

Photography Project Area Guide



Beginner Level

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Activity 1

Technical Skills Development

Project Outcomes Addressed

- Define the term “point-and-shoot” camera.
- Label the parts of a point-and-shoot camera.



Before you can learn how to use a camera to take eye-capturing shots, it’s important to know the different types of cameras that are available. In this activity, you will be learning about the “point-and-shoot” camera. In the space below, write two sentences or draw a picture of what you think a “point-and-shoot” camera is. It is okay if you don’t know what this term means, you will learn more about it below!

So, what is a point-and-shoot camera?



A point-and-shoot camera, also known as a compact camera, is a camera that serves a single purpose—to take photos. Most use a single, built in lens and use automatic systems for focusing and exposure.

Point-and-shoot cameras are popular among people who do not call themselves “photographers.” They are easy to use and provide good quality pictures. There are five basic parts of a point-and-shoot camera. Read about each piece. Then, label the diagram on the next page with the correct term.

- **Electric Flash** – If you need to shed some light on a subject, the electronic flash will light up your subject.
- **LCD Panel** – This lets you review the photos you have taken or set up your shot if you are shooting digitally or without film. A film camera will not have an LCD panel.
- **Shooting Mode Dial** – Shooting at night? Wanting to take an action photo? Point-and-shoot cameras have built-in settings, controlled by this dial, that allow you to capture a variety of shots.
- **Shutter Button** – This is the button that is used to capture the shot. You most likely press it down to take a picture.
- **Zoom Lens** – This is the part of the camera that changes how close or far away your subject appears in your photo.



Check your answers below!

Upload a picture of your definition or picture of a point-and-shoot camera from this activity to your digital 4-H portfolio.

Point-and-Shoot Camera Diagram Answers



Activity 2

Technical Skills Development

Project Outcomes Addressed

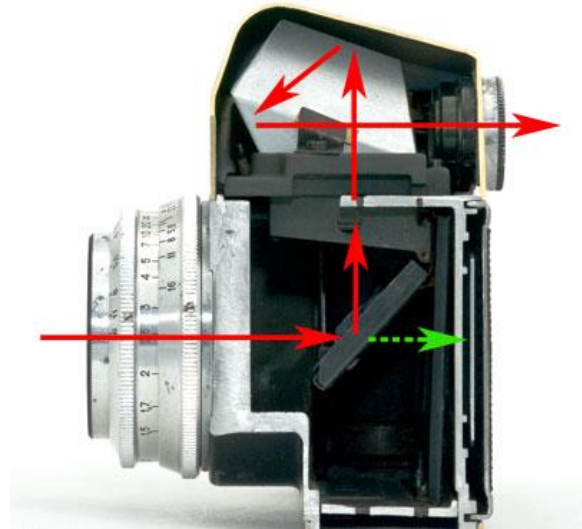
- Define DSLR camera.
- Label the parts of a DSLR camera.



Another common type of camera growing in popularity is a DSLR camera. In this activity, you will learn what DSLR stands for, label the parts of a DSLR camera and identify the parts of a basic video camera.

A DSLR camera combines the moving parts of a point-and-shoot camera with a digital imaging sensor, as opposed to film. DSLR stands for digital single-lens reflex. This camera gets its name from a mirror that sends the image in view of the lens (the image you are trying to capture) and displays it in the viewfinder. Unlike a point-and-shoot camera, the viewfinder has its own lens. The image to the right shows how light flows through a DSLR camera.

Another difference between a DSLR camera and a point-and-shoot camera is that DSLR camera often uses interchangeable lenses. Instead of having a built-in lens, different lenses can be used on the camera for different purposes.



You'll learn more about lenses in a later activity.

Using the following lines, pretend you are explaining a DSLR camera to your family or friends. How would you explain it? Write complete sentences below.

As you can guess, the parts of a DSLR camera are different from those of a point-and-shoot camera. Read about the major parts of a DSLR camera.

