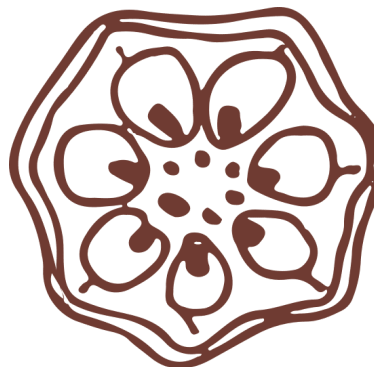


# Searching for Symmetry

## Plant Part Art- Lesson 2

Lesson written by Jenna Mobley for Georgia Organics



### For the Classroom:

- Group structure - small group
- Location - school garden, where okra is growing
- Approximate time - 15 minutes

### Standards:

- S2L1c. Construct an explanation of an animal's role in dispersing seeds or in the pollination of plants.
- CCSS.MATH.CONTENT.4.G.A.3. Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

### Materials:

- Journals or paper (1 per child)
- Colored pencils
- ["Types of Symmetry" Poster](#)
- ["Searching for Symmetry in Okra" Posters](#)
- 2 okra pods, cutting board, knife

### Procedure:

#### 1. Engage:

- Display "Types of Symmetry" Poster. "Today we are going to search for symmetry on our okra plants. Let's look at an okra pod together."
  - Slice one okra pod in half length-wise. "What type of symmetry do you see inside the okra?"
  - Slice the other okra pod width-wise in coins. "What type of symmetry do you see inside the okra now?"

#### 2. Explore:

- "Now, let's look carefully at the rest of the okra plants. Which parts of the plants have reflectional symmetry and which parts of the plants have rotational symmetry?"
- "When you have found symmetry on a plant part, draw it in your journal and either draw a circle around it if it has rotational symmetry or draw a line across where it has reflectional symmetry."
- Provide time for children to search through the garden or display "Searching for Symmetry in Okra" Posters".

#### 3. Explain:

- "Put your hand in the air if you'd like to share where you found symmetry on the okra plant and what type of symmetry you found." Select children to share and prompt other children to snap if they agree.
- "Why do you think plants have symmetry?" Provide time for students to think and share responses.
- "That may be something we continue to wonder about. It is thought, though, that flowers have symmetry (some reflectional, some rotational) to help with pollination. A sunflower head has radial symmetry, allowing small insects to land on top, while a snapdragon flower has bilateral symmetry, inviting large bees to enter from the side."