

City of Angels School
Independent Study
Los Angeles Unified School District PHOTO A: Course #200503
STUDENT'S Instructional Guide/ workbook

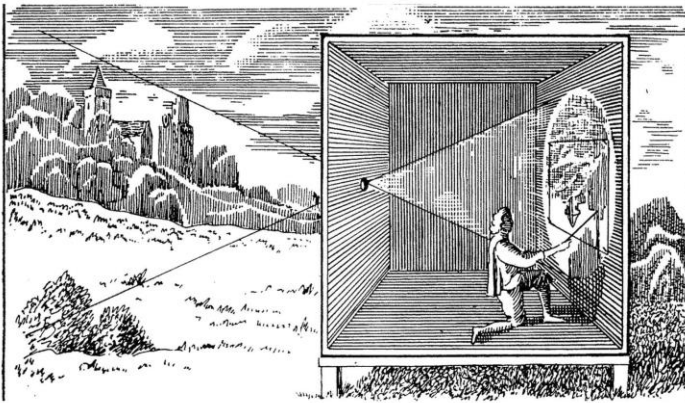
Week 1 - What is Photography?

Week 1a Written assignments

Click the link to watch the video and answer the following questions

<https://www.youtube.com/watch?v=SGncepmrckE&t=1s>

1. In which year did Leonardo D'Vinci discover Camera Oscura?



- a. 1490
- b. 1492
- c. 1494
- d. 1499

2. Who created the Daguerreotype?

- a. Joseph Nicephore
- b. Rembrandt
- c. Louis Daguerre
- d. Aristotle

3. In 1949, the first SLR camera arrives. What does SLR stand for?

- a. super lens response
- b. single lens reflex
- c. significant light recapture
- d. small light refocus

4. When did the digital revolution begin?

- a. 1970s
- b. 1980s
- c. 1990s
- d. 2000s

5. According to the video, why are mobile phones a "game changer"?

- a. They have made photography more accessible to everyone
- b. They have games to keep people interested
- c. Phone cameras are not as good as SLR cameras

6. Write a short paragraph or two about what kind of photography you might be interested in. What interests you in life and the world: sports, cars, people, nature? How can photography fit into those interests?

7. What camera will you be using for this course? How familiar are you with all of the features of this camera?

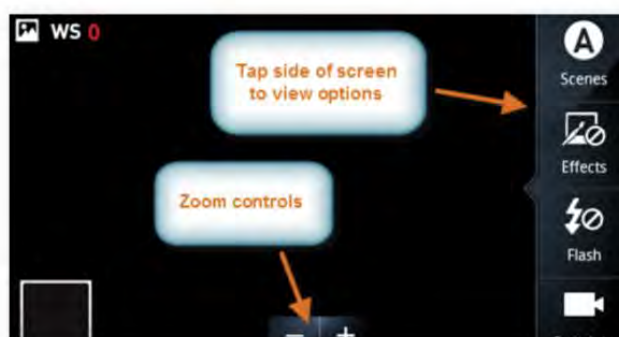
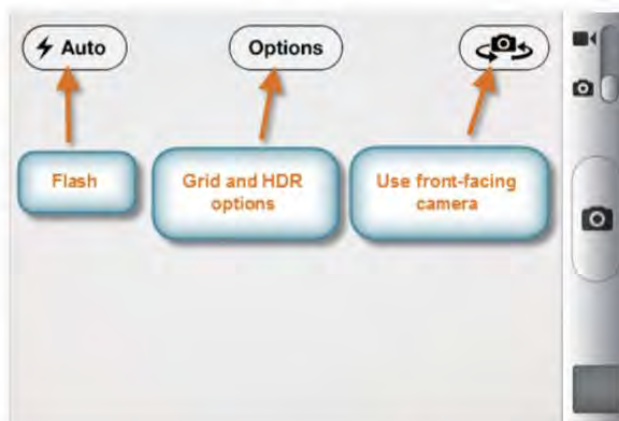
Taking photos with a smartphone

A smartphone is probably the most convenient camera you can have. You'll always have it with you, it fits in your pocket, and it doesn't require any manual adjustments before you can take a photo. Even if you own a nicer camera, you'll probably still use your smartphone to capture unexpected photo moments.

Therefore, it's a good idea to learn how your phone's camera works so you'll be ready when you want to take a photo.



As you can see in the photos below, each smartphone has different features and may put common features in different places.



8. Examine your camera that you will be using for this course. Submit a screenshot showing or write about the flash options available on your camera

Focusing

Many phones have basic cameras that use a **focus-free system** (which means pretty much everything stays in focus all the time). However, more and more phones are starting to have **high-quality cameras** that require focusing.

As you learned in our lesson on [Getting to Know Your Camera](#), most cameras use a **two-stage shutter button** to trigger the auto-focus. Some smartphones, such as the Motorola Droid, have a two-stage shutter button. To auto-focus the camera, you'll simply press the shutter button halfway down. Other phones, such as the iPhone, allow you to **touch a specific area of the screen** to focus the camera. When you do this, the iPhone will also adjust the exposure so the focal point of your photo will always look good.

Zooming

Many smartphones have a **digital zoom** you can use to capture small or distant objects. On the iPhone, you can bring up the zoom slider by using a pinch gesture, while on an Android phone you can tap the **plus (+)** and **minus (-)** buttons. It's important to keep in mind that this is a digital zoom, which is of a lower quality than an optical zoom.

Scene modes

Scene modes are a great way to take better photos in specific situations. For example, the **Landscape**, **Sports**, **Night Portrait**, and **Closeup/Macro** modes are each tailored to different situations. Some smartphones allow you to select scene modes. For example, many Android phones allow you to tap the right side of the screen to access scene modes (as well as other options).



9. Describe how you can focus and zoom on your camera.

10. If your camera offers any scene modes, play with them and describe them.

Other features

ng Photos with a Smartphone

<https://edu.gcfglobal.org/en/digitalphotogr>

Some smartphones have additional features you can use to take better photos. Here are a few features your phone may have:

- ▶ **Grid:** The iPhone can display a rule of thirds grid on the screen to help you compose your photo. You can access this by tapping the **Options** button at the top of the screen.
- ▶ **HDR (High Dynamic Range):** This mode helps you capture more detail in the shadows and highlights of your photos. Generally, it will only work when your subject isn't moving.
- ▶ **Flash:** Many smartphones have a flash to help you take low-light photos.
- ▶ **Effects:** Some smartphones allow you to apply effects to your photos, which can include **black-and-white**, **tinted**, or **vintage** filters. On Android phones, you can tap the right side of the screen to access the effects.
- ▶ **Front-facing camera:** The iPhone has a second camera just above the screen. This makes it easier to take a photo of yourself, since you can see the screen while you're taking the photo.

Answer the following questions:

- Are you able to add a grid to your camera? If not, look into a free app that may offer one like camera+?
- Research how to manually control the HDR on your camera. What have you learned about it?
- Does your phone offer any built in effects? What photo effects do you use from other apps?
- Sometimes, rear and front-facing cameras offer different options. What can you figure out about yours.

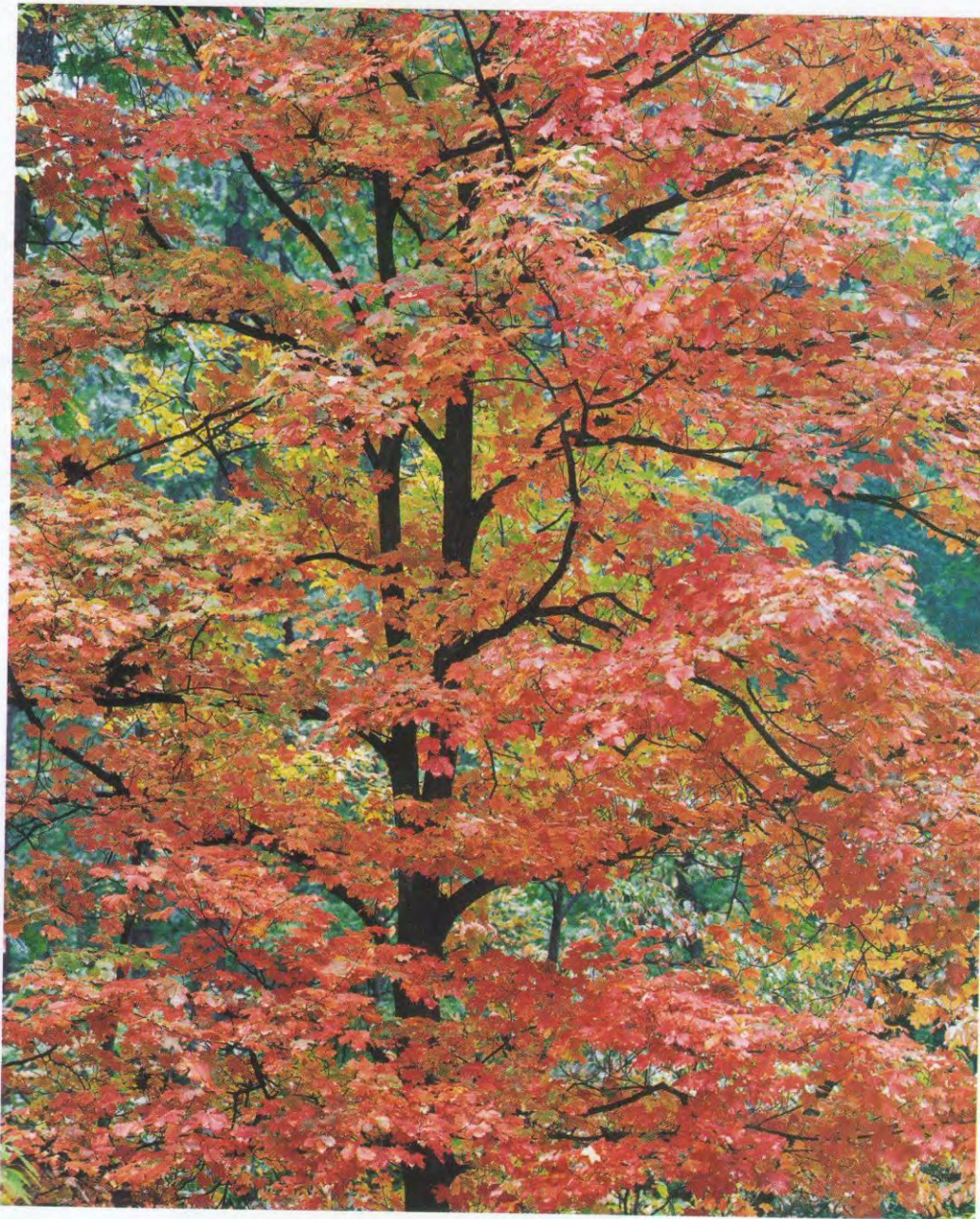


Fig. 1-26. The strong use of warm colors closest to the viewer is contrasted by the cool colors in the distance. How does combining both affect the visual impact of the image?

Christopher Burkett, *Young Red Maple, Kentucky*, 1993.

