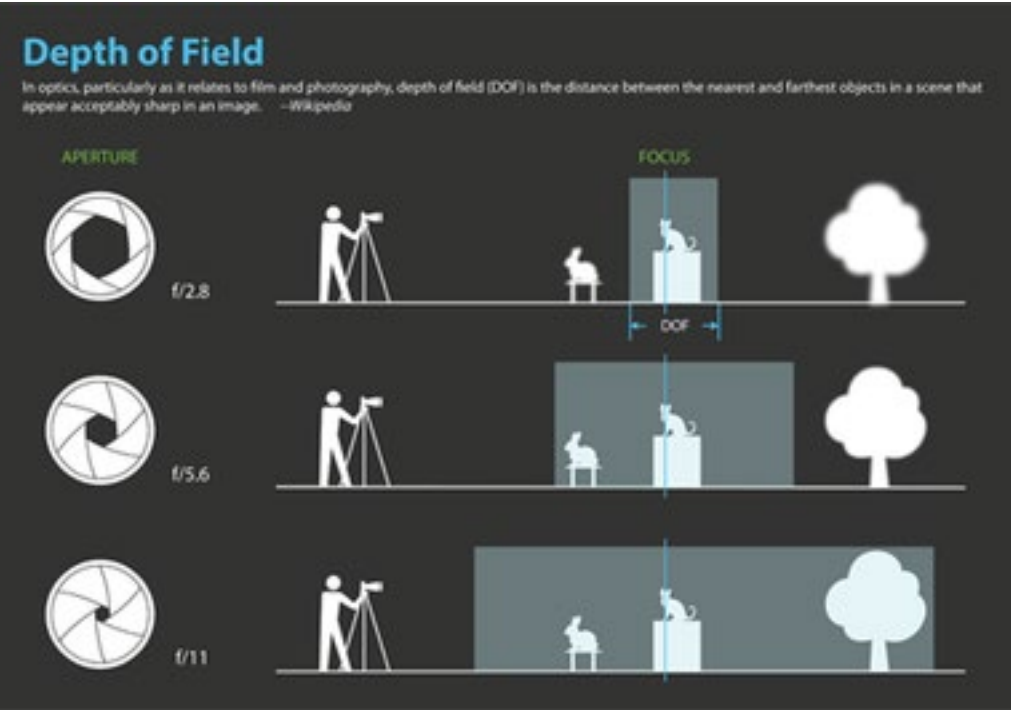
Depth of Field

For many cameras, depth of field (DOF) is the distance between the nearest and the farthest objects that are in acceptably sharp focus in an image. The depth of field can be calculated based on focal length, distance to subject, the acceptable circle of confusion size, and aperture. A particular depth of field may be chosen for technical or artistic purposes. Limitations of depth of field can sometimes be overcome with various techniques/equipment.

Angle to Subject (Object, Person or Scene)

Composition

Build the Picture	Consider Graphic Images	Lighting Techniques	Use Space + Depth
Singling out the Subject	Bold Shapes	Natural Light	Framing the subject
Viewpoint	Visual Rhythm	Artificial Light	The lead in
Format (Horizontal Vertical)	Pattern	Towards the light	Focus to control depth
Point of Interest	Surface Texture	Back lit	Sense of Scale
Harmony / Balance vs. Asymmetry	High Contrast vs. Even Tone	Morning Light	Linear Perspective
The Critical Moment	Overexposure vs. Underexposure	Evening Light	Haze and Distance

More Composition Tips / Tricks

1. Apply the Rule of Thirds

2. Look for Triangles
All you need are three visual points that exist in a somewhat triangular formation. The viewer's imagination will connect the dots and tie all elements of the photograph together!

3. Consider Framing
Frames can be natural, such as overhanging tree branches or rock formations, or they can be man-made objects, such as doorways.

4. Look for Symmetry
To master the art of symmetry, you must consider size, shape, color, line, and texture as elements to balance.

5. Use Juxtaposition
The most common way to achieve this is to place or arrange objects in adjacent or opposing locations to highlight their differences.

6. Look for Leading Lines
Leading lines literal or implied lines create a path for the viewers' gaze to follow.

7. Use Diagonal Lines
Diagonal lines convey strength and motion.

8. Incorporate Curves
Curving lines soften an image and convey a natural organic look that lends itself perfectly to landscape, architecture, drone, and urban photography.

9. Keep the Background Simple

10. Let the Background Show Context
Action in the background to be visible but also not be so distracting that it overwhelms the subject and spoils the composition.

11. Use a High Horizon Line
Use a high horizon line in your composition when you want to emphasize the foreground.

12. Use a Low Horizon Line
If you want to emphasize the sky, use a low horizon line.

13. Add Depth by Including Objects at Different Distances
Having a point-of-interest in the foreground, the middle ground, and in the far distance is a great technique for adding depth to any composition.

