Flower and Fruit
Drawing Diagrams - Lesson 4

For the Classroom:
- Group structure - small group
- Location - school garden, where okra is growing
- Approximate time - 20 minutes

Standards:
- S2L1b. Plan and carry out an investigation of the life cycle of a plant by growing a plant from a seed and by recording changes over a period of time.
- S2L1c. Construct an explanation of an animal's role in dispersing seeds or in the pollination of plants.

Materials:
- Cameras or Journals and colored pencils (1 per pair of children)
- Magnifying glasses (1 per pair of children)
- Flower and Fruit Sequencing Cards
- Flower and Fruit Sequencing Check
- Optional: plastic flagging tape

Procedures:
1. Engage:
   a. "Parts of the okra plant grow and change so fast - almost before your eyes!"
   b. "Scott Peacock, an award-winning chef, once said 'In the fierce heat, the pods grew rapidly. The small ones that weren't ready in the morning, would be ready by dusk (and by the next day they'd be too mature).' Today, we are going to try to watch closely and capture some of these changes."
2. Explore:
   a. "With your partner, explore the okra patch and look for flowers and fruits at all stages - little to big. Take a picture of each (or draw each in your journal)."
   b. "Look closely at how each of your photos or drawings is the same or different from each other. With your partner, organize or number your photos or drawings showing the sequence you believe they happen in."
3. Explain:
   a. "Put your hand in the air, if you'd like to share your sequence in order." Select children to share. Encourage other children to snap if they agree.
   b. Confirm children's findings - flower bud to flower (only open for one day), then a fruit grows from the flower (reaching full size in only a few days).
   c. Notice if children mentioned any insects they saw. Okra is actually self-pollinated and can grow from flower to fruit without the help of pollinators. It still has sweet nectar that insects love and it still loves the help with pollination, though!
4. Evaluate:
   a. Provide the Flower and Fruit Sequencing Cards or the Flower and Fruit Sequencing Check to individual or small groups of children to see if they can place the cards or number the plant parts in the correct order.

Teacher's Note: Children can also gently tie plastic flagging tape around a specific flower bud and visit multiple times over three days to watch that specific flower bud grow and change over time.

Lesson Created by Jenna Mobley for Georgia Organics