Answer the question in the caption

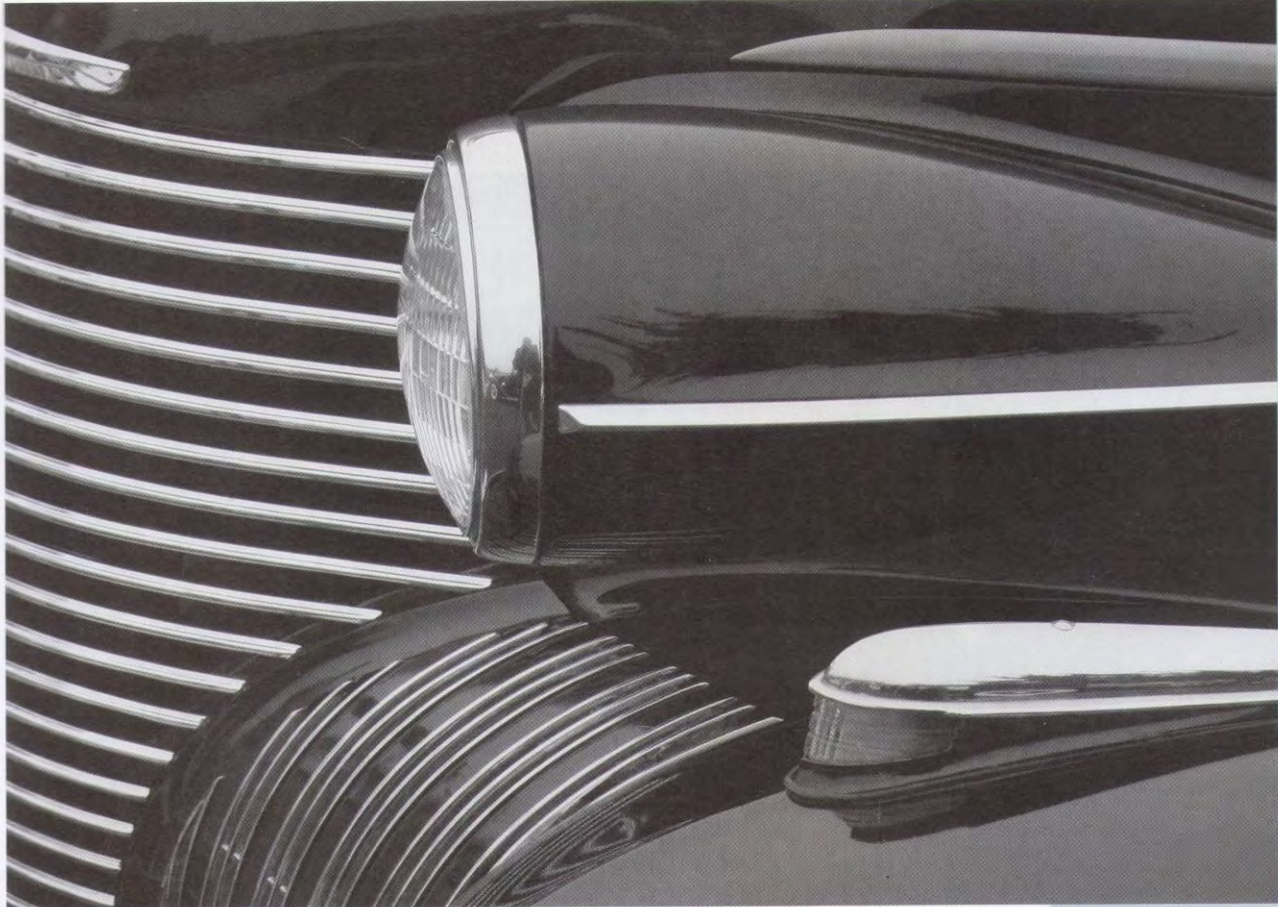


Fig. 1-27. The strong contrast and bold shapes and lines are perfectly suited for black and white.
How would using color change this image?
Huntington Witherill, *Headlamp*, 1940 Cadillac Series 75, 2005.

Answer the question in the caption

Career Profile Lynn Johnson



Lynn Johnson is a staff photographer for *Sports Illustrated* and freelances for *National Geographic*. Rather than competing to be a sports photographer, Johnson has chosen to specialize in capturing the personalities of the people involved in the sports world, examining the intimate sides of their public

and private lives. Rather than deal with the superstar personalities in sports, Johnson focuses on what she calls “the real people.”

How did you become a photographer?

Lynn: When I was in the ninth grade, I saw the work of Dorothea Lange and the Farm Security Administration photographers, and was immediately taken by what felt like the Truth. I’ve been interested in photography ever since.

What kind of assignments do you get from Sports Illustrated?

Lynn: I photograph people for who they are, as opposed to what they do or how fast they run. So, for instance, I might follow a coach around for a week or two, show why she’s so passionate, why she has a winning team, what motivates her, what drives her, what are the relationships in her life. That’s the kind of assignment I get.

What’s the most important aspect of being a photographer?

Lynn: It’s developing trust between the person on the other side of the camera and myself. Getting them to trust my intention to tell their story with integrity and honesty.

What advice do you have for students wanting to become photographers?

Lynn: Be aware of the wider world, but not necessarily study photography as your primary course of study. Study sociology, anthropology, history, writing, economics. Learn how to think, how to reason, how to research. It’s not enough just to take pictures today; you need to have other kinds of skills. You need to be curious. That’s the key.



Fig. 1-32. Rather than concentrating on the person in the image, Johnson chooses to focus on the setting and the conditions. What does the setting reveal about this person?

Lynn Johnson, *Untitled*.

Answer the question in the caption

WHAT IS A JPEG?

JPEG stands for Joint Photographic Experts Group and is the most common format for digital photos. A JPEG can display millions of colors, so it's perfect for photos. There are other image formats that also display millions of colors, but JPEGs are compressed to create smaller image files while still looking good. Compression allows you to save more photos in less space. You'll learn more about compression - good and bad - later in this chapter. File format extensions most commonly associated with JPEG photos are *.jpeg* and *.jpg*.

RECORD YOUR FINDINGS

- **Select the two main reasons from the paragraph the JPEG format is used for digital photos?**
 - a. A JPEG can display millions of colors, so it's perfect for photos.
 - b. There are other image formats that also display millions of colors, but JPEGs are compressed to create smaller image files while still looking good.
 - c. Compression allows you to save more photos in less space
 - d. File format extensions most commonly associated with JPEG photos are *.jpeg* and *.jpg*.

CLEANING YOUR CAMERA LENS

If your camera lens is dirty, it's like shooting photos through a dirty window. So, before you start, be sure your camera lens is clean. However, DON'T start wiping off the dirt, as this can scratch the lens and give you worse images than just having a dirty lens. Also, DON'T spray the lens with compressed air, as this can force dirt and dust inside the lens housing.

How do you clean a camera lens? [1] Carefully, blow away any grit or dust, or brush it away with a camel's hair brush made for camera lenses. [2] Gently wipe the lens surface with a clean, soft, lint-free cloth, like a microfiber cloth for cleaning eyeglasses. [3] If needed, use a little lens cleaning fluid (or, in a pinch, water) applied to the cloth. [4] Consider buying a lens-cleaning tool that has a brush on one end and a lens pen on the other end (about \$8).

Learn more about cleaning camera lenses at About.com:

<http://cameras.about.com/od/tutorials/a/How-To-Clean-A-Camera-Lens.htm>

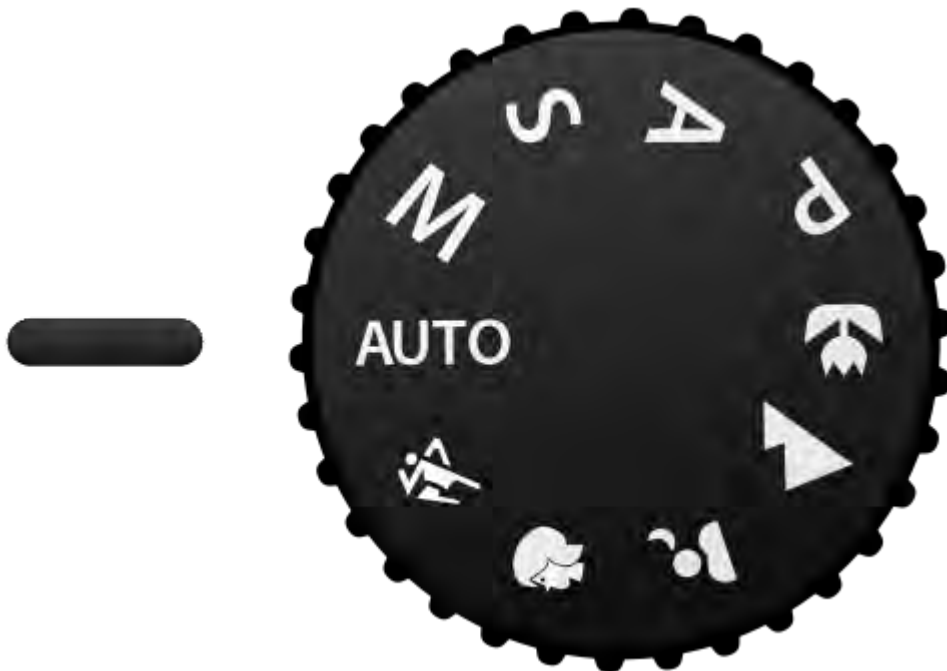
RECORD YOUR FINDINGS

- **Describe the steps for cleaning a camera lens.**
 - **Describe what not to do when cleaning a camera lens.**
-
-
-

This lesson will help you understand AUTO, SEMI-MANUAL, & MANUAL SHOOTING MODES. Start with the explanations in GET THE BASICS to build understanding. Then, deepen your learning with additional online resources in EXPLORE. The additional online resources are essential to understanding shooting modes! When you respond to the questions and prompts in RECORD YOUR FINDINGS, be sure to include information you learned from the additional online resources.

GET THE BASICS

Your digital camera has auto, semi-manual, and manual shooting modes that relate to shutter speed and aperture - and who/what is setting them. Auto mode is the simplest to use. In auto mode, all you do is point and shoot, or point, hold the shutter button down halfway to use auto-focus, and shoot. The digital camera senses which shutter speed and aperture provide the optimum exposure. Some digital cameras have more than one auto mode, such as Program Auto and Intelligent Auto. Program Auto is the basic auto mode to get the optimum exposure. Intelligent Auto tries to understand your intention with the photo and adjust accordingly. For example, it may recognize a moving subject and try to freeze it, or it may see the warm colors of a sunset and try to bring out those colors. The image below shows an example of a digital camera mode selections dial. You'll learn more about the little picture icons (scene modes) in the next lesson.



Semi-manual mode generally has two options, Shutter Priority and Aperture Priority. In the last lesson, you learned about the relationship between these two. Shutter priority allows you to set the shutter speed to control how moving objects are handled and lets the digital camera attempt to find an aperture value that works with your shutter speed. The majority of digital cameras use "S", while some use "TV" (time value), to indicate shutter priority on the dial or menu selections. Aperture priority does just the opposite of shutter priority. Aperture priority allows you to set the aperture value to control depth of field and lets the digital camera attempt to find a shutter speed that works with your aperture setting. Many experienced photographers use a light meter to help them determine appropriate aperture values. The majority of digital cameras use "A", while some use "AV" (aperture value), to indicate aperture priority on the dial or menu selections.

Manual mode allows you to set both the shutter speed and aperture value. In manual mode, YOU have to determine all of your motion and depth of field needs and requires a lot of experience. Again, many experienced photographers use a light meter to help them determine appropriate aperture values.

EXPLORE

Learn about shutter and aperture priority modes at Aperture and Shutter Priority Modes from Digital Photography School:
<http://digital-photography-school.com/aperture-and-shutter-priority-modes/>

Learn about shutter and aperture priority modes at Which mode is better? Aperture priority of shutter priority from Digital Photo Secrets:

<http://www.digital-photo-secrets.com/tip/1330/which-mode-is-better-aperture-priority-or-shutter-priority/>

RECORD YOUR FINDINGS

- Describe the differences between auto, shutter, aperture, and manual shooting modes.
- Which mode do you think you'd use most often and why? (There's no right or wrong answer for this one.)

This lesson will help you understand SPECIAL SCENE MODES. Start with the explanations in GET THE BASICS to build understanding. Then, deepen your learning with additional online resources in EXPLORE. The additional online resources are essential to understanding scene modes! When you respond to the questions and prompts in RECORD YOUR FINDINGS, be sure to include information you learned from the additional online resources.

GET THE BASICS

Most digital cameras have special scene modes that control the camera's settings specific situations. In the previous lesson, you learned about shooting modes that allow you to set the shutter speed and/or aperture. Scene modes are basically presets for shutter speed, aperture, and other factors, like optimizing colors. Common scene modes include Portrait, Landscape, Night, Sports. Depending on your digital camera, you may have fewer - or many more - scene modes.

Here are two examples of scene modes:

Portrait scene mode assumes that you want the subject to be in focus and the background out of focus. So, the aperture is automatically set to be larger (smaller f stop) to create a narrow depth of field. The camera also finds a shutter speed that is compatible with the larger aperture.



Sports scene mode assumes that you want to freeze action. So, the shutter speed is automatically set to be faster to freeze the action. The camera also finds an aperture setting that is compatible with the faster shutter speed.



