Focus on: Plant Life Cycles

This lesson is meant to support the unit on Plants on Earth. It can be done to generate background knowledge prior to teaching the unit, during the unit to reinforce lessons, or as a follow up to the unit to increase the retention of information. How you guide your students will depend on the information you have already taught and the information you want to introduce.

Clarifying Objectives:

3.L.2.1 Remember the function of the following plant structures as it relates to the survival of plants in their environment:

- Roots – absorb nutrients
- Stems – provide support
- Leaves – synthesize food
- Flowers – attract pollinators and produce seed for reproduction

3.L.2.2 Explain how environmental conditions determine how well plants survive and grow.

3.L.2.3 Summarize the distinct stages of the life cycle of seed plants.

Key Vocabulary:

Definitions can be found at http://learnersdictionary.com

-Function
-Plant Structures
-Survive/ Survival
-Environment /Environmental
-Conditions
-Roots
-Absorb
-Nutrients
-Stems
-Support
-Leaves
-Synthesize
-Flowers
-Pollinators
-Produce
-Reproduction
-Summarize
-Stages
-Life Cycle
-Seed Plants

Focus Question(s):

Do plants progress through the different life cycle stages at the same time?

Materials:

School Garden
Garden Gloves to wear while exploring the garden especially if touching plants, soil, lifting pots, etc.
Science Notebooks
Camera, iPad, or other recording device

Activities:	**Guiding Questions:**
1. Review/ introduce the different plant life cycle stages. 2. Present the Focus Question, "Do plants progress through the different life cycle stages at the same time?" 3. Have the students go on a search in the garden to find evidence that plants are in the same life cycle stage or that they are not in the same stages. 4. Students should sketch the different life cycle stages in their science notebooks and record notes. They may also photograph them to share with others. 5. Encourage students to find at least one example for each life cycle stage. 6. Share findings 7. If photographs were taken, make a collection of all the photographs of plants at each stage to compare and contrast.	- What are the life cycle stages of plants? - Do you think all plants in the garden are currently at the same life cycle stage? - How do you know? - What life cycle stage is that plant? - If you find a dead plant, ask, "Do you think that plant went through all of the life cycle stages before it died? How do you know? What evidence is there? - What could cause a plant to die before going through each life cycle stage? - How do humans help or hurt plants in the garden? - How are the sprouts the same/ how are they different? - How are the true leaves the same/ how are they different? - How are the flowers the same/ how are they different? - How are the seeds the same/ how are they different?