

Objective

By the end of this lesson, Kamie will be able to identify and photograph various geometric shapes and patterns in her environment, while also understanding the geometric principles behind them. This will enhance her photography skills and deepen her appreciation for geometry in everyday life.

Materials and Prep

- Camera or smartphone with a camera
- Notebook and pen for notes and reflections
- Access to a variety of locations (indoors and outdoors) for photography
- A basic understanding of geometric shapes (triangles, circles, squares, etc.)

Activities

• Geometric Scavenger Hunt

Kamie will explore her surroundings to find and photograph at least five different geometric shapes. She will document each shape, noting its characteristics and where she found it.

• Shape Analysis

After the scavenger hunt, Kamie will select her favorite photo and analyze the geometric properties of the shape. She will write a brief description of the shape, including its angles, sides, and symmetry.

• Creative Composition

Kamie will experiment with different angles and perspectives to photograph geometric shapes in creative ways. She can play with lighting and shadows to enhance the shapes in her photos.

• Photo Gallery

At the end of the lesson, Kamie will create a mini gallery of her best geometric photos. She can present her gallery to family members or friends, explaining the geometric concepts behind each photo.

Talking Points

- "Geometry is all around us! Can you think of any geometric shapes you see every day?"
- "When you look through your camera, try to find shapes that create interesting patterns. How can you frame them to highlight their geometry?"
- "What properties make a shape unique? For example, how many sides does a triangle have, and what are its angles?"
- "Experimenting with different perspectives can change how we see shapes. What happens when you shoot from above versus at eye level?"
- "Consider the role of light in your photos. How does it change the appearance of geometric shapes?"
- "After you create your photo gallery, think about how geometry influences art and design. How can you incorporate geometric shapes into your own creative projects?"