Scene modes are usually represented by little icons (pictures) that indicate visually what each scene mode does. Some digital cameras have help menus that describe the functions of each scene mode. These descriptions can help you to learn more about each.

Locate the scene mode settings for your digital camera. Can you recognize the purpose of each based on the icons?

EXPLORE

Learn about scene mode settings at *Guide to Digital Camera Shooting Modes* from SnapFish:

<http://www.snapfish.com/snapfish/digitalcameramodes/>

Learn more about scene modes at *Common Digital Camera Scene Modes* from Picture Perfect:

<http://www.picturecorrect.com/tips/digital-camera-scene-modes/>

RECORD YOUR FINDINGS

- Name and describe five or more of your digital camera's shooting/scene mode settings. If possible, include drawings of the icons representing each.

Match each word to the correct definition

- | | |
|----------------|--|
| 1. Resolution | A. is a measure of the number of pixels (dots) used to make a photo. |
| 2. Compression | B. is a function of how much information is kept or discarded to make an photo file smaller when storing it. |

Research your camera or smartphone camera. Find an article or manual for your camera. The article should help you learn more about the available functions your camera offers.

- Copy the URL to this question
 - List or summarize what you learned from this article
-
-
-

Week 1 Photo project:

Choose 10 ideas from the list below. You will have to take a lot of photos to find the ones you like best. Try to compose your photos in an interesting way. You can submit each photo to this assignment, or compile them onto a sheet like a Google Doc. No explanation needed for the photos

1. **Good Morning:** Just give us a view of your morning. Is it hectic or relaxed, involve work, commutes, playtime, breakfast? What's going on for you in the morning?
2. **Headshot:** Just from the neck up for this one. Try for a living human subject, whether yourself or someone else. If you can find a model willing to pose for you, great.
3. **Landscapes/Nature/Trees:** You may not live in a rural area, so you can try a park if you're a city dweller. Black and white or color will be accepted. A tree MUST be included in your picture.
4. **Hands:** Yup, that's it.
5. **From a High Angle:** Take your shot from above!
6. **From a Low angle:** Take your shot from below!
7. **A Bad Habit:** We all have them, so get us a great one!
8. **A Childhood Memory:** Dig deep for this one. It should be something that is vivid in your mind, whether good, bad or ugly!
9. **Someone You Love:** You can be in or out of the shot.
10. **Eyes:** However you see it.
11. **Shoes:** Some of us are obsessed with these.
12. **Broken:** This can be an item, a feeling, or an event.
13. **Technology:** Must be something nifty!
14. **Silhouette:** Play with the shadows.
15. **Faceless Self-Portrait:** Keep it clean people!
16. **Food:** All things yummy!
17. **Tranquility:** This could be a scene, a person, animal or any other way you envision the theme.
18. **Fierce:** Attitude is a state of mind.
19. **Sunflare:** This one could be tricky. No artificial light allowed!
20. **Yourself With 13 Things:** However you want!
21. **Elderly:** This one explains itself.
22. **Speed:** Catch it if you can.
23. **Close-Up:** Practice your Macro Photography!
24. **Construction:** You can stage it if you have to, but an actual scene is better.

Week 2 – Basic Photo Composition

2a – Steady Camera

This lesson will help you learn and practice **STEADY CAMERA**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

There are many things to learn about taking good photos. The first and most important of these is keeping the camera steady. A steady camera captures clear and sharp photos. Moving the camera makes the photos blurry and is one of the most common mistake beginners make. So how can you keep the camera steady?

One way to keep the camera steady is to use a tripod. A tripod is a stand with three legs. Many photographers also use a monopod. Like it sounds, a monopod is a stand with only one leg. Tripods and monopods allow you to hold the camera on something solid, so it's easier to keep the camera steady.



[Figure 1]

If you don't have a tripod or monopod, try setting the camera on a solid surface, like a table, chair back, a fence, a railing...



[Figure 2]

... or even a pole.



[Figure 3]

Even without something else to steady the camera, it's possible to hold the camera very steady - if you know how. Stand with your feet firmly on the ground, shoulder width apart, and weight evenly distributed. Hold the camera with both hands and pull your elbows in to brace them against your body.



[Figure 4]

Variations include sitting or kneeling. In this example, notice how the photographer braces her arm and elbow on her knee.



[Figure 5]

EXPLORE

Before shooting your own steady camera photos, learn more about steadying your camera at *Eliminating Camera Movement* from Short Courses:

<http://www.shortcourses.com/use/using2-1.html>

Also look at *More ways to hold a camera steady when a tripod isn't possible*:

<http://www.digitalcameraworld.com/2012/07/25/more-ways-to-hold-a-camera-steady-when-a-tripod-isnt-possible/>

For even more information on how to steady your camera, including pictures of hand placement, see *Sharp Pictures with Your Digital Camera, Part 1: Camera Shake* from Ritz Interactive. You'll even learn how to hold a cell phone camera steady:

<http://www.ritzcamera.com/static/articles/tips/nyip2006a.html>

ASSIGNMENT:

Shoot four or more pairs of photos. For each pair, choose a subject. For the first photo in a pair, try a steady camera technique. (If you are using a digital camera and not a smartphone, press the shutter button smoothly halfway down to let your camera auto focus. Then press smoothly the rest of the way. Taking your time is better than rushing and jiggling the camera. For the second photo in the pair, try shooting without using a steady camera technique.

Compare your steady/not-steady photo pairs. Submit your photo pairs to this assignment, and be prepared to discuss how they show what you've learned. Create and attach a document (word, google docs, etc) where you can embed your photos and label if they were taken with a steady camera technique or not. Include a reflection and answers to the following questions:

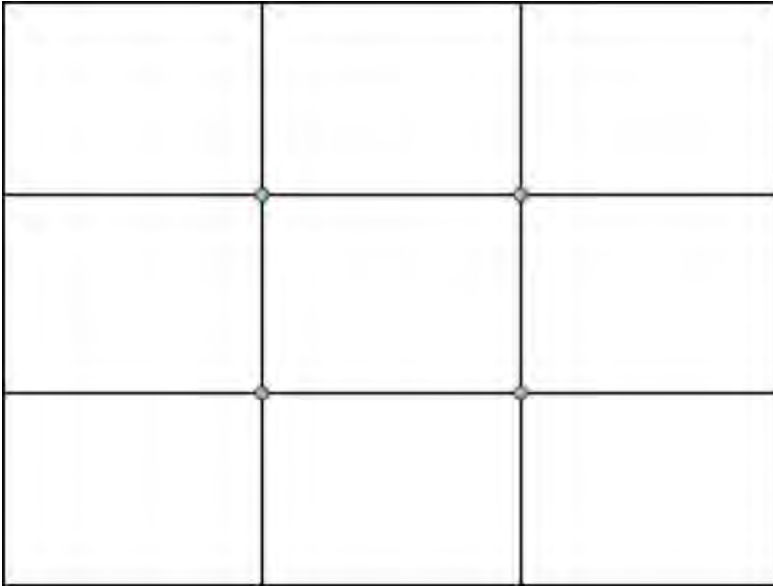
- **Why is the skill of Steady Camera important?**
- **How do the Steady Camera 1 and 2 photo pairs compare? Are the photos without steadying the camera as clear and sharp as the Steady Camera 1 and 2 photos?**
- **What are four things you can do to steady the camera?**

2b – Rule of Thirds

This lesson will help you learn and practice **RULE OF THIRDS**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

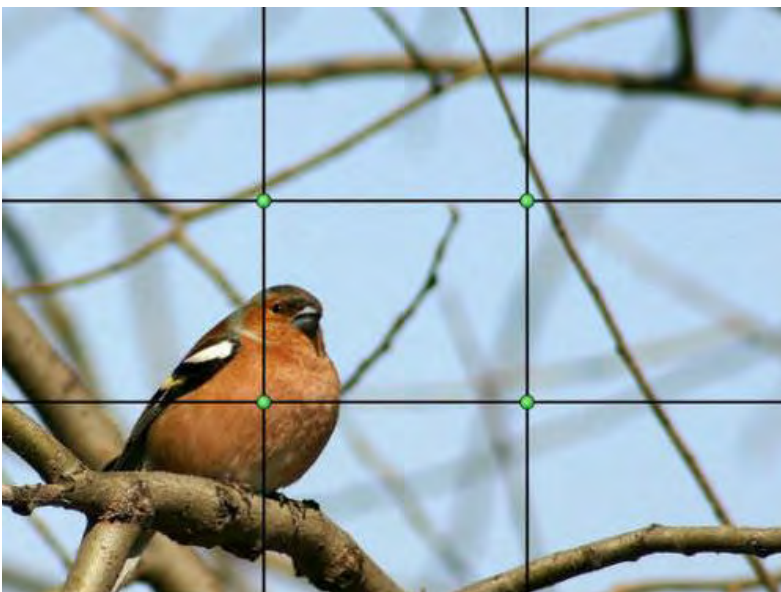
GET THE BASICS

Beginners point-and-shoot with their point-and-shoot digital cameras – usually with the subjects right in the middle of the photos. One of the first rules of photo composition is the rule of thirds. Using this rule, the subject is NOT in the middle. Here's how it works: In your mind, divide the photo area into thirds with two equally-spaced horizontal and vertical lines.



[Figure 1]

Place the most important part of your photo at one of the four intersections. This creates a photo that is balanced, interesting, and pleasing to the eye.



[Figure 2]

Many digital cameras have a setting which overlays a rule of thirds grid on the screen. This can be very helpful as you practice your rule of thirds photocomposition. See if your digital camera has this setting.

EXPLORE

Before shooting your own rule of thirds photos, learn more about the rule of thirds at Photoble:

<http://www.photoble.com/photography-tips-tricks/composition-101-rule-of-thirds-in-photography-with-examples>

Learn more with annotated examples at *Rule of Thirds* from Photography Mad:

<http://www.photographymad.com/pages/view/rule-of-thirds>

Finally, see the rule of thirds applied to amazing photos at *Superb Rule-of-Thirds Photography* from Abduzeedo:

<http://abduzeedo.com/superb-rule-thirds-photography>

Assignment

Shoot four or more pairs of photos. For the first photo in each pair, place the subject in the center of the photo. For the second photo in each pair, apply the rule of thirds by placing the subject on one of the four intersections. Try different subjects, like a tree, a person, or a pet.

Compare your centered/rule of thirds photo pairs. Select FOUR pairs. Share your photo pairs with your teacher, and be prepared to discuss how they show what you've learned. Create and attach a document (word, google docs, etc) where you can embed your photos and label if they were taken with a steady camera technique or not. Include a reflection by answering the following questions:

RECORD YOUR FINDINGS

- **What is the rule of thirds?**
- **Why is the rule of thirds important?**
- **Describe how you applied the rule of thirds in each of the four photo pairs you selected?**

2c – Level Horizon

This lesson will help you learn and practice **LEVEL HORIZON**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

When you look at a landscape, you're used to seeing a level horizon. Even with your head tilted, your brain still registers the horizon as being level. It's just the way our brains are wired. The horizon should be horizontal (horizon – horizontal – get it?) This is true indoor as well. Floors and ceilings should be horizontal. When you see a photo with a tilted horizon, it doesn't look right.



[Figure 1]

Another thing to keep in mind with the horizon is the rule of thirds. You'll want to place the level horizon one-third from the bottom of the photo if you want more sky or one-third from the top if you want more land or water. Here are examples of each.

Level horizon with 1/3 land and 2/3 sky:



[Figure 2]

Level horizon with 2/3 land and 1/3 sky:



[Figure 3]

EXPLORE

Before shooting your own level horizon photos, learn more about why you need a level horizon at *Photography Lesson - The Importance of Straight Horizons* from About:

<http://photography.about.com/od/takingpictures/qt/Photography-Lesson-The-Importance-Of-Straight-Horizons.htm>

Get some quick tips at *Getting Horizons Horizontal* from Digital Photography School:

<http://digital-photography-school.com/getting-horizons-horizontal/>

Now, learn more level horizon techniques at *4 ways to insure a level horizon* from Digital Camera World:

<http://www.digitalcameraworld.com/2012/03/30/4-ways-to-ensure-a-level-horizon/>

Assignment

Shoot four or more pairs of photos. For the first photo in each pair, let the horizon tilt. For the second photo in each pair, concentrate on keeping a level horizon. Choose a variety of subjects: landscape with some sky, sky with some landscape, sky-horizon like a sunset or sunrise, and indoor with the floor or ceiling line showing.