14. Include a Person or a Familiar Object in a Landscape to Show Scale

15. Shoot from an Unusual Vantage Point
Add interest by shooting from an unexpected place. Consider vantage points that aren't usually seen, and take viewers on a unique journey.

16. Use Contrast to Add Interest
Contrast is the key to avoiding "flat" images that look dull and one-note. Contrasting colors can energize a photograph, but so can big differences in light and shadow.

17. Use Repetition to Your Advantage
An object or shape that repeats can create a dominant pattern.

18. Beyond the Edge of the Picture
When an element of your subject is offstage, your viewers want to know more.

19. Use Lines That Aren't There

20. Show Your Subjects in Motion

21. Get Very Close

Framing & Exposure

Types of Camera Lenses by Focal Length and Uses

| Focal Length	Type of Lens	Primary Uses
4mm - 14mm	Fisheye	Abstract, creative
14mm - 35mm	Wide angle	Landscape, architecture
35mm - 85mm	Standard	Street, travel, portrait
85mm - 135mm	Short telephoto	Portraits, street
135mm+	Medium telephoto	Sports, wildlife, action
35mm - 200mm	Macro	Close ups
Undetermined	Tilt-shift	Architecture, fine art

Framing is the presentation of visual elements in an image, especially the placement of the subject in relation to other objects. Framing can make an image more aesthetically pleasing and keep the viewer's focus on the framed object(s).

Depth of field– The distance between the nearest and furthest points in which an object will be in focus.

White space – Negative space used in framing to increase aesthetic appeal. Negative space is used mostly as a neutral or complementary background in order to draw focus upon the central subject.

Vignetting – A naturally occurring optical phenomenon where the brightness or saturation is reduced at the periphery of an image.

Perspective distortion – An optical technique where lenses of different focal lengths are used to affect the perceived distance between the foreground and background. Wider lenses extend the distance and show more of the background. Longer lenses compress the distance.

The rule of thirds

Exposure
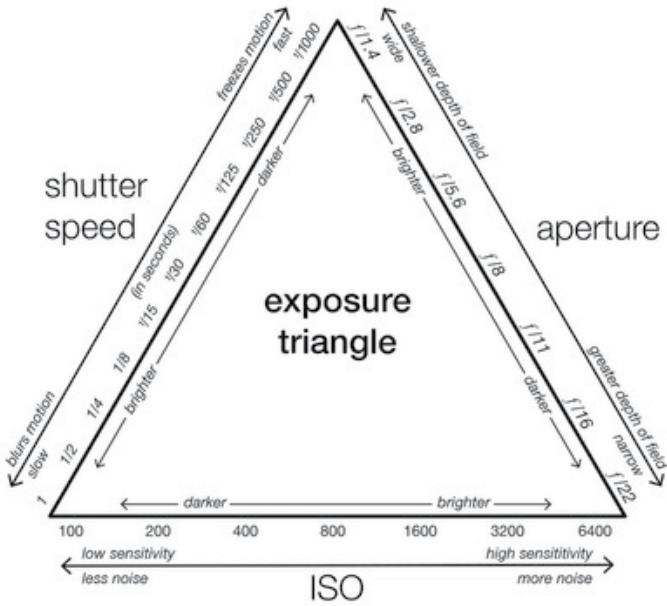
Editing

Throw away:
— Anything out of focus.
— Anything that is too dark, too light or too boring.
—Photos with some technical problems lost high-lights, bad colour.
—All pictures that does not tell a story!
—Any picture without a clear subject.

Keep:
— Photos with a clear story to tell.
— The pictures that you show action or even better of the peak of action.
—The photos that you were taken close to the subject, so they can make good dominant photos.
—Pictures that been taken is interesting angles or perspectives.