Major parts of a DSLR camera:

- Lens Alignment – Each lens will have a similar marking allowing you to line up the lens when putting it on.
- Lens Release – This button allows you to remove the lens from the camera.
- Lens Contacts – These line up to the contacts on the lens and allows the camera to autofocus the lens.
- Grip – Allows you to have a firm hold on the camera.
- Focus Assist Beam – This lights up the subject using flashes of light to assist with focusing. It is a common piece on DSLR cameras.
- Pop-up Flash – This is a built-in flash that remains out of the way unless needed to illuminate the subject.
- Shutter Release Button – Pressing this allows you to capture an image.
- Mirror – This reflects what is in view of the lens and allows you to see it in the viewfinder. When the shutter release button is pressed, the mirror moves and allows the digital sensor to capture the image.
- Flash Pop-up – Pressing this button will allow the flash to pop up.
- Depth of Field Preview – This determines how much of an image is in focus. Pressing this allows you to see what would be in focus in your photo in the viewfinder.

After reading about each part, label the diagram of the Canon EOS 20D using the terms from the previous page.



Check your answers below!

DSLR Camera Diagram Answers



Another tool that can be used to capture video and audio is a video camera. Below is a diagram you can use to identify the major pieces of a video camera.



If you are unfamiliar with any of the parts, ask an adult to use the Internet to research each part and their function. Here are two resources to help you get started. You'll see QR codes throughout this guide. To use them, open the camera application on a smart device or click the image to open the hyperlink to view resources.



Activity 3

Photography Equipment and Use

Project Outcomes Addressed

- List essential pieces of equipment for still and video photographs.
- Value the importance of understanding photography and videography equipment before using it.

While you could shoot amazing pictures and videos using just a camera, sometimes extra equipment helps enhance your shot making the photos and videos even better. Using the Internet, research five pieces of equipment that can be used when shooting photos and videos. In the table below, describe the function of that piece of equipment and identify whether it can be used for still photography, videography or both. One example has been provided for you.

Equipment Name	Function	Still, Video, or Both
Example: Tripod	To provide a stable place for a camera to rest when taking photos or videos	Both

Each piece of equipment serves a specific purpose. Understanding its purpose is important before you try to use a piece of equipment. Improper use could result in damage to the equipment.

You have learned the essential equipment, but it is just as important to learn how to properly hold your camera. It is such a basic skill that most take it for granted. Yet, learning to hold your camera correctly is essential for quality photographs and videography.

The key is to reduce **camera shake** or when the camera is moved unintentionally while taking a picture resulting in a blurry image that might lead you to become discouraged. Camera shake is the first key to sharp, clear images you will want to keep and show off!

Review the two images below. Circle the image you think has camera shake.



Hopefully you circled the image on the right. Holding your camera the correct way will not only help with sharper photos, but also provide your camera with support and stabilization.

Let's go over the proper camera holding techniques by reviewing the graphic below. The more comfortable you are with your camera, the better your pictures will become.



Taking your newly gained knowledge, answer the following statements on camera use. Make a statement as T for true or F for false.

1. ____ Leaving your elbows out while holding your camera will result in a sturdy support.
2. ____ While taking a photo, your legs should be shoulder-width apart to help you stay balanced.
3. ____ Rest the viewfinder against your forehead to create additional support while taking photos.
4. ____ Breathing in while taking a picture prevents camera shake.

You have practiced proper camera holding techniques. Now it is time to put your new skills to the test. Below is a photo scavenger hunt where you will apply proper camera holding techniques. Check your photos for signs of camera shake. Work on the areas you feel need improvement. It's okay to take a picture more than once!

1. Take a photograph of a family member, neighbor or friend inside a residence.
2. Take a photograph of a family member, neighbor or friend outside.
3. Lean on a building, house or fence to capture a photo of a flower or tree.
4. While kneeling, take a photograph of your pet or another animal.
5. Capture a photograph of a vehicle while maintaining proper elbow and leg positioning.
6. Practice your breathing and take a photograph of a scenic landscape or landmark in your community.
7. Take a close-up photo of an insect while practicing the kneeling technique.
8. Capture a photograph of someone while you lean on a sturdy surface.
9. Practice your breathing while photographing a sunrise or sunset.

The more you practice proper camera holding techniques, the more comfortable you will become with your camera and taking photographs. You will notice your pictures improving, too. Be sure to keep your photographs so you can see your progress. Remember, practice makes perfect, so don't give up!

Upload the ten best pictures from your scavenger hunt to your digital 4-H portfolio!

Activity 5

Types of Shots

Project Outcomes Addressed

- Define each of the following terms: focal point, balance, symmetry, rule of thirds, rule of odds.

In photography, there are different types of shots that you can take such as landscape, portrait, micro (detailed and focused images), and macro (big and wider images). In each of these types, there are different “rules” that can be used to enhance your shot to make it more appealing.