Compare your level horizon photo pairs. Select FOUR pairs. Share your photo pairs with your teacher, and be prepared to discuss how they show what you've learned. Create and attach a document (word, google docs, etc) where you can embed your photos and label if they were taken with a steady camera technique or not. Include a reflection by answering the following questions:

- **What is a level horizon?**
- **Why is a level horizon important?**
- **How does the rule of thirds apply to a level horizon?**
- **How did you insure a level horizon in each of the four pairs you selected?**

2d – Fill the Frame

This lesson will help you learn and practice **FILL THE FRAME**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

You shoot photos something you want to see. That something is called the subject of the photo. If the subject is actually only a small part of the photo, it can get lost. To make the subject the most important thing, move close enough so that it fills the digital camera screen. This is the concept of filling the frame.

Here is an example of a photo with three boys. They are the subject of the photo. In the photo on the left, see how motorcycle pulls your eyes away from the subject? This happens in the middle photo as well. How about the photo on the right? Now, the boys are the most important. This is clear, because they fill the frame of the photo.



[Figure 1]

Be careful though. If you get so close that your digital camera can't focus, the photo will be blurry. Always press the shutter button half way to let the camera auto-focus. If it can't, you'll know that you're too close.

Another way to get close is to use your digital camera's zoom. However, it's important to know the difference between optical zoom and digital zoom. Optical zoom moves the camera lens farther from the image sensor, magnifying the image that reaches the sensor without decreasing the resolution (number of pixels) or image quality. Digital zoom shoots a cropped view of the image and then enlarges it to fill the frame. It does this by making the pixels larger. This can result in a blurry, blocky appearance, because you see that actual pixels. This is referred to as pixelated. If you use digital zoom, shoot at a high resolution. Otherwise, it can result in pixelated photos like the one on the right below.



[Figure 2]

EXPLORE

Before shooting your own fill the frame photos, learn more about why it's important to fill the frame at *Fill the Frame in Your Photography Composition* from PictureCorrect:

<http://www.picturecorrect.com/tips/fill-the-frame-photography-composition/>

Learn more with great fill the frame examples at *Fill Your Frame* from Digital Photography School:

<http://digital-photography-school.com/fill-your-frame/>

To help you understand the difference between optical and digital zoom, check out *What Is The Difference Between Optical Zoom and Digital Zoom? Which is Better?* from tfpsoft's Digital Camera Guide:

<http://www.tfpsoft.com/fun/digitalcameraguide/digitalversusopticalzoom.html>

Assignment:

Shoot four or more pairs of photos. For the first photo in each pair, make the subject a small part of the photo. For the second photo in each pair, apply the concept of fill the frame. In at least one pair of photos, fill the frame by physically moving closer to the subject. In at least one other pair of photos, fill the frame by using your camera's zoom (optical and/or digital).

Compare your fill the frame photo pairs. Select **FOUR** pairs. Share your photo pairs with your teacher, and be prepared to discuss how they show what you've learned. Download your photos to a computer to keep them for the portfolio you'll create in the end-of-course final project. Create and attach a document (word, google docs, etc) where you can embed your photos and label if they were taken with a steady camera technique or not. Include a reflection and answer the following questions:

- What is the importance of filling the frame?
- How can filling the frame change the purpose of the photo?
- What are two things you can do to fill the frame?
- How are optical zoom and digital zoom different?

2e – Distracting Backgrounds

This lesson will help you learn and practice avoiding **DISTRACTING BACKGROUNDS**. In **GET THE BASICS**, you'll get explanations and photos to build understanding. In **EXPLORE**, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in **BUILD YOUR SKILLS**. Finally, answer the questions in **RECORD YOUR FINDINGS** at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

Often, you concentrate so much on the subject of a photo, you forget the background - the area around and behind the subject. The background can complement, or distract from, the photo. If the background is busy, or a tree branch appears to grow out of your subject's head, the result isn't going to be a good photo.

One way to clear up a distracting background is to zoom in on the subject. This creates less area around the subject to distract the eye. In this example, the bleachers, pole, and trees distract the eye from focusing on the subject, the people. The matching photo corrects this by zooming in.



[Figure 1]

Another way to clear up a distracting background is to changing the background. The easiest way to do this is to change the direction from which you are shooting the photo. Here's an example where the pool tools, play structure and house distract from the people in the pool. The matching photo fixes this by changing the shooting direction as well as by zooming in.



[Figure 2]

EXPLORE

Check out more about distracting backgrounds at *Five Ways Backgrounds Make or Break Photos* from the Digital Photography School:

<http://www.digital-photography-school.com/5-ways-backgrounds-make-or-break-photos>

So far you've learned two ways to fix distracting backgrounds. Now, learn more ways to fix distracting backgrounds at *9 Tips for Getting Backgrounds Right* from the Digital Photography School:

<http://digital-photography-school.com/getting-backgrounds-right/>

ASSIGNMENT:

Shoot four or more pairs of photos. For the first photo in each pair, keep a distracting background. For the second photo in each pair, apply one of the methods you've learned to fix the distracting background. In at least one pair of photos, fix the distracting background by zooming in. In at least one other pair of photos, fix it by changing the direction you use to shoot the photo.

Compare your distracting background photo pairs. Select FOUR pairs. Share your photo pairs with your teacher, and be prepared to discuss how they show what you've learned. Create and attach a document (word, google docs, etc) where you can embed your photos and label if they were taken with a steady camera technique or not. Include a reflection by answering the following questions:

- **How can a distracting background hurt a photo?**
- **What are some things that can make a photo's background distracting?**
- **Describe three or more ways to correct a distracting background.**

Week 3 - Movement & Direction

3a - Direction of Movement

This lesson will help you learn and practice **DIRECTION OF MOVEMENT**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

Direction of movement is the feeling that a photo's subject is moving across the photo. It is created by allowing space in front of the subject for the subject to move into. In the photo on the left below, the dog is centered. There is an equal amount of space in front of and behind the dog. Your eye is drawn equally in front of and behind the dog, so the dog appears to be still. In the photo on the right, the space in front of the dog is greater than the space behind the dog. This greater space is called leading space. Your eye is drawn to the leading space making it appear that the dog is walking into that space. The photo on the right is an example of direction of movement.



[Figure 1]

Using leading space to create direction of movement can be applied to any subject capable of moving. Here are two more examples of direction of movement.

1. The woman appears to be walking from right to left into the leading space.



[Figure 2]

2. The bicycle racer appears to be moving from right to left into the leading space.



[Figure 3]

EXPLORE

Before shooting your own direction of movement photos, here's a quick look at direction of movement, what it is and why it works, at *Leave Space For Movement* from Outdoor Photographer:

<http://www.outdoorphotographer.com/how-to/tip-of-the-week/leave-space-for-movement.html>

Then, check these examples and explanations from *Project 6: direction of movement* at Susan Barwood's OCA Photography blog:

<http://susanbarwoodphotography.blogspot.com/2011/05/project-6-direction-of-movement.html>

ASSIGNMENT:

Shoot four or more pairs of photos. For the first photo in each pair, center the subject. For the second photo in each pair, apply the concept of direction of movement by leaving leading space in front of the subject.

Compare your direction of movement photo pairs. Select FOUR pairs. Share your photo pairs with your teacher, and be prepared to discuss how they show what you've learned. Create and attach a document (word, google docs, etc) where you can embed your photos and label if they were taken with a steady camera technique or not. Include a reflection and answer the following questions:

- **What is leading space?**
- **How does leading space create direction of movement?**
- **Describe what you did with your photos to create direction of movement.**

3b – Framing

This lesson will help you learn and practice **FRAMING**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

Just like a picture frame can surround a photo, in photography, framing is a technique using something in the foreground that “frames” the subject, leads the eye into the photo to focus on the subject. It also gives a feeling of depth because the subject is further away than the frame. Here are some examples of framing.

1. The shadow of the arch in the front frames the building in the distance.



[Figure 1]

2. Here's a similar photo with an old stone building forming the frame.



[Figure 2]

3. You can frame the subject in a doorway.



[Figure 3]

4. Even trees can serve as a frame.



[Figure 4]

Notice that you can use a variety of things for frames, like an interesting arch, tree branches, doorframes, and even a crumbling building. Can you think of other frames?

EXPLORE

Before shooting your own framing photos, learn more about framing at *Guidelines for Better Photographic Composition: Framing* from Photoinf.com:

http://photoinf.com/General/KODAK/guidelines_for_better_photographic_composition_framing.html

Get ideas for framing with LOTS of examples at *Framing - Photography Composition* from Photography Blogger:

<http://www.photographyblogger.net/framing/>

ASSIGNMENTS

Shoot four or more photos - no pairs this time. See if you can find ways to frame subjects. If you can't think of enough ways, review *Framing - Photography Composition* from Photography Blogger (see above). You can get lots of ideas from the many examples in this blog posting.

Review your framing photos. Select FOUR photos. Share your photos with your teacher, and be prepared to discuss how they show what you've learned. Create and attach a document (word, google docs, etc) where you can embed your photos and label if they were taken with a steady camera technique or not. Include a reflection and answer the following questions:

- What is framing?
- How does framing affect your eye when you look at a photo?
- Name four things that could frame a subject without using any of the examples in GET THE BASICS.

3c - Point of View

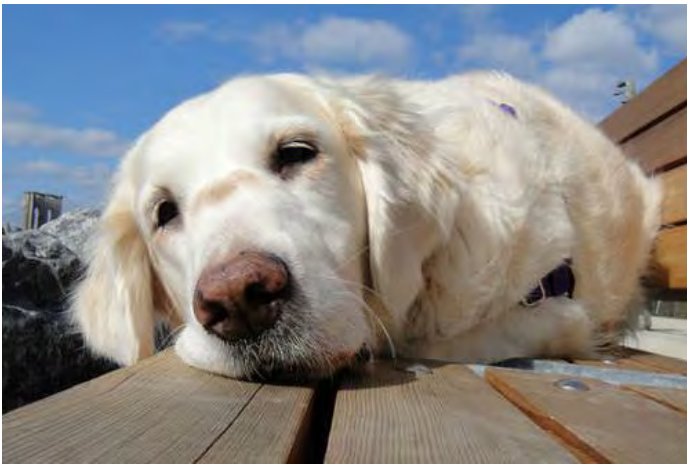
This lesson will help you learn and practice **POINT OF VIEW**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

So far, Your photos have been from your point of view - how you see things with your eyes. However, you don't have to take pictures only from your *eye level*. Shooting from different heights and angles can result in some amazing photos from different points of view.. as if you are looking through someone of something else's eyes. Other lessons in this chapter have been about creating movement. This one is about you moving to different spots and changing directions as you capture different points of view.

A photo from a different position can draw your eye into a subject, change the way the viewer sees the world, or even affect the way the viewer feels about the subject of the photo. Here are some examples to demonstrate how point of view can change a photo.

1. In this example, a dog is taking a well-earned nap. Since you are down at the dog's level, your eye is quickly drawn to the dog's face and nose, giving the feeling that you're taking a nap with the dog.



[Figure 1]

2. What if you were as small as a bug? What would the world look like to you? In this case the building's slant makes it feel like you are tilting from side to side as you move through the grass jungle.



[Figure 2]

3. Even a flower can look huge and threatening when seen close up from underneath.



[Figure 3]

4. Looking down at these children from above makes them appear small and weak. Would they still appear small and weak if you took the photo from ground level looking up at them?



[Figure 4]

5. Here's an intimate moment you might miss from a different point of view.



[Figure 5]

EXPLORE

Before shooting your own point of view photos, get more detail about point of view at *Point of View in Photography* from About.com:

<http://photography.about.com/library/pointofview/blpointofview.htm>

Now enjoy amazing examples of point of view photography at Photography 101: Establishing a Point of View from The Daily Post:

<http://dailypost.wordpress.com/2013/09/03/photography-pov/>

ASSIGNMENT:

Shoot four or more pairs of photos. For the first photo in each pair, don't try to change the point of view. Just shoot the photo with the skills you've been learning *before* point of view. For the second photo in each pair, apply the concept of point of view by changing the angle and/or distance or by taking the photo from above or below.

