

WEEK 1 Lesson 2

Science and Engineering: Exploring Plants- Seed Parts
 Working in small groups, children open up a soaked lima bean. They observe it and learn about parts of a seed.

S & E Big Ideas	Inside each seed is a baby plant and food to help the baby plant grow.
S & E Guiding Question	What are the different parts of a seed?
Content Objective	I can make observations about seeds (1-LS3-1) I can use a glossary to define words I don't know. (RI.1.5, L.1.4)
Language Objective	I can gather information about how seeds grow. (Practice 8, R1.1.2)
Vocabulary	DNA: The special code that tells a plant how to grow embryo: The baby plant inside a seed seed: Part of a plant that can grow a new plant seed coat: The hard cover that protects the seed
Materials and Preparation	<ul style="list-style-type: none"> ● Parts of a Seed, passage and glossary, one per child ● A Peek Inside a Seed sheet, one per child ● hand lenses, 1-2 per small group ● paper towels, a couple of sheets per small group ● container to hold water for soaking the beans ● presoaked lima beans, one per small group plus extra <p>Soak lima beans in water overnight or for several hours. During the Investigation, children will need to split the bean in half, lengthwise. This step might be difficult for some children, therefore, it might be helpful to split some beans ahead of time.</p> <p>Children will work in small groups. If necessary, pre-assign these small groups ahead of time.</p>
Opening	Distribute Parts of a Seed. Read together as a whole group.

5 minutes	
Investigation and Discussion 10 minutes	<p>Provide each small group a soaked bean, paper towels, and a hand lens. Instruct children to gently rub the bean to remove the seed coat. This will look translucent once it is removed.</p> <p>Guide children to gently split the bean in half, lengthwise. Encourage children to use the hand lens to look at the inside of the bean and at the seed coat.</p> <p>Ask children to locate the embryo (stem and leaf).</p>
Discussion	Children complete the A Peek Inside a Seed Sheet in partners or small groups.
Closing	<i>Seeds and people both have DNA. Just like DNA tells a plant what kind of plant it will be, our DNA tells our bodies what color eyes we have, our hair color, and how tall we grow.</i>
Standards	<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>RI.1.2. Identify the main topic and retell key details of a text.</p> <p>RI.1.5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.</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> <p>L.1.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content, choosing flexibly from an array of strategies.</p>
Ongoing assessment	<p>What do children understand about how seeds grow?</p> <p>What do children understand about using a glossary to define new words?</p>

Notes
