

WEEK 4 Lesson 2

Science and Engineering: Bean Plant/ Onion Cutting Observations
 Children again observe their plants and onion cuttings. They record their findings.

S & E Big Ideas	Plants are living organisms that need water, air, nutrients, light, and space to grow. Plants can produce new plants in many ways. Plants have different structures that function to help them survive. Individuals of the same kind of plant may look similar but also vary in many ways.
S & E Guiding Question	How have our seeds and cuttings changed?
Content Objective	I can make observations of my seed and onion cutting. I can measure, record, and discuss my findings. (Practice 5, 1-LS3-1) I can graph data. (Practice 4)
Language Objective	I can describe the change in my plant and onion cutting. (1-LS3-1)
Vocabulary	root: the part of the plant that is underground and soaks up water and nutrients from the soil leaf: a structure on a plant that is usually green and makes food from sunlight germinate: when a seed (or spore) starts to grow
Materials and Preparation	<ul style="list-style-type: none"> ● root bean plants (from Week 1, Lesson 3) ● green onion plants (from Week 2, Lesson 1) ● Seed Observation Journal, one for each child (from Week 1, Lesson 3) ● 6 inch ruler, one for each child or small group (from Week 1, Lesson 3)

Opening 5 minutes	<p><i>It is time to check our growing plants again. When you look at your plants, what do you notice that has changed?</i></p> <p>Provide time for children to share their ideas.</p> <p><i>Make sure you check your soil today. The soil should not be muddy, just a little wet. If you think you need more water, please let me know.</i></p> <p><i>Let's review how we will measure the plant growth.</i></p> <p>Review the process used the previous week to measure the plants.</p>
Investigation 20 minutes	<p>Have the children make observations of their bean plants and onion cuttings from last week. Children draw and label what they see. Note any changes the bean has undergone in the journal. If there is visible growth, have the children carefully measure it. Have the children graph the observed growth.</p>
Discussion 5 minutes	<p>Discuss children's findings. If some plants have grown more than others, ask children to identify the elements that their plant may be missing.</p>
Closing 2 minutes	<p><i>How are people and plants similar in what we need and how we grow?</i></p>
Standards	<p>1-LS1-1. Use evidence to explain that (a) different animals use their body parts and senses in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air, and (b) plants have roots, stems, leaves, flowers, and fruits that are used to take in water, air, and other nutrients, and produce food for the plant.</p> <p>Practice 8. Obtaining, Evaluating and Communicating Information</p> <p>SL.1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.</p>
Ongoing assessment	<p>What do children understand about how plants grow?</p>

Notes