Compare your point of view photo pairs. Select FOUR pairs. Share your photo pairs with your teacher, and be prepared to discuss how they show what you've learned. Create and attach a document (word, google docs, etc) where you can embed your photos and label if they were taken with a steady camera technique or not. Include a reflection by answering the following questions:

- **How does point of view change the way you view the subjects and their locations?**
- **How is the effect of a low point of view different from the effect of a high point of view?**
- **Describe how a different point of view changed the second photos in your pairs when compared to the first photos in the pairs.**

3d - Leading Lines

This lesson will help you learn and practice **LEADING LINES**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

Leading lines are straight, curved, parallel, or diagonal lines that pull your eye into or through a photo. While you won't always be able to find a leading line for every photo, if you do, you'll need to find the best angle to make it work. A leading line often starts from a corner of a photo and leads your eyes into or through the photo, but it can also work starting from an edge. A leading line could be anything: road, path, fence, stream, hedge, staircase, or even a shadow.

Here are five examples of photos with leading lines to get you thinking.

1. Let your eyes start in the lower right corner, and follow the circular staircase upward through the building.



[Figure 1]

2. Start in the lower right corner, and follow the country lane into the middle of the photo.



[Figure 2]

3. Start at any corner, and spiral into the photo.



[Figure 3]

4. Start at the bottom/bottom right, and walk your bike across the bridge and into the photo.



[Figure 4]

5. Finally, start the bottom middle, and footprints across the sand dunes. Where do you think the people are now?



[Figure 5]

EXPLORE

For great examples of leading lines photos and lots of ideas for shooting your own, see *How to Use Leading Lines for Better Compositions* from Digital Photography School:

<http://digital-photography-school.com/how-to-use-leading-lines-for-better-compositions/>

Now learn about different types of leading lines at *EXAMPLES OF LEADING LINES AND HOW TO USE THEM* from Photolistic Life:

<http://photolisticlife.com/2013/07/13/examples-of-leading-lines-and-how-to-use-them/>

For more information and examples of black-and-white photos, see *Leading Lines in Photography* from Photoble:

<http://www.photoble.com/photography-tips-tricks/leading-lines-in-photography>

ASSIGNMENT:

Shoot four or more photos - no pairs this time. See if you can find interesting leading lines. If you're not sure where to look, review *How to Use Leading Lines for Better Compositions* from Digital Photography School (see above). This article has lots of ideas for where to look for leading lines.

Review your leading lines photos. Select FOUR photos. Share your photos with your teacher, and be prepared to discuss how they show what you've learned. Create and attach a document (word, google docs, etc) where you can embed your photos and label if they were taken with a steady camera technique or not. Include a reflection by answering the following questions:

- What is the function of leading lines?
- Make your own list of things that could be leading lines without including any of the things listed above the five photo examples in GET THE BASICS.
- Describe how the leading lines in each of your selected photos leads the eye into or through the photo.

3e - Freezing Action

This lesson will help you learn and practice **FREEZING ACTION**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

Have you ever seen photos of action in sports in which the player(s) appear frozen in time? How about a splash as something hits the water? Freezing action is a common but fascinating technique that stops movement and allows you to see something that would have happened too quickly to see without the benefit of photography.

To freeze action, you need a faster than normal shutter speed. Shutter speed is the length of time the shutter is open, allowing light to reach a digital camera's sensor. The smaller the number the longer the shutter is open. For example, 1/60th of a second is a common shutter speed for most photos. Even though that seems like a very short time, it's enough for many subject to move while the shutter is open. This creates a blurred photo. The shutter speed needed to freeze action depends on how fast the subject is moving. In EXPLORE (below), you'll learn what shutter speeds are needed to freeze the action - generally 1/250th of a second or faster depending on the speed of the subject.

Here are some examples of freezing action.

1. This young man appears frozen in the air while dancing to some tunes.



. [Figure 1]

2. A baseball pitcher winds up for the pitch.



[Figure 2]

3. The boy appears to be flying with the seagull.



. [Figure 3]

4. The dog is caught running.



. [Figure 4]

Before you learn more about freezing action, you need to review the concept of aperture. In the chapter, *Know Your Digital Camera*, you learned that shutter speed and aperture affect each other. Aperture is the round hole that lets light reach the sensor. A larger aperture lets in more light, while a smaller aperture lets in less light. If you use a fast shutter speed, there's less time for light to enter the camera, so you may need to increase the aperture. Remember, though, the larger the aperture, the narrower the depth of field. That's what happens with the sports action photo with the frozen player and the blurry background. The shutter speed is fast, so you need more light and set the aperture larger. The larger aperture narrows the depth of field, so the player is in focus but anything in front or behind the player is out of focus.

As you continue with this lesson, see how shutter speed and aperture work together. If your digital camera has a separate shutter priority setting, use it to select a fast shutter speed, and see what aperture the camera chooses. If your digital camera doesn't have a separate shutter priority setting, use the sports scene mode.

EXPLORE

For great examples of freezing action photos, lots of ideas for shooting your own, and suggested shutter speeds for different subjects, see *Shutter Speed: Freezing Action* from MyPhotoSchool:

<http://www.my-photo-school.com/2013/04/17/shutter-speed-freezing-action/>

Learn more dos and don'ts at *Common mistakes at every shutter speed (and the best settings you should use)* from Digital Camera World:

<http://www.digitalcameraworld.com/2012/05/29/common-mistakes-at-every-shutter-speed-and-the-best-settings-you-should-use/>

ASSIGNMENT:

It's your turn to try and freeze the action! Since your subjects are moving, don't worry about shooting pairs of photos to compare. Try and capture two or more freezing action photos.

Review your freezing action photos. Select TWO photos. Share your photos with your teacher, and be prepared to discuss how they show what you've learned. Create and attach a document (word, google docs, etc) where you can embed your photos and label if they were taken with a steady camera technique or not. Include a reflection by answering the following questions:

- **What is the function of freezing action?**
- **What do you have to do with shutter speed to freeze action?**
- **Explain how shutter speed and aperture work affect each other.**
- **Describe the settings (shutter speed/aperture or scene mode) you used for each of your selected photos.**

Week 4 - Light & Shadow

4a - Quality of Light

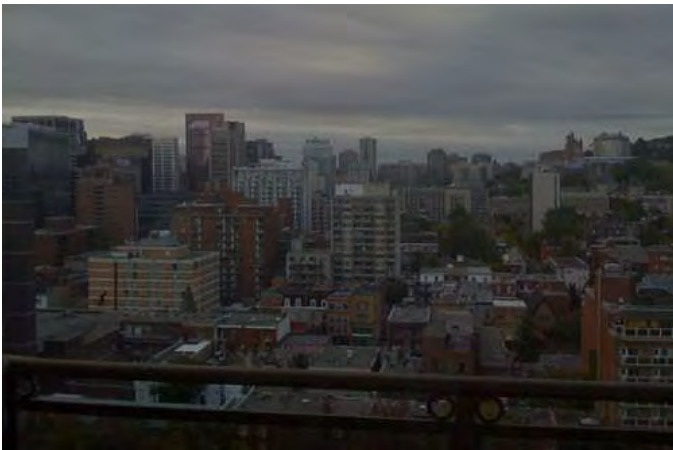
This lesson will help you learn and practice **QUALITY OF LIGHT**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

Light is essential to photos. In fact, photography is the process of capturing light. So, what can happen if there's too little or too much light?

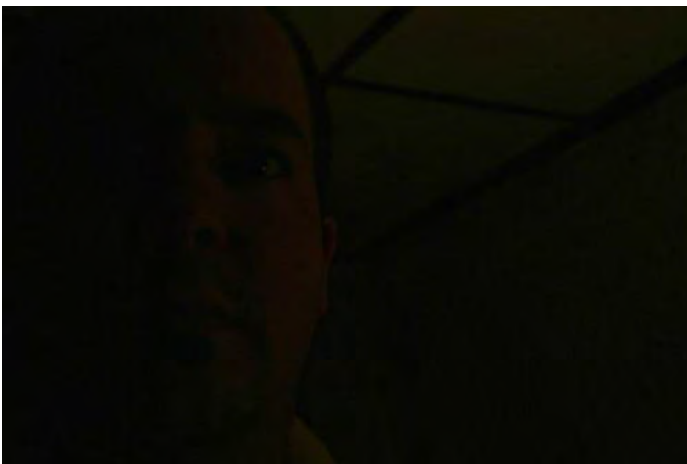
If too little light reaches your digital camera's sensor, the results will produce photos that are too dark or even black. Three things affect exposure: shutter speed, aperture, and ISO (a rating for sensitivity to light). Your digital camera may not have ISO settings, or you may be using a smart phone with only scene modes. remember scene modes? They are auto settings that preset one or more of the exposure variables. This lesson addresses two of the exposure variables: shutter speed and aperture. If your shutter speed is fast and the aperture is small, too little light may reach the camera's sensor. This can also happen in auto mode if there's just not enough light.

In this photo, the sky is overcast, and there is too little light. The photo looks dark, flat, and dull. The term for this is *underexposed*.



[Figure 1]

Here's an example of a very underexposed photo. The photo is so dark that it's hard to see the person.



[Figure 2]

You see what can happen if there's too little light. What about too much light? Too much light can produce a photo that's way too bright. The term for this is *overexposed*. If a photo is way overexposed, the bright parts of the photo can appear all white with no details. This is called *blown out*. Overexposure can occur if the shutter speed is too slow and/or the aperture is too large. It can also happen in auto mode if there's just too much light.

In this example, notice how the dogs and the background are so light that they lose all detail and run together (pun intended). Note: this photo has been edited to appear overexposed and blown out.



[Figure 3]

Here's another example of an overexposed, blown out photo. The background is totally white, and the bright areas of the blossoms blend with the background.



[Figure 4]

EXPLORE

Take a quick look at the same subject photographed three ways - underexposed, correctly exposed, and overexposed - at Photographic Examples of Exposure from DigicamGuides:

<http://www.digicamguides.com/learn/exposure-examples.html>

Now, learn more about how shutter speed, aperture, (and ISO) work together at *The Ultimate Beginner's Introduction to Exposure* from tuts+ Photography. Focus on shutter speed and aperture, and check out the examples in the "Putting It All Together for the Perfection Exposure" section:

<http://photography.tutsplus.com/tutorials/the-ultimate-beginners-introduction-to-exposure--photo-3028>

Explore light and exposure using a smartphone. There are also tips for changing the exposure on different types of smartphones. <https://www.photoworkout.com/smartphone-photography-exposure/>

ASSIGNMENT:

To build your quality of light skills, you're going to shoot photos that have too little or too much light - two photos of each.

Review your quality of light photos. Select ONE photo for EACH for too little and too much light. Share your photos with your teacher, and be prepared to discuss how they show what you've learned. Create and attach a document (word, google docs, etc) where you can embed your photos and label if they were taken with a steady camera technique or not. Include a reflection by answering the following questions:

- **What can happen to a photo when there is too little light?**
- **What can happen to a photo when there is too much light?**
- **What does it mean to be underexposed? Overexposed?**
- **What does it mean for a photo to have an area that's blown out?**
- **Describe how the quality of light in each of your selected photos affects the appearance of the photo.**

4b - Direction of Light

This lesson will help you learn and practice **DIRECTION OF LIGHT**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

You've learned that light is essential to photos. Too little light... your photos will be dark or black. Too much light... they could be blown out white. So just make sure that there's enough light, right? No, there's actually *a lot* more to it!

Let's start with your eyes. Your eyes are offset from each other, so each eye sees things from a slightly different angle. When your brain combines the signals from both eyes, the result is seeing the world as 3-dimensional (3D) - not just vertically and horizontally in one plane (remember planes from geometry?) but closer and further away as well. This is called depth.

A photo, on the other hand, is 2-dimensional (2D). It is all in one plane, so there is no depth. So, how can you make your photos look 3D? You've already learned about how a larger aperture setting creates a narrower depth of field. Your subject can be in focus while the foreground and background is out of focus. This is one way to create a 3D look.