In this activity, you will look at different rules and terms for photography and establish a definition of each of the terms. Below, write what you already know about each of these terms. If you are unsure about some of these terms, that’s okay! Give it your best shot.

Focal Point _____

Balance _____

Symmetry _____

Rule of Thirds _____

Rule of Odds _____

Now that you have attempted to define each term, let’s look at some different images to see if they can help you refine your definitions. Each set of three photos has been grouped based on the term they define. Review the pictures and write an updated definition.



Focal Point



Balance



Symmetry



Rule of Thirds



Rule of Odds _____

Now, it's time to compare your drafted definitions with actual definitions. Read each definition to compare to your definitions you wrote above.

- Focal Point – The point in an image where the photographer wants to focus the viewer's attention.
- Balance – This technique positions the subject of the photo so that everything in the photo receives equal attention from the viewer. The items in the photo are balanced.
- Symmetry – This technique is a component of balance. Symmetry deals with making sure items in the photo are equal.
- Rule of Thirds – This technique involves placing the subject of the photo in either the left, middle or right third of the photo. The lines in the image help you identify what third the subject is in.
- Rule of Odds – The rule of odds deals with photographing items in odd numbers, whether that be three or 237.



If you'd like to learn about additional photography rules, visit the following QR code. To use the QR code, open the camera application on a smart device or click the image to open the hyperlink to view resources.

Activity 6

Lighting

Project Outcomes Addressed

- Understand the role lighting plays when composing an image.
- Value that images are used to tell a story.

In portrait photography, there are four main types of lighting schemes that are used to highlight different features of a person. You'll learn more about each of those types of lighting below.

Split Lighting

Split lighting essentially splits the face in half, with one half being lit and the other being in shadow. This technique creates dramatic images. To create this type of lighting, place a light source to one side of the subject.



Loop Lighting

Loop lighting is made by creating a small shadow of the subject's nose on their cheek. To create loop lighting, the light source should be slightly higher than eye level and located about 45 degrees from the camera.

Rembrandt Lighting

This technique is named after the painter, Rembrandt, who frequently used this style in his paintings. This style can be identified by a triangle of light on the cheek. This is another dramatic style of lighting, similar to split lighting.



Butterfly Lighting

This style is named after the butterfly shaped shadow that is created under the nose by placing the light source above and behind the camera. This style is typically used for glamour shots and to create shadows under the cheeks and chin.

As in portrait shooting, light also plays an important role in landscape photography as well. Below, you'll look at different landscape lighting techniques and observe the different impacts

they have on photography. One difference between landscape lighting and portrait lighting is that you often cannot control what lighting scheme is used in landscape photography.

Reflected Light

This style of lighting occurs when sunlight is bounced, or reflected, off of a surface.



Overcast Light

This light is found on cloudy or foggy days. It is a very soft lighting, which can result in some very dramatic photographs.



Backlight

This type of lighting will often have pieces of sun rays around the subject, or you may see the sun as a bright spot in the image.



Direct Light

Direct sunlight is found one to two hours after sunrise and one to two hours before sunset. This type of lighting casts strong shadows and works great for black and white photos.



As you could see from the photos, lighting can make photos seem dramatic and tell the story of what has happened in the moment the shutter opened and closed. It is often said that you can never capture the same photo twice, since photos tell a story. Now that you know several new lighting techniques, it's time to try them out! Using the four different lighting techniques from above, capture some photos using these techniques.

Activity 7 Scenery

Project Outcomes Addressed

- Value that images are used to tell a story.
- List different types of photography and identify what types of scenery would be used in each.

Previously, you learned about lighting techniques for both portrait and landscape photography. Those are two of the hundreds of types of photography that exist!

In this activity, you will do research to find other types of photography and identify what type of scenery would be used in each type. Use the internet to identify six different types of photography and their sceneries. An example has been given in the chart below.

Photography Type	Scenery
Aerial Photography	Buildings, unique landscapes, landmarks, people

Activity 8

Video Production

Project Outcomes Addressed

- Identify the steps that are taken when shooting a video production.
- Define the following terms related to videography: storyboard, shot list, pan, close-up, cut-away and tilt.
- Value that images are used to tell a story.

