

Unit 4: The Power of Pollinators

WEEK 1 Lesson 1

**Science and Engineering: Life Sciences**  
Ecosystems: Gathering Ideas and Questions about Plants

| <b>Big Idea</b>                  | Living things grow and change over time.   |              |  |                  |                 |  |  |
|----------------------------------|--|--------------|--|------------------|-----------------|--|--|
| <b>Guiding Question</b>          | Why is it important to understand how living things grow and change over time?   |              |  |                  |                 |  |  |
| <b>Content Objective</b>         | I can identify what I know and what I wonder about plants. (Practice 1)  |              |  |                  |                 |  |  |
| <b>Language Objective</b>        | I can discuss my ideas and questions about plants. (SL.1.2, SL.1.2.b)  |              |  |                  |                 |  |  |
| <b>Vocabulary</b>                | <b>grow:</b> to get bigger<br><b>reproduce:</b> to make new organisms  |              |  |                  |                 |  |  |
| <b>Materials and Preparation</b> | <ul style="list-style-type: none"><li>• writing tools</li><li>• About Plants sheet, one copy for each group</li><li>• chart paper</li></ul> Prepare the following chart.<br><table border="1" data-bbox="493 1333 1357 1675"><thead><tr><th colspan="2">About Plants</th></tr><tr><th>We Think We Know</th><th>We Want to Know</th></tr></thead><tbody><tr><td></td><td></td></tr></tbody></table> <p>Plan for children to work in small groups.</p> <p>If possible, plan to conduct part or all of this lesson in an area outdoors where children can observe plants growing.</p> | About Plants |  | We Think We Know | We Want to Know |  |  |
| About Plants                     |  |              |  |                  |                 |  |  |
| We Think We Know                 | We Want to Know  |              |  |                  |                 |  |  |
|                                  |  |              |  |                  |                 |  |  |

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|  | <p><b>Prepare for Lesson 2:</b> Soak bean seeds overnight to accelerate sprouting time. Each group will need seven or eight seeds. Soak more seeds than needed, as not all seeds will germinate.</p>   |
| <p><b>Opening</b><br/>5 minutes</p>        | <p><i>In our new unit, The Power of Pollinators, we will look closely at plants. We'll learn about their different parts and how they are used, and we'll learn about what they need to grow and develop. We'll also learn how plants reproduce, or make new plants.</i></p> <p>If possible, take the class outdoors to where plants are growing. Invite children to make and share observations.</p> <p><i>Along with the plants we've just looked at, you all have other experiences with plants—maybe you have planted seeds and watched them grow; maybe you have noticed plants around our town; or maybe you take care of plants where you live. You probably also have some ideas about what plants need to grow. Today you will talk in small groups about what you think you know and what more you want to find out about plants.</i></p> <p>Show the About Plants sheet.</p> <p><i>In your small groups, as you share ideas about plants, you might not all agree about something. Talk about that. Once you have talked about your ideas, have someone in your group record <u>one</u> question that you would like to investigate during this unit. You will revisit this question each time you make an observation of our plants.</i></p> |
| <p><b>Investigation</b><br/>10 minutes</p> | <p>As children talk and record ideas in small groups, circulate to facilitate their discussions. Help them to formulate questions and land on one to investigate over the course of several weeks.</p>   |
| <p><b>Discussion</b><br/>14 minutes</p>    | <p>Gather the group together and harvest some of the children's ideas, one column and one group at a time. Encourage children to use a signal for repeated ideas, and record only each new novel idea on the chart. Note children's names next to the questions</p> <p>As children share statements from the We Think We Know section, encourage discussion. If disagreement arises, annotate it with a question mark or formulate a new question and record it in the We Want to Know column.</p>   |
| <p><b>Closing</b><br/>1 minute</p>         | <p><i>Today we talked about ideas we already have about plants and generated some questions to come back to through our study of pollination. This chart will stay up in the classroom so that you can</i></p>   |

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|---------------------------------------|--|
|                                       | <p><i>keep these questions in mind as we read, investigate, and talk about plants.</i></p> <p><i>Tomorrow we will begin to work with seeds.</i></p>  |
| <p><b>Standards and Practices</b></p> | <p><b>SL.1.2</b> Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.</p> <p><b>SL.1.2.b</b> Build on others' talk in conversations by linking their comments to the remarks of others.</p> <p><b>2-LS2-1</b> Plan and conduct an investigation to determine if plants need sunlight and water to grow.</p> <p><b>2-LS2-2</b> Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.</p> |
| <p><b>Ongoing assessment</b></p>      | <p>Collect children’s recording sheets and reflect on the class discussion.</p> <p>What ideas do children begin with?</p> <p>What misconceptions have arisen?</p> <p>How do children discuss what they think they know?</p> <p>How attentively do they listen to others’ ideas?</p> <p>How do children formulate questions?</p>  |

**Notes**