Another way is by controlling the direction of light. When light hits something solid, a shadow is created by blocking the light. Shadows give the appearance of 3D. Here's a photo with light coming from the front of the subject. There are few or no shadows, so the photo looks 2D.



[Figure 1]

What if the light comes from the left of the subject, creating shadows on the right? This photo looks 3D! The difference is the direction of light.



[Figure 2]

Light from the right of the subject creates shadows on the left. Again, giving a 3D appearance.



[Figure 3]

Light from overhead can also create shadows and 3D.



[Figure 4]

When you were little, did you ever hold a flashlight under your chin to try and look scary? Well, you were using light from below the subject to create shadows and 3D.



[Figure 5]

You can see that the direction of light in photos is extremely important. It can create shadows, a 3D appearance, and even affect the mood of the photo.

EXPLORE

Learn more about the direction of light at *The direction (position) of light* from Kodak. [Don't worry about the references to using a flash. That will be addressed in the next chapter.]:

http://www.kodak.com/ek/US/en/Home_Main/Tips_Projects_Exchange/Learn/Photo_Tips_Techniques/Advanced_Techniques/Direction_of_light.htm

Now play with an interactive direction of light tool at Light Direction from PhotoMatters:

<http://www.photomatters.org/light-direction>

ASSIGNMENT:

To build your direction of light skills, you're going to shoot examples of subjects with light from the front, left, right, overhead, and below - two photos for each direction.

Review your direction of light photos. Select ONE photo for EACH direction of light - front, left, right, overhead, and below. Share your photos with your teacher, and be prepared to discuss how they show what you've learned. Create and attach a document (word, google docs, etc) where you can embed your photos and label if they were taken with a steady camera technique or not. Include a reflection by answering the following questions:

- When it comes to depth, how are photos different from seeing things with your own eyes?
- How does the direction of light affect photos?
- Describe how the direction of light in each of your selected photos creates a 3D appearance.

4c – Silhouettes

This lesson will help you learn and practice **SILHOUETTES**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

You've already learned that the direction of light is important for making a 3-dimensional appearance with a 2-dimensional photo by creating shadows. There's a special direction of light effect created when the light comes from behind the subject. Since the subject is solid it blocks the light and looks like a black shape. The black shape with light coming from behind is called a silhouette. A term for light coming from behind is *backlighting* or *backlit*.

Here is a silhouette that you already saw in the Framing lesson. Notice how the light from beyond the arch creates silhouettes of the people in the foreground.



[Figure 1]

Now, look at two more examples of silhouettes.

1. This weather vane appears as a silhouette against the bright sky. The shapes of the woman's hair, dress, and umbrella make it look like the wind is blowing hard.



[Figure 2]

2. These people appear as silhouettes against the brighter sunset behind them.



[Figure 3]

3. Two cats are silhouetted against a sunset as night approaches.



[Figure 4]

EXPLORE

Learn more about the photographing silhouettes at *How to Photograph Silhouettes in 8 Easy Steps* from Digital Photography School:

<http://digital-photography-school.com/how-to-photograph-silhouettes/>

Another online article, *Simple Steps for Shooting Amazing Silhouettes*, from tuts+ Tutorials provides some great dos and don'ts as well as examples with details on the shutter speed and aperture settings used:

<http://photography.tutsplus.com/tutorials/simple-steps-for-shooting-amazing-silhouettes--photo-2447>

Using your cell phone? Get silhouette photo tips for your iPhone (or other smart phone such as Android) at *How to Take Great Silhouettes With Your iPhone* from iPhone Photography School:

<http://iphonephotographyschool.com/creating-silhouettes/>

ASSIGNMENT:

To build your silhouette skills, shoot FOUR or more photos - no pairs this time. For each photo, choose a

different subject, and try to use different backlighting like the sky, a sunset or sunrise, a lamp, light from a window...

Review your silhouette photos. Select four photos. Share your photos with your teacher, and be prepared to discuss how they show what you've learned. Create and attach a document (word, google docs, etc) where you can embed your photos and label if they were taken with a steady camera technique or not. Include a reflection by answering the following questions:

- **What is a silhouette?**
- **Describe the direction of light needed to create a silhouette.**
- **Describe the light sources you used for your selected silhouette photos.**

4d - Light & Shadow

This lesson will help you learn and practice **LIGHT & SHADOW**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

So far, you've learned how important light and shadows are to photos. Sometimes, however, mixing light and shadow can create too much variation between the two. The result can be a problem. In this example of a child inside a window with sunlight coming through the blinds, the shadows and bright stripes of sunlight make it difficult to see the child. Also, notice that the stripes of sunlight on the child's face are blown out.



[Figure 1]

In this next example, the sunlit carpet to the left of the dog and the bright base of the office chair draw your eye away from the dog. The dog's bone is partly hidden in shadow, and the tip of the dog's nose is also hidden in shadow. There is something on the carpet at the tip of the dog's left front paw, but it's hard to tell what it is.



[Figure 2]

While the examples above show how light and shadow interactions can create problems, there are times that using light and shadow interactions can create interesting photos. Sometimes, the shadows themselves can take over and become the subjects of the photos. Here are a few to get you thinking about what's possible.

1. The rippling of the water creates an interesting shadow design on the stones and leaf.



[Figure 3]

2. An off-photo bird casts a frightening shadow behind the running figure.



[Figure 4]

EXPLORE

Learn more about how light and shadow interactions can create interesting photos at *Eight Great Ways to Include Shadows In Your Pictures* from DIY Photography:

<http://www.diyphotography.net/eight-great-ways-to-include-shadows-in-your-pictures/>

Now explore effective light and shadow photography at these two sites:

35 Beautiful Examples of Shadow Photography from Smashing Hub:
<http://smashinghub.com/beautiful-examples-of-shadow-photography.htm>

Great Examples of the Use of Light and Shadow:
<http://www.freephotoresources.com/great-examples-of-the-use-of-light-and-shadow/>

ASSIGNMENT:

To build your light and shadow skills, you're going to shoot two sets of four or more photos. In the first set, shoot examples of subjects with light and shadows interacting to create too much variation between the two. In the second set, try to shoot photos in which the shadows become the subjects.

Review your light and shadow photos. Select two photos from each set. Share your photos with your teacher, and be prepared to discuss how they show what you've learned. Create and attach a document (word, google docs, etc) where you can embed your photos and label if they were taken with a steady camera technique or not. Include a reflection by answering the following questions:

- What can be an unwanted effect of mixing light and shadows?
- For your first set of selected photos, describe how light and shadows interact to create too much variation between the two.
- For your second set of selected photos, describe how the shadows are actually the subjects.

Week 5 - Flash

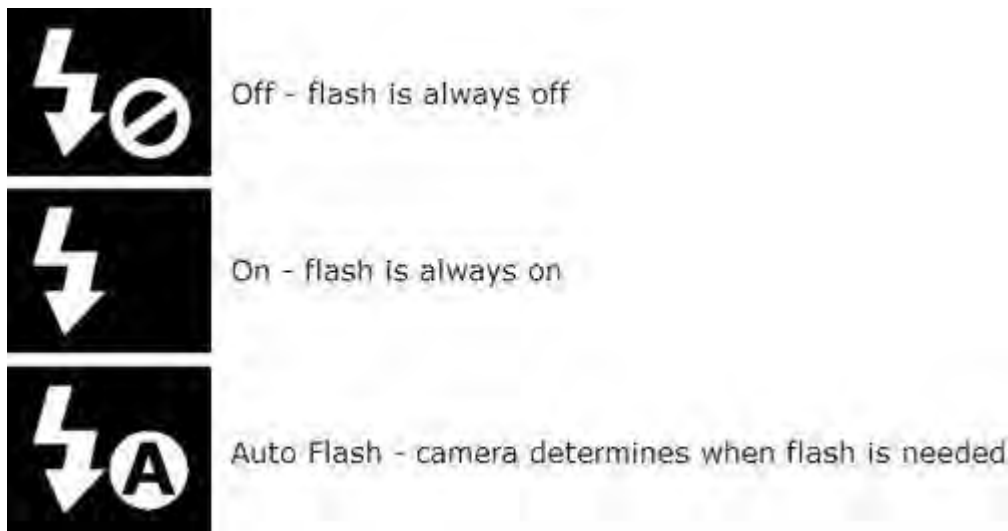
5a - Flash Modes

This lesson will help you learn and practice **FLASH MODES**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

In the previous chapter, you learned a lot about light. There be times when you want to shoot a photo and there won't be enough light. You'll need some extra light. That's the purpose of your digital camera's flash. When you use flash, your camera supplies a brief burst of light timed with the digital camera shutter.

Knowing the flash settings for your digital camera is important. The most common setting is toggling between Off, On, and Auto Flash modes. Icons for these settings may vary, but they generally look something like these:



.. [Figure 1]

Sometimes using your digital camera's low light setting produces a better photo than using the flash. In that case, you would set flash to Off, so it wouldn't flash. Other times, you may need just a little boost and can set the flash to On, so it will flash regardless of other settings. If you're not sure, leave your flash set to Auto and the camera will decide if flash is needed for your photo.

In addition, many digital cameras have +/- options that adjust the flash intensity. See if yours has a +/- flash option. If it does, you can increase the flash intensity with the + and decrease flash intensity with the -.

EXPLORE

Learn more about digital camera flash modes, including red-eye reduction and fill flash (addressed in its own lesson) at *Flash Modes Explained Simply* by Digital Photo Secrets:

<http://www.digital-photo-secrets.com/secrets/39/flash-modes-explained-simply/>

ASSIGNMENT:

To build your flash skills, you're going to shoot two or more sets of three photos. Choose a dimly-lit situation for each set. In each set, shoot with each of the three main flash modes - Off, On, and Auto Flash.

Review your flash photos. Select one set of photos that best demonstrates the three settings. Share your photos with your teacher, and be prepared to discuss how they show what you've learned. Create and attach a document (word, google docs, etc) where you can embed your photos and label if they were taken with a steady camera technique or not. Include a reflection by answering the following questions:

- **What are the three main flash settings, and what do they do?**
- **What other flash modes may be available on some digital cameras?**
- **For your selected set of photos, describe how the flash mode settings affected the photos.**

5b - Flash & Distance

This lesson will help you learn and practice **FLASH & DISTANCE**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

You've learned that your digital camera's flash can provide more light when needed. However, flash has a limitation - distance from your subject. This applies both to being too far away and too close.

The amount of light from your flash provides drops off quickly as the subject is further from the camera. By about 10-15 feet away, the subject gets little or no light from the flash. Here's a flash photo that shows what happens when the subjects are too far away. Notice that the flash is unable to illuminate the subjects at this distance. It also means that all those people in huge stadiums who shoot flash photos of action far away on the field are getting no benefit from their cameras' flashes. All they're doing is illuminating the backs of the heads of the people in front of them.



[Figure 1]

The closer your flash is to the subject the stronger the effect of the flash. If you are too close and the flash is too strong, the subject will be blown out. The highlights on the face, forearm, and hands in this photo are blown out. [Note: The original photo has been edited to create the blown-out appearance.]



[Figure 2]

You may be able to compensate for being too far from, or close to, your subject by increasing or decreasing the flash intensity using your digital camera's +/- flash options (see previous lesson).

EXPLORE

Learn more about flash and distance at *Flash Photography 101 - A Beginner's Guide* from Photography-on-the.net:

<http://photography-on-the.net/forum/showthread.php?t=171657>

ASSIGNMENT:

To build your flash skills, you're going to shoot two or more sets of three photos. Choose a dimly-lit situation for each set. In each set, use your digital camera's flash and shoot from too far away, too close, and in-between positions.

Review your flash photos. Select one set of photos that best demonstrates the three distance positions. Share your photos with your teacher, and be prepared to discuss how they show what you've learned. Create and attach a document (word, google docs, etc) where you can embed your photos and label if they were taken with a steady camera technique or not. Include a reflection by answering the following questions:

- **What happens to a photo when the subject is too far away from your flash?**
- **What happens to a photo when the subject is too close to your flash?**
- **For your selected set of photos, describe how the three distance positions affected the photos.**

5c - Flash Glare

This lesson will help you learn and practice avoiding **FLASH GLARE**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

Using flash can have an unwanted effect. Since light bounces off reflective surfaces, shooting with flash toward a window, mirror, or other reflective surface can produce a flash glare - also referred to as flash flare. A flash glare is bright spot of light bounced back from a reflective surface. It happens when the flash is bounced directly back to the camera.