The next two activities are about videography. In activity two, you identified the major parts of a video camera, and in this activity, you will look at different components and steps in shooting a video. By the end of this activity, you should be able to define some basic videography terms and list the steps followed in a video shoot.

For each of the terms below, identify the matching definition from the list and write the letter before the definition on the line beside the word.

___ Storyboard

___ Shot List

___ Pan

___ Close-up

___ Cut-away

___ Tilt

A. A list that describes the type, location and a description of different shots in a video shoot

B. The movement of a camera up and down in the vertical plane

C. Tightly framing a subject

D. A panel, or series of panels that are made of sketches arranged consecutively that outline a video shoot

E. Movement of the camera to the left or right, in the horizontal plane

F. Inserting a shot of something else during a continuously filmed section

Check your answers!

D-Storyboard; A-Shot List; E-Pan
C-Close-up; F-Cut-away; B-Tilt

There are several steps that are taken when shooting a video production. Each of those steps can be organized into three different categories:

- Pre-Production: What happens before you shoot
- Production: What happens while shooting
- Post-Production: What happens after shooting

The steps below are scrambled. Organize the steps into the order they are followed during a video production. Read the description of each step before trying to place them in the correct order.

Write a Script- Will your video have voices? It is always a good idea to write out a script beforehand, so your actresses and actors can review it prior to the shoot.

Identify Objectives- What is your ultimate goal for the video production? In this step, you identify the major goals of your production.

Add Special Effects- Every video can be enhanced by adding in special effects. They help your video come to life.

Edit the Footage- While it would be nice to be able to shoot the perfect video every time, that often doesn't happen. This is where editing helps.

Research Audience- Who is this production for? By knowing your audience, you will be better prepared to create a production that will be appealing to them.

Finalize and Show- After everything had been completed, it's time to finalize your film and show it off!

Storyboard- What will the flow of your production be? In this step, you'll create storyboards and shot lists for your production that will help you reach your objectives.

Shoot the Footage- Now that everything has been planned, it's time to get out there and record video!

Mix the Soundtrack- Adding music can also enhance your video production.

Now, write the steps in the correct order:

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

Check your answers below.

1. Identify Objectives, 2. Research Audience, 3. Storyboard, 4. Write a Script, 5. Shoot the Footage, 6. Edit the Footage, 7. Add Special Effects, 8. Mix the Soundtrack, 9. Finalize and Show

Activity 9

Creating a Video Production

Project Outcomes Addressed

- Demonstrate the ability to operate a basic video camera.
- Understand that capturing quality audio and video is essential for a high-quality video production.
- Value that images are used to tell a story.

Now that you've identified different components of video production and listed the steps for a video production, it's time to put that knowledge to use!

For this activity, you will create a short 4-minute video production. To create your video, select one role, one audience, one format and one topic to tell your story!

Be sure to follow the steps you listed in the last activity when creating, shooting and finalizing your production!

ROLE	AUDIENCE	FORMAT	TOPIC
An old radio	Young children (ages 5-7)	Storytime	How has news delivery changed?
An HD TV	A family	News broadcast	Why does high quality video matter?
A video camera	A classroom of middle schoolers	Interview	What is the difference in video and still photography?

Upload your finalized video to your digital 4-H portfolio website!

Activity 10

Image and Video Editing

Project Outcomes Addressed

- Identify programs that can be used for image and video editing.
- Compare and contrast the capabilities of different image and video editing programs.
- Understand that image and video editing can be used to enhance photographs and videos.

One of the most important parts of producing high-quality photos and videos is the ability to edit them. In this activity, you will research five different photo and video editing programs and create a list of them. In your research, your goal is to answer the following questions about each of the five programs you identify.

1. How much does it cost?
2. Where is it available from (store, online download, etc.)?
3. Does it work for photos, videos or both?
4. What editing tools does it include?

On the next page, fill out the table with the five programs you identified.

