STEAM Subject: Photography
Lab: Point of View

Grades: 4th-8th

Learning objective:
Students will explore different points of view by changing the position of their camera phone.

ENGAGE:
Ask students the following questions:

- Can you imagine how the world looks to an insect or bird flying around?
- How can you represent how an insect or bird looks at the world in a photograph?

EXPLORE:
Point of View Activity:
When you move around looking for the "right angle," your images can become more interesting. You can explore your subject/object by moving the position of your camera to find:

- Interesting shapes
- Make subjects/objects appear more powerful or look smaller
- Create distorted images
- Emphasize vertical or horizontal lines to create a sense of three-dimensionality

Materials:

- Phone camera app
- Pick an object that you are familiar with or you would like to explore

Directions:

1. Pick an object you are familiar with to be the subject of your photos.
2. Take at least 1 photograph from each point of view (see examples below taken by EIS Photography Instructor Carla Reyes). Explore the object moving your camera position from high angle, low angle, zoom in or out. You will observe how the object changes the appearance, some parts appear larger, some appear smaller, or the image gets distorted.
3. Experiment with other points of view by moving the position of the camera around your subject. Take a picture, every time you find an interesting point of view.

Eye Level

Bird's-Eye View

High Angle

Worm's-Eye View

Side Angle

Becoming the Subject

EXPLAIN:

- Humans can see three-dimensional images because we have two eyes, each eye produces an image, and our brain combines the information producing the 3D image. A single camera lens cannot see depth, and therefore sees two-dimensional images.
- Watch this National Geographic video “How your eyes make sense of the world” at https://youtu.be/hsh2kPdgazo. Recommended for 12 years and older, includes a Salvador Dali’s painting and explains the “Lincoln Illusion”.
- Photographs are considered two-dimensional art. One way to create the illusion of depth (3D) in a photograph (2D), is by moving the camera position, so the objects appear bigger in the front and smaller in the back.

- Review STEAM Vocabulary
    - **Two-Dimensional (2D):** something flat that has height and width, like a piece of paper.
    - **Three-Dimensional (3D):** something with volume that has height, width, and depth (length), like a sculpture.
    - **Point of view:** the position the camera is when is viewing a scene. The point of view can describe the objects/subject very different from what looks like. Some examples of point of view are:
        - **Eye-level:** photographing looking straight at your subject, the viewer can identify the object more precisely or connect with the subject.
        - **Bird’s-eye view:** photographing the subject looking from above. It can make the viewer feel superior and the subject very small. An example of this would be photographing the Earth from a spaceship.
        - **High angle:** photographing the subject looking from above, but at a slight angle, creating distortion.
        - **Side angle:** photographing the subject from the side. As you can see in the sample above, the front of the object appears larger, while the back appears smaller. The distortion of the lines and shapes can make the subject appear 3D.
        - **Worm’s-eye view:** photographing from below, the objects look larger even when it is small. The objects/subjects can look more powerful and intimidating.
        - **Becoming the subject:** photographing from a point of view that invites the viewer to be part of the image. One way to archive this is including a hand, so when the viewer sees the image, it feels like their hand has become part of the scene.

EVALUATE:
Which point of view did you like the most? Do you think you can describe an object better by changing the camera position? Do you think your subject look more powerful when you photograph it from a low angle?

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