1. Here's an example where the flash glare interferes with seeing a painting.



[Figure 1]

2. In another example, the flash glare distracts the eye from the subjects of a photo.



[Figure 2]

One way to avoid this effect is move the camera so that it is at a slight angle to the reflective surface. That way, the light of the flash can't bounce directly back at the camera. If you are shooting a photo of a person with glasses, try tilting the glasses down slightly to change the angle of reflection.

EXPLORE

Learn more about angle of reflection, flash glare, and how to avoid it at *Reducing Flash Glare* from Archive of Photography Tips:

<http://www.davideaves.co.uk/PhotoTips/FlashGlare.html>

Learn about avoiding flash glare when photographing people with glasses (You can apply many of these tips to other situations as well.) at *10+ Tips for Photographing People in Glasses and Avoiding Glare* from MCP Photography Blog:

<http://www.mcpactions.com/blog/2012/05/09/photographing-people-in-glasses/>

BUILD YOUR SKILLS

To build your avoiding flash glare skills, you're going to shoot four sets of two photos. Choose a dimly-lit situation for each set, and make sure that your digital camera's flash is on. For the first photo in each set, shoot directly at a reflective surface. For the second photo in each set, change the angle to avoid the flash glare effect.

Review your flash glare photos. Select one set of photos that best demonstrates flash glare and how to correct it. Share your photos with your teacher, and be prepared to discuss how they show what you've learned. Download your photos to a computer to keep them for the portfolio you'll create in the end-of-course final project.

RECORD YOUR FINDINGS

- **What happens if you shoot an photo using flash and there is a reflective surface in the background?**
- **How can you avoid the flash glare effect?**
- **For your selected set of photos, describe why the first resulted in a flash glare and how you corrected it in the second.**

5d -Fill Flash

This lesson will help you learn and practice **FILL FLASH**. In GET THE BASICS, you'll get explanations and photos to build understanding. In EXPLORE, you'll find additional online resources to learn more. It's important to review and learn from these resources also! You'll have opportunities to practice in BUILD YOUR SKILLS. Finally, answer the questions in RECORD YOUR FINDINGS at the end of this topic, be sure to include information you learned from the Explore resources.

GET THE BASICS

In Silhouettes, you learned about a creative way to use backlighting. While you might want backlit subjects for silhouettes, in other photos you may want to capture the light AND the subject. A common lighting problem is a dark subject caused by backlighting like a sunset, bright sky, or window. The way to fix this is by applying a flash technique called fill flash. Fill flash combines the effects of the natural light from behind the subject with light from your camera's flash in front of the subject.

Set your camera to forced flash (flash always on) and shoot the photo. What the flash does is to illuminate the subject in the foreground. By about 10-15 feet behind the subject, the flash effect goes away, so the flash doesn't illuminate the background. This brightens the subject while still capturing the natural light of the background.

Here's an example of a photo without applying fill flash. You can see that the light source behind the subject creates too much of a shadow effect with the subjects. [Note: This photo has been edited to increase the shadowed effect.]



[Figure 1]

Here's the same photo with fill flash applied. The sky and background remain the same, but the flash illuminates the man, dog, rocks, and ground closer to the camera.



[Figure 2]

EXPLORE

Learn more about fill flash at *Fill Flash* (4-slide tutorial) from About.com:

<http://photography.about.com/od/photographyequipment/ss/FillFlash.htm>

ASSIGNMENTS:

To build your fill flash skills, you're going to shoot four or more pairs of photos. Choose subjects with light coming from behind them. For the first photo in each pair, use the natural light without your camera's flash. For the second photo in each pair, apply fill flash by turning your camera's flash to ON so that it flashes when you shoot the photo.

Compare your fill flash photo pairs. Select **FOUR** pairs. Share your photo pairs with your teacher, and be prepared to discuss how they show what you've learned. Download your photos to a computer to keep them for the portfolio you'll create in the end-of-course final project.

RECORD YOUR FINDINGS

- What happens to a photo when the subject is backlit?
- What is fill flash and how does it correct a backlit subject problem?
- Describe how you applied fill flash in each of the four photo pairs you selected?

Week 6 - The Selfie

6a Think about Selfies

Watch the video and answer the questions. <https://www.youtube.com/watch?v=ontgK-zBfQ>

1. One of the first self-portrait photographs was in what year?
 - a. 1839
 - b. 1845
 - c. 1970

2. How did 13-year Duchess Anastasia take a self-portrait?
 - a. She asked her friend to hold the camera for her.
 - b. She used a mirror.
 - c. She used her reflection in the water.

3. Which camera in the 1970's made it more affordable to take self-portraits?
 - a. Instagram
 - b. Snapchat
 - c. Polaroid

4. In what year was the front facing camera on a cellphone introduced?
 - a. 2003
 - b. 2000
 - c. 1970

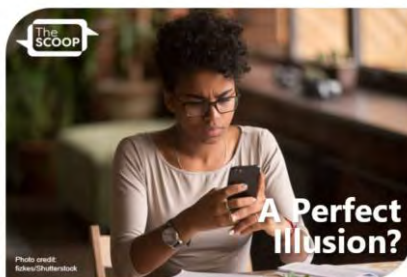
5. Why was s selfie guide introduced in 2015?
 - a. To keep some people from hogging the limelight.
 - b. Because there were more selfie-related deaths than shark attacks.
 - c. Because self-portraits have to be composed in a certain way.

6. What is one thing you learned about selfies or self-portraits that you did not know before watching this video?

Watch the video and answer the following questions. <https://www.youtube.com/watch?v=HcO6Nx7diKM>

7. Watch this examination of The Selfie. Explain what the Selfie mean to you?

8. Attach a selfie of you that displays your opinion of selfies.



Think about the following questions when reading the following article. Answer the two questions at the end.

- **Are selfies locking teens into a cycle of self-criticism?**
- **Social media may be feeding unrealistic ideas of what "flawless" is.**

Teens are really into social media. In a 2018 survey, 45 percent of teens reported being online pretty much constantly. But the fact that Gen Z likes posting pics on Instagram, creating TikToks, and sending snaps on Snapchat isn't news to anyone. The real scoop here is that all those online images may be affecting teens' self-esteem.

Picture this: Someone's selfie suggests that they have perfect skin, perfectly proportioned facial features, perfect hair, and a perfect body. Faced with so much so-called perfection, people start wondering, "Why don't I look that way?" They may even begin to obsess over what they perceive as their own flaws.

This kind of thing is nothing new. Generations of teens looked at photos of others in magazines and then examined themselves in the mirror. Then they became self-conscious about what they saw as "flaws." Maybe they thought their eyes were the wrong color, they weren't tall enough, or their cheekbones weren't contoured enough. And all because they compared themselves to some pictures.

Health experts say social media could be making this problem worse. Online photos may just be adding to the false perception that there's a level of perfection that people need to live up to. Back when magazines were all the rage, celebrities and models set that standard of perfection. Now, it's influencers and peers posing for selfies.

The truth is, it takes a lot of effort to create the illusion of perfection. Phones make it possible to take selfie after selfie to find the ideal angle and lighting. Countless photo editing apps let users apply filters, contouring, and other visual effects to alter their facial features and body shape. Magazines have done this kind of thing for decades. They literally shape models and actors to fit an unrealistic idea of what "flawless" is. And now, anyone can use digital photo editing apps to do the same to their own faces and bodies. In fact, a selfie, or any online photo, can be altered to the point where it barely looks like the person who took it.

According to experts, social media has made people think they're supposed to look a certain way. And retouched photos circulate so widely that they can make people forget what human faces are supposed to look like! In 2019, a British photographer known as "Rankin" did an experiment. He took photos of 15 teens and invited them to edit the photos until they felt the pics were ready to be shared on social media. Rankin reported that the teens altered the photos so much that their facial features no longer looked natural.

Experts say it's easy to fall into the comparison trap, even for people who are selfie-savvy enough to know all about photo editing apps. So, what's a good way to break out of the self-criticism cycle? Jennifer Mills, a professor of psychology at York University, suggests taking a vacation from social media.

"Take a break and engage in other activities that have nothing to do with appearance and comparing yourself to other people," Mills told the BBC.



What's Your Take?

Why did the author include information about what people do to create the illusion of perfection?

Do you agree or disagree with the view that social media may be negatively impacting teens' self-esteem? Explain.



Think about the following questions/facts when reading the following article. Answer the three questions at the end.

- **A selfie taken 60 stories above the ground!**
- **Dangerous selfies: Are they worth the risk?**

- **Serious injuries or deaths occur monthly.**

All over Instagram, people are living on the edge—literally. They're taking selfies dangling their feet over the rims of cliffs, perching on the edges of skyscrapers, and hanging out next to the likes of grizzly bears and lions. Looking at those pics, your thoughts go back and forth between, "Yeah, that's pretty cool," and "Why would anyone *do* that?" And...yeah...why WOULD anyone do that?

Selfie deaths are so common that they've led to a new word: "killfie." One study found that between 2011 and 2018, 259 people died while putting themselves in dangerous situations to get a selfie. There were 2 such deaths in 2011 and 98 in 2016, indicating a disturbing trend. Although the number of deaths dipped to 93 in 2017, people aren't wising up: So far in 2019, someone has been seriously injured or killed taking a selfie every single month.

And yet... the bigger the risk, the bigger the reward? There's a whole field out there dedicated to studying why people behave the way they do on social media. Those experts say there are plenty of possible reasons why people take high-risk selfies, ranging from attention-seeking to building a personal brand. They say some people are looking for validation—approval from others—even if it's just in the form of, "Wow, amazing shot!" Others may do it because the thrill of it somehow becomes more important to them than safety.

Also, our culture encourages people to do whatever's necessary to get followers. You can even get corporate sponsors (and therefore make money) if you have enough of a following. And the more interesting—or shocking—a pic, the more clicks it gets. If it starts trending, the person who snapped it has a chance at social media stardom. Who's *not* gonna click on a selfie that was taken from the top of a 60-story building, if only to see what that looks like? Boom: Instant career.

And once someone posts one viral selfie, the pressure's on to take more—to #doitfortheagram. Then the danger becomes even greater, because how many times can a person cheat death?

Here and there, actions are being taken to curb high-risk selfies. Some national parks are imposing fines on people who get too close to dangerous animals, or having people sign pledges that they'll steer clear. The U.S. Fish and Wildlife Service warns people against posing with grizzlies. Yellowstone has made a list of places not to take selfies, one of which is "right next to a geyser," in case you were wondering. And social media platforms like Instagram and Facebook are identifying people who post images their algorithms detect as problematic. They're sending them warnings, or in some cases, blocking their accounts.

But all that—along with numerous headlines about the people who have died in the pursuit of the most dangerous selfie—hasn't stopped the high-risk selfie train, or the deaths of those who have embraced it wholeheartedly.



What's Your Take?

What evidence from The Scoop supports the idea that social media is influencing people to take selfies in dangerous places or situations?

Do you agree or disagree with the idea that national parks should impose fines on people who get too close to dangerous animals or places? Explain.

Explain what you think could be done in public places to reduce the number of injuries and deaths caused by taking dangerous selfies.

6b - Photo Journal

Follow the video lesson to create a photo journal

Click the blue link to get to the [Photo Journal](#) Video lessons. You will need to sign in using your LAUSD mymail log in.

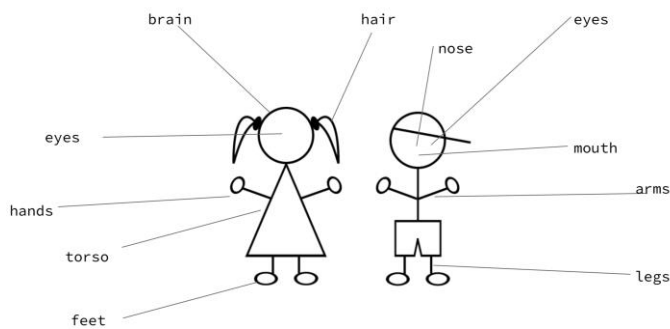
<https://applieddigitalskills.withgoogle.com/c/middle-and-high-school/en/create-a-photo-journal-in-google-docs/overview.html>

6c - The Best Part of Me

Watch the video to read *The Best Part of Me: Children Talk about Their Bodies in Pictures and Words* by Wendy Ewald.