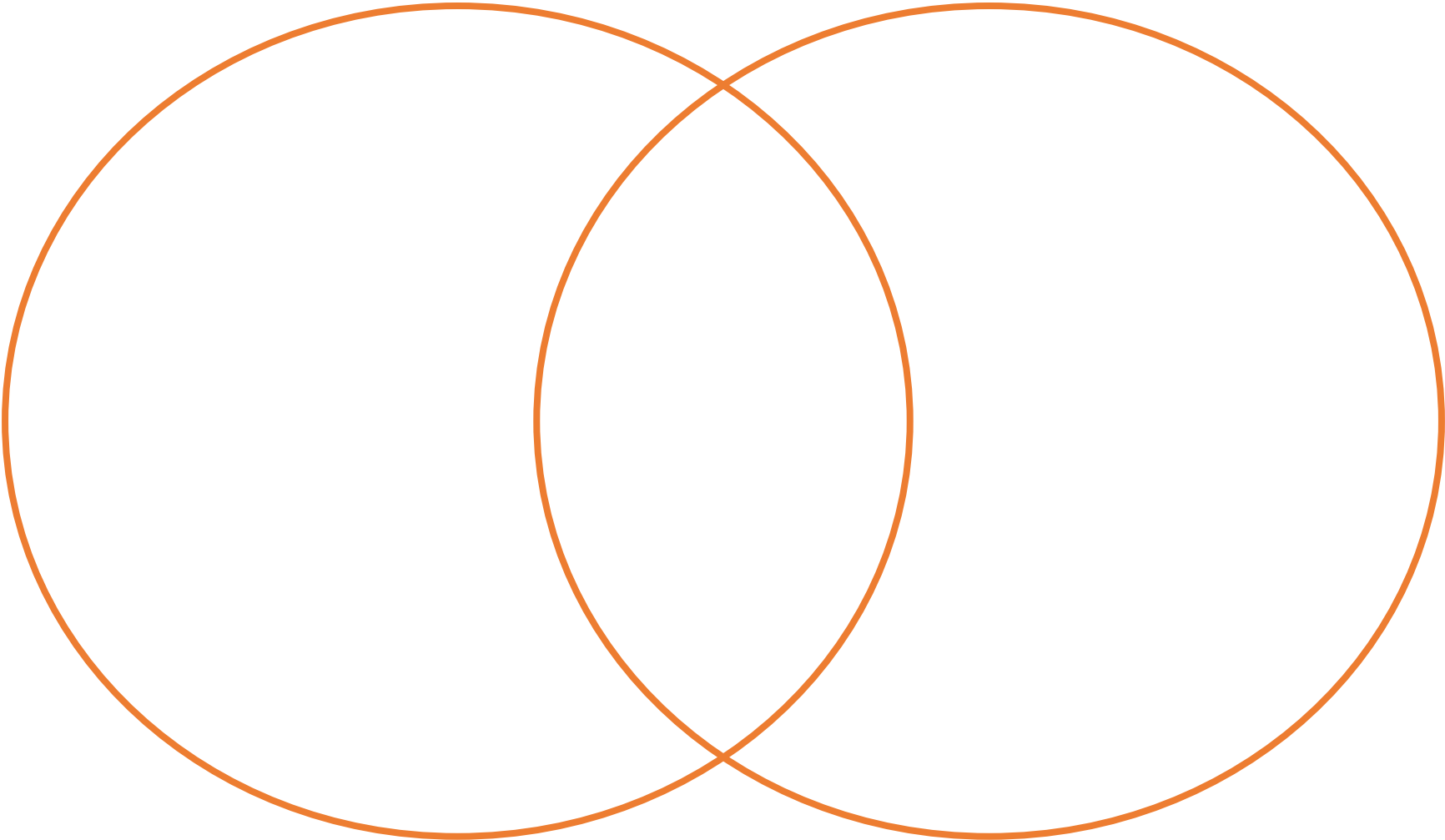
Name	Cost	Availability	Photos, videos or both?	Editing tools

Great job on identifying some great programs!

From the list you created, choose two programs and complete the compare and contrast chart by identifying what they have in common and how they are different.

Program 1: _____

Program 2: _____



Activity 11

Photography Careers

Project Outcomes Addressed

- List careers that use photography or videography as a primary skill set.
- Identify specific skills that are needed for people in a photography or videography field.

In this activity, you will look at different careers that use photography and videography skills. Fill in the table below by identifying three careers that use photography skills and three that use videography skills. Include three skills that are essential for the careers. An example of a wildlife photographer has been provided for you.

Career Name	Description	Skills	Training or Education
Wildlife Photographer	This person takes photos of wildlife in multiple settings.	Landscape photography, fast reflexes (for shooting moving animals), ability to identify animals	bachelor's degree in photography

Career Name	Description	Skills	Training or Education

Thinking about the careers you researched, which one interests you the most and why?

Congratulations! You have completed the beginning photography curriculum!



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