

WEEK 2 Lesson 1

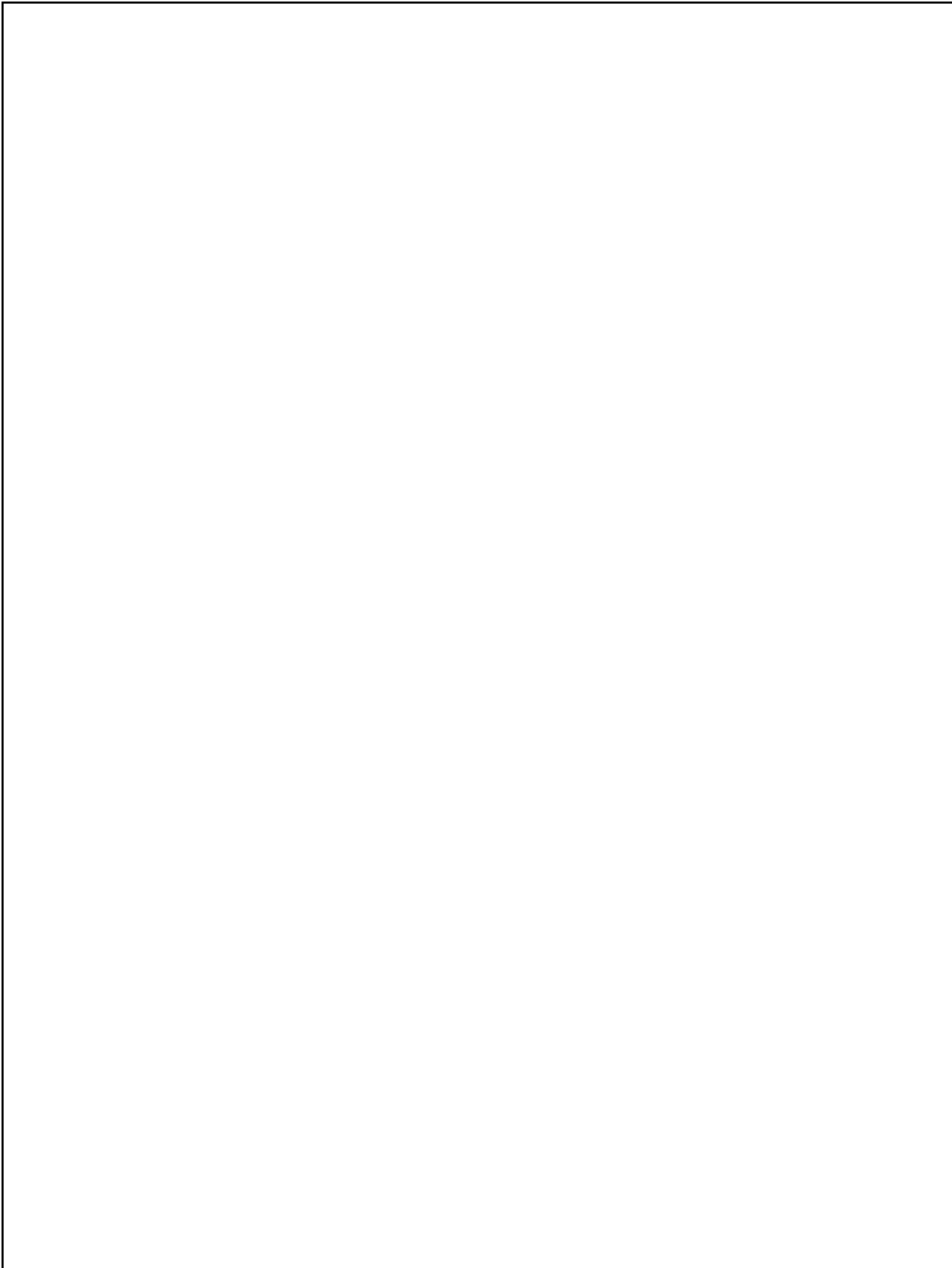
Science and Engineering: Rooting Stem Plantings

S & E Big Ideas	Plants can produce new plants in many ways. Plants have different structures that function to help them survive.
S & E Guiding Question	Do plants only grow from seeds?
Content Objective	I can ask questions to get more information about a plant I am growing. (1-LS1-1, 1-LS3-1)
Language Objective	I can have a conversation with my classmates about the plants we are learning about and our method of growing new plants. (SL.1.1)
Vocabulary	node: the place on stems where leaves, twigs, and roots grow cutting: the pieces of stems from an old plant that are used to make new plants eye: The part of a potato that sprouts a new plant
Materials and Preparation	<ul style="list-style-type: none">● Growing your Own Potato (optional, can be shown at the end of the lesson)● Green onion, left whole● Green onion Only the bottom portion clipped off and saved (white end with roots on them), 1 for each small group This can be cut ahead of time, or children can do this in their small group.● hand lenses● plastic cups, 1 per small group● 1/3 cup of soil, per small group● water <p>If necessary, pre-assign small groups.</p> <p>The end of a green onion (with little roots growing out of it) can grow</p>

	<p>into a new green onion. Plant the cutting with root end down in some quality potting soil, place it in a sunny window, keep it watered and watch it grow. The green part of the onion will grow back quickly. In less than two weeks it will be tall enough to snip the top off to eat.</p>
<p>Opening 3 minutes</p>	<p><i>Last week, we learned about seeds. What are some things we know about seeds?</i></p> <p>Provide time for 2 responses.</p> <p><i>Today we will learn about another way to grow plants. Some plants can be grown from cuttings. Cuttings are pieces of stems from an old plant used to make new plants. Plants like roses, succulents, herbs, and some vegetables like potatoes can all be grown from cuttings.</i></p>
<p>Investigation and Discussion 25 minutes</p>	<p>Have children sit in their small groups and provide each group with a green onion clipping. Show them a whole green onion. Explain that people eat the green tops. They put them in salads, soups, and as a topping for some foods like a baked potato.</p> <p><i>First let's observe your green onion clipping. What do you notice about it? Is it smooth or bumpy?...</i></p> <p><i>Do you know what those little things coming from the bottom of the onion bulb are the roots?</i></p> <p>Distribute the hand lenses. Allow for a couple of minutes for children to carefully examine the onion bulbs. Draw their attention to the roots. Next, distribute the plastic cups with the soil already in the cup. Demonstrate how to safely insert the bulb into the soil in the cup. Once this step is complete, have children add water and store the onions in a sunny spot.</p>
<p>Closing</p>	<p><i>I wonder how the green onion cutting will change over time! Will it grow a new plant?</i></p> <p>The children should check on their onion cuttings once a week. Make sure to check the soil moisture every few days. Optional-show students the potato cutting video to see other ways that vegetables can be grown from cuttings.</p>
<p>Standards</p>	<p>1-LS3-1 Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like their parents</p> <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</p>

	<p>for the plant.</p> <p>1-LS3-1. Use information from observations (first-hand and from media) to identify similarities and differences among individual plants or animals of the same kind.</p> <p>Practice 1. Asking questions and defining problems</p> <p>Practice 3. Planning and carrying out investigations</p> <p>SL.1.1c. Ask questions to clear up any confusion about the topics and texts under discussion.</p>
Ongoing assessment	Observe children as they work in their small groups. Are they participating in conversations about the development of the potato cuttings?

Notes



Science and Engineering U3 W2 L1