<https://www.youtube.com/watch?v=XiYXGhce1X4>

Think about the part of you that you like the best. Take a moment to brainstorm some possible options.



Take a color or black and white photo of the best part of yourself and create an explanation of the photo.

If you are stuck on the writing part, think about:

- Explaining what the part of your body it is
- Explaining what it looks like to you
- Explaining why it is an important part of your body
- Explaining how it is useful
- Explaining what you can do with it.

Please remember that photos must be appropriate for school

EXAMPLES



Deep Brown Eyes

The best part of me is the gateway to the soul,
there is a center that is the color of coal.
When I am down they start to cry,
these would be called my deep brown eyes.

My eyes are dark and very bold,
when I am unhappy my stare is cold.
Even though they aren't the *most* beautiful,
for me they are the most suitable.

The eyes I have are the color of a spruce,
for a very long time they will be in use.
Sometimes I would use them to look at the skies,
These would be called my deep brown eyes.



The Best Part of Me Are my Hands.

I read every night under my covers, and my hands help me turn the pages
quietly as a mouse and gently as a mother bird with her chicks
while I read.

I use my hands to show my dog and cat that I love them to the moon and
back.

They help me draw and have adventures through the forest. My hands help
me climb trees and bake for my family

But the best thing that my hands do for me, is let me lay piano and flute as
beautifully as a dream.

The Best Part of Me Are my Hands

© Teaching for the FUN of it

EXAMPLES

The Best Part of Me



The best part of me are my hands

I like to play softball with my hands
I like to bake with my hands
My hands are as important as my back bone
My hands are helpful
My hands are unique

The best part about me are my hands

Helpful hands

Hands are helpful, with everything you do,
I like my hands, and you like yours too!

I use my hands for gardening, fishing, and writing.

Hands, hands let me get my hard work done.

Hands Hands help me to type a good song, get ready,
and protect me.

Hands, hands, can let me play in the band and in the
sand.

Hands can be big or hands can be little, but all hands
are important.



The best part of me



Head

My head holds my brain. My brain helps
Me do a whole bunch of things. It helps
Me run, jump and play. It also stores all
The education I learn from school.
My brain does everything for me.

© Teaching for the FUN of it

EXAMPLES



The best part of me

The best part of me is my hands.

Handing at my sides throughout the day.

My big, strong, and athletic hands help me play sports, hold hands, type, make sandcastles and bake. My hands are very important, just like your mind. The best part of me is my hands.

BEST PART OF ME



THE BEST PART OF ME ARE MY HANDS
BECAUSE I CAN PLAY GUITAR AND VIOLIN I
CAN ALSO TURN PAGES TO READ A BOOK. I
REALLY LIKE MY HANDS BECAUSE THEY ARE
ONE OF A KIND I CAN WEAR RINGS ON MY
HANDS, TOO!



The best part of me is my hands.

My hands help me be able to shoot a basketball.

My hands help me play softball.

My hands are very important just like my brain.

The best part of me is my hands.

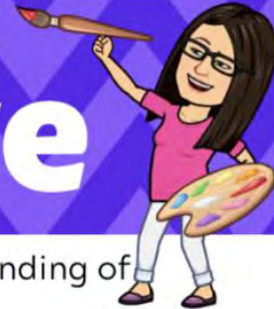
Week 7 - Photography fun - Forced Perspective

7a - Forced Perspective practice

Watch the following video for information on forced perspective.

https://www.youtube.com/watch?v=QWMFpxkGO_s

FORCED Perspective



Your objective today is to demonstrate your understanding of forced perspective photography.

What is **PERSPECTIVE**? Makes something look 3-dimensional on a 2-dimensional surface.



<http://www.instantshift.com/2010/08/24/88-brilliant-examples-of-forced-perspective-photography/>

What is **FORCED PERSPECTIVE**? **FORCED PERSPECTIVE** is a photographic optical illusion! It uses scale and point of view to trick the eye! It can make two or more of the same object seem different than their actual size.

Forced Perspective generally falls into a few main categories.

- Making a main subject larger
- Making a main subject smaller
- Merging subjects
- Bending gravity

More samples at <https://sites.google.com/a/pgcps.org/erhs-photography/forced-perspective>



https://www.flickr.com/photos/flea_yan/4112827294/



<https://www.flickr.com/photos/h19/226665638/>



FORCED Perspective



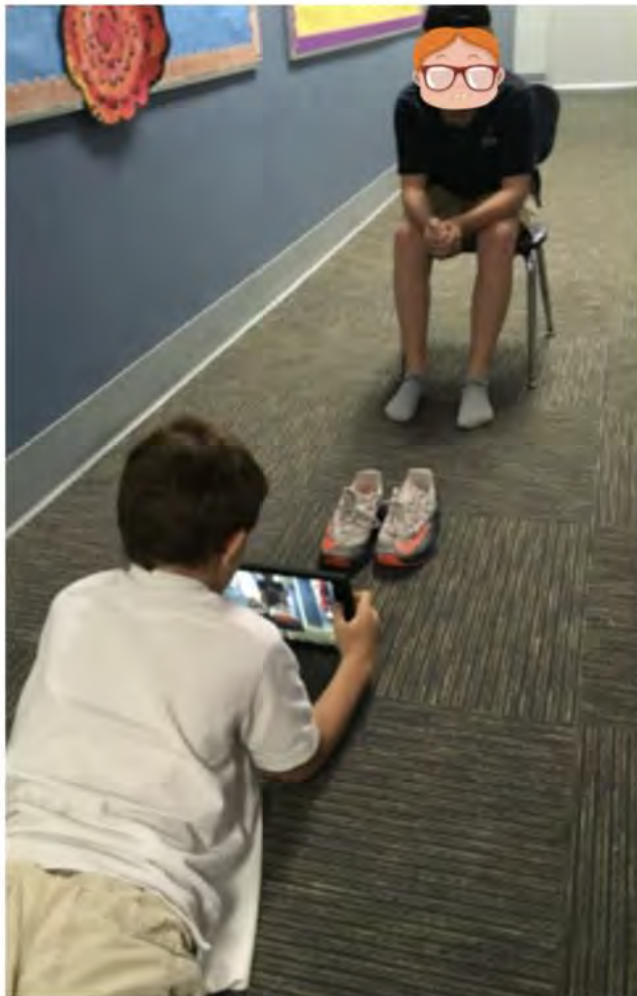
Making Main Subject Smaller

Materials: Two people, sneakers, chair and camera/iPhone.

Watch video on how Forced Perspective was in Lord of the Rings

https://www.youtube.com/watch?v=QWMFpxkGO_s&feature=emb_title

1. Hold the camera/phone/iPad close to the floor.



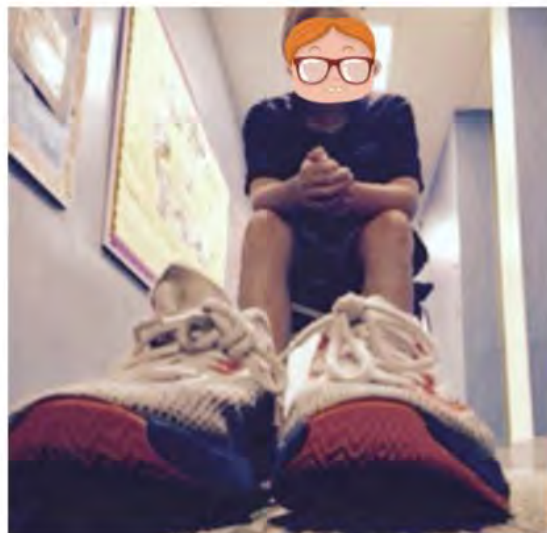
2. The model sits in a chair with shoes off.

3. Shoes are placed near the camera.

4. Line up the shoes so it looks like the model is wearing them.

5. Take a few photos. How did it turn out? Try tilting the camera on an angle.

It will take a few tries to get the perfect forced perspective photo.

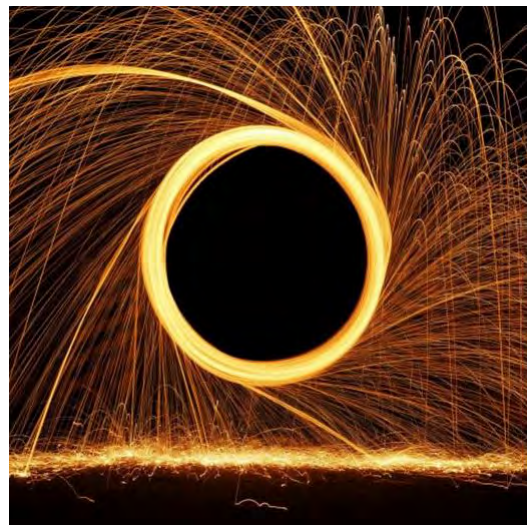


7b - Forced perspective written assignment

Watch the following video for information and examples of forced perspective.

<https://www.youtube.com/watch?v=iDn-PvS6ues>

1. Which picture is an example of forced perspective?



2. To make an object look **bigger** you need to:

- Put the object close to the camera.
- Put the object far away from the camera.

3. What objects could you use in a forced perspective photo?

- a. A chair.
- b. An apple.
- c. A toothbrush.
- d. All of the above.

What type of forced perspective do you plan to use for your photo? Explain your plan.



Merging Objects



Making a main subject Smaller



Bending Gravity



Making a main subject Larger

Week 7c - Forced perspective project

Create three different forced perspective photos. You are welcome to look online for inspiration, but remember that you are required to do this yourself. You may not copy a photo from the internet and submit it as your own.

Attach the photos to your google slides portfolio or to this assignment.

Week 8 - Create a Portfolio

For the Photography A final, you will build a portfolio that demonstrates what you've learned. Each week, you saved your photos from each lesson. For the portfolio, you'll be reviewing these photos, selecting examples, and writing reflections about what you've learned. The portfolio also provides you the opportunity to retake images as needed.

Below, you'll find a checklist of the lesson concepts from each week. For each concept, follow the same basic steps:

1. List and define the concept. You may want to refer to your answers in the ASSIGNMENT sections of each concept
2. Select photos, photo pairs, or photo sets – depending on the directions in each lesson – that show the concepts you've learned.
3. Write a short reflection draft describing how each photo demonstrates your learning.
4. Check off the concept.

You'll find some ideas for portfolio layouts on the next section. For now, just select your photos and draft your reflections.

CONCEPT CHECKLIST

Week 1: What is Photography

Week 2: Basic Photo Composition

- ☐ Steady camera
- ☐ Rule of Thirds
- ☐ Level horizon
- ☐ Fill the frame
- ☐ Distracting backgrounds

Week 3: Movement & Direction

- ☐ Direction of Movement
- ☐ Framing
- ☐ Point of View
- ☐ Leading Lines
- ☐ Freezing Action

Week 4: Light & Shadow

- ☐ Quality of Light
- ☐ Direction of Light
- ☐ Silhouettes
- ☐ Light & Shadow

Week 5: Flash

- ☐ Flash Modes
- ☐ Flash & Distance
- ☐ Flash Glare
- ☐ Fill Flash

Week 6: The Selfie

Week 7: Photography fun - Forced Perspective

Now, it's time to build your Photography A portfolio. Create a page in the portfolio for each of the topics (weeks) from this course. For each concept, be sure to include the concept title, a description of the topic and why it's important, your photos that show not applying/applying the concept, and your reflections on how the photos demonstrate what you've learned.

One way to create the portfolio is to print your photos, attach them to paper or poster board with glue or double-sided tape, and write your reflections next to the photos. You can also create this same look digitally with a word processor like Google Slides or Docs word processing or Microsoft Word. This example uses Creative Commons licensed photos. For your portfolio, you must use your own photos!



[Figure 1]

Another way to create the portfolio digitally is using presentation software like google slides or PowerPoint. Again, this example uses Creative Commons licensed photos. For your portfolio, you must use your own photos!



[Figure 2]