Adobe Lightroom

Navigator
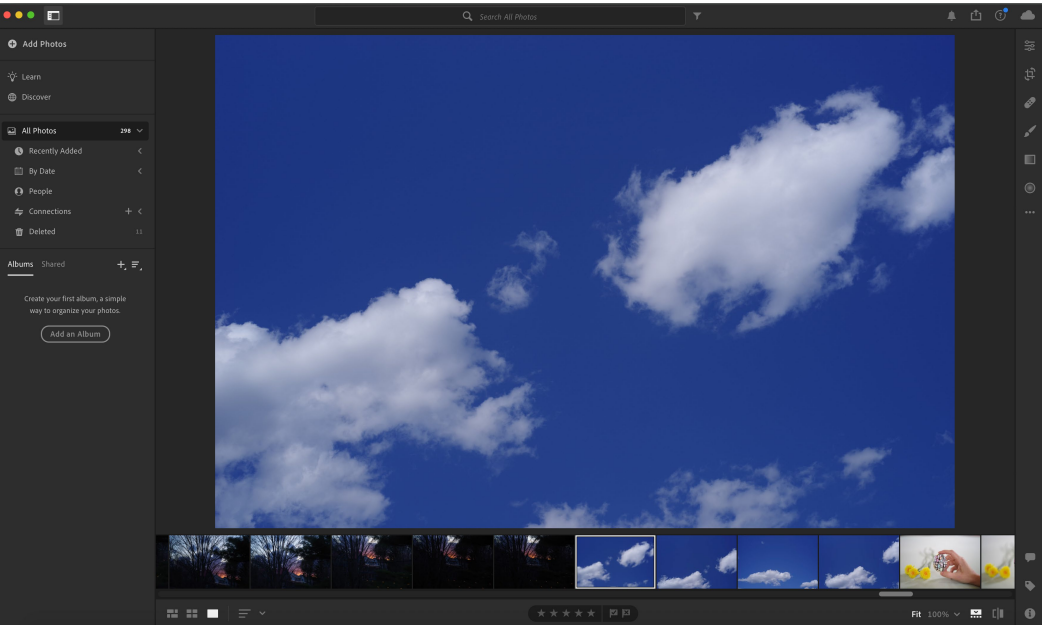
Marking Favorites   Adjustments
                                            Presets
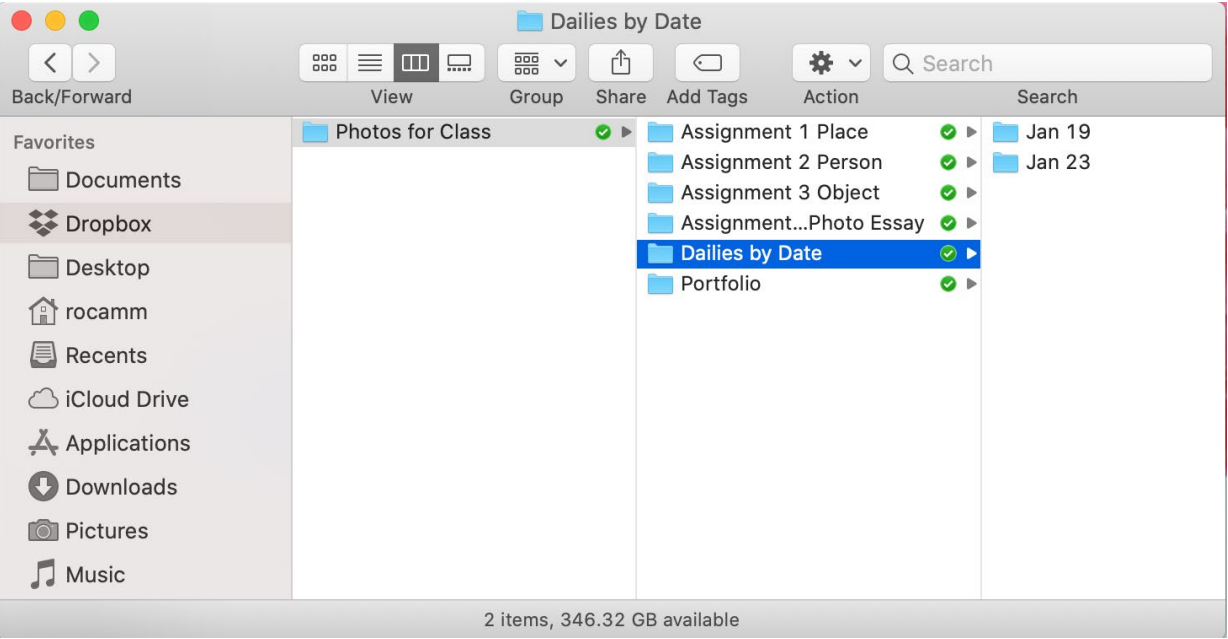
Digital Management

Photo Management:
Digital cameras are great, but they can end up with thousands of photos!

Develop a system that allows you to know when you took the photos, what the subject matter of the photo is, and whether it has been used or not.

Processing Images:
Batch photos- they are a group of photos of one theme with others of the same theme. This makes it all of them easier to find.

Track Information:
Record the 6 w's for each of the photo as you take it- this is much easier than finding the information later.

Store:
File Management is key, keep your images organized well from the beginning so that it is easy to come back to

Mark:
Choose your best images in lightroom and create folders that clearly mark your edited and original photos

Export:
A jpg version of your images and can keep in a handy folder.

Delete:
The photos you do not want to use at the beginning before you store them

The 6 W's:
Who: is in your photo?
What: are they doing?
Where: are you?
When: did this happen?
Why: is this event taking place?
How: are you doing? What went into the event, what did it take to get to this point?

Make sure you ask these six questions at any event where you are taking the photos. What makes a good photography?

Keep detailed notes so that you can come back to these later on