GEOMETRY // ANGLES // JESSICA STOCKHOLDER

Explore different characteristics of geometry including vertices and angles.

Jessica Stockholder

OBJECTIVES:
1. Explore the installation by contemporary artist Jessica Stockholder by describing what you see using details from the work of art.
2. Identify and analyze different geometry concepts such as shapes, vertices, and angles.
3. Inspired by Jessica Stockholder’s installation and using different geometric shapes, create a sketch or maquette of a sculpture you would want to build in a park.

MATERIALS:
Anything you have available, including but not limited to paper, pencils, markers, colored pencils, crayons, cardboard, tape, popsicle sticks, pipe cleaners, wire, fabric, or other drawing/3-D materials

Geometry & All About My Sculpture sheet (below)

OBSERVE & DISCUSS:
Begin by looking at the images above of an installation by Jessica Stockholder, and think about the following questions:

• What do you notice?
• What shapes do you see? Where?
• What colors do you see?
• How might you use this space? What is familiar? What is unfamiliar? What types of activities could you do in the space? Walk, climb, run, jump?

Jessica Stockholder creates works of art, and she invites people to experience them with their bodies. Parks often have stages, benches, picnic tables, swing sets, etc. that people can use for fun.
• How does this sculpture compare to traditional or familiar playground equipment? What is the same? What is different?
• What is the same/different about an artist creating something like this, and a park having these kinds of elements?
• How will you create something that people can use that is also a work of art?

Take a closer look at the colors in the sculpture. Jessica Stockholder uses bright orange, splashes of pink, neon green, red, and turquoise.
• Why do you think she chose these colors? What would the sculpture look like if the orange triangles were purple? Or white? Would it change the environment?
• Colors make up an important part of a park. Think about the parks around you. What colors have you observed?

Think more about the different shapes you see in Jessica Stockholder’s installation titled Save on select landscape & outdoor lighting: Song to mind uncouples. Use the geometry sheet below and the Stockholder images to follow along.

• List the shapes that you observe.
• How many of each shape do you see?
• Focusing on the triangles, how many are there? Count both small and big triangles.
• Look at the shape in red-orange. What shape is that? How many sides does it have?
• A vertex is a meeting point of two lines that form an angle. How many vertices do you see in the image?
• How many acute angles, or angles that are less than 90 degrees, are there? Using a colored pencil (crayon, marker, pen, whatever you may have on hand), circle all of the acute angles on the image.
• Using another color, circle all of the obtuse angles, or angles that are more than 90 degrees, on the image.
CREATE AND DO:
Now that you’ve observed and identified different shapes, vertices, and angles in Jessica Stockholder’s sculpture, it’s your turn to design your own installation! Take a look at Jessica Stockholder’s maquette above at top left.

- What do you notice about her maquette?
- How is it different from the finished installation? What elements are the same?

Imagine that you were asked to create a new sculpture for a neighborhood park and you could only use geometric shapes.

- What shapes would you use? Why?
- Where might you find organic shapes already in a park?
- Jessica Stockholder chose to add the plants, including the palm trees, to her installation. What plants might you add to your sculpture? What would they add to the environment?
- How will you create something that people can use that is also a work of art?

Drawing inspiration from Stockholder’s installation, think about the colors that you would want to use.

- What colors will you use and why?
- How would they work together in an outdoor environment?

Now it’s time to create! You can choose to draw on paper or create a sculpture with any materials you have on hand. Crayons, markers, toilet paper tubes, etc. Once you’re done, make sure to fill out the All About My Park sheet (below).
Use the image above & a writing utensil to answer the questions below.

1. List the shapes that you observe.

2. How many of each shape do you see?

3. Focusing on the triangles, how many are there? Count both small and big triangles.

4. Look at the shape in red-orange. What shape is that? How many sides does it have?

5. A vertex is a meeting point of two lines that form an angle. How many vertices do you see in the image?

6. How many acute angles are there? How many obtuse angles are there?

7. Using a colored pencil (crayon, marker, pen, whatever you may have on hand), circle all of the acute angles on the image. Using another color, circle all of the obtuse angles on the image.
Name______________________________

**All About My Park – Sculpture or Sketch**

1. What shapes did you use?__________________________________________________________

2. How many of each shape are there?________________________________________________

3. What colors did you use? Why?____________________________________________________

4. How many vertices do you see?_____________________________________________________

5. How many acute angles are there? How many obtuse angles are there?____________________

6. What is your sculpture titled?____________________________________________________

7. How would someone use this in a park?____________________________________________

8. How did you plan for people of all shapes and sizes to be able to use this?______________

9. You’re able to see Jessica Stockholder’s installation in daylight and nighttime. In thinking about your sculpture, what do you think it will look like at night? ________________________________