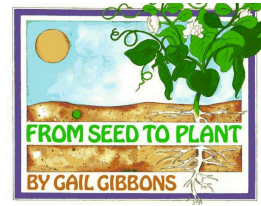


Unit 4: The Power of Pollinators



WEEK 1 Day 4

**Text Talk**  
***From Seed to Plant***  
 Read 1 of 2

<b>Big Ideas</b>	Organisms in an ecosystem are interdependent. Living things grow and change over time. The parts of an organism have specific functions. Pollination is a result of animal behavior. Animals, including humans, benefit from and depend on pollination.
<b>Weekly Question</b>	What is important about seeds?
<b>Content Objective</b>	I can explain and describe the text’s big ideas. (R.4.2, R.6.2.b)
<b>Language Objective</b>	I can describe the early stages of how a plant grows and changes over time. (R.9.2.b, LSS2-3(MA))
<b>Vocabulary</b>	<p><b>bud:</b> an undeveloped part of a plant</p> <p><b>fluff:</b> a soft, light part</p> <p><b>germination:</b> the process of beginning to develop into a plant</p> <p><b>hook:</b> something that catches on to something else</p> <p><b>nectar:</b> the juice of a plant that attracts pollinators</p> <p><b>nutrition:</b> food</p> <p><b>petal:</b> the colored pieces of the flower that surround the stamen and stigma</p> <p><b>pistil:</b> female part of the flower; made up of style, stigma, ovary</p> <p><b>pollination:</b> when pollen is moved from a stamen to a stigma in order for a plant to reproduce</p> <p>* <b>ripen:</b> to become ripe or ready</p>

	<p>* <b>scatter</b>: to disperse, to toss or go in different directions</p> <p><b>seed</b>: the fertilized part of a mature plant</p> <p><b>seed coat</b>: the outer covering of a seed</p> <p>* <b>shoot</b>: a new plant or branch</p> <p><b>sprout</b>: begin to grow</p> <p><b>stamen</b>: male part of the plant that makes pollen</p> <p><b>stigma</b>: top part of the pistil that receives the pollen</p> <p>Note: there are many words in this lesson, as there are a lot of technical terms about plants in the text. Many of these vocabulary words will be revisited throughout the unit.</p>
<p><b>Materials and Preparation</b></p>	<ul style="list-style-type: none"> <li>● <i>From Seed to Plant</i>, Gail Gibbons Pre-mark the pages of the book. Page 1 begins, “Most plants make seeds.”</li> <li>● Parts of a Flower poster</li> <li>● Writing Station Response: <i>From Seed to Plant</i>, 1 copy</li> </ul> <p>On the whiteboard, write the Writing Station prompt.</p> <p>Elsewhere on the whiteboard, write the following questions.</p> <p>What do we know so far about how a plant grows and changes over time?</p> <p>Describe how seeds and plants depend on other living things.</p> <p>Why do you think knowing about plants and how they grow matters to animals and people?</p> <p>Assign groups of four children for Numbered Heads Together.</p>
<p><b>Opening</b> 1 minute</p>	<p><i>In this unit of study, <b>The Power of Pollinators</b>, we are learning about <b>pollination</b> of plants and about pollinators. Through reading and discussion—and through our Science investigations—we’ll look closely at how a plant grows and changes over time. Today we’ll read <i>From Seed to Plant</i> by Gail Gibbons, to better understand these changes. You might remember this book from kindergarten! As we read, we’ll think about how a seed and plant depend on, or need, other living things, and how this is important for people and other animals.</i></p> <p><i>Today we will focus on the first part of the book. We’ll finish reading this text tomorrow.</i></p>

<p><b>Text and Discussion</b> 18 minutes page 5</p>	<p>Read through page 5, then pause. <i>This diagram offers a lot of information about the structures of a flower and how those different parts work the way that they do. We can also look at our class diagram.</i></p>
<p>Parts of a Flower poster</p>	<p>Show the Parts of a Flower poster. <i>These diagrams teach us a lot of new vocabulary, but we will need to think about, talk about, and use these words over time to really understand them.</i></p> <p><i>What's important right now is to note that flowers are where most seeds begin.</i></p>
<p>pages 6-7</p>	<p>Return to the book, and read the next two pages. Think, Pair, Share. <i>Pollination is going to be the central idea in this unit. From what you've heard so far, what is pollination? Can you explain it in just a few words?</i></p>
<p>page 17</p>	<p>Continue reading through page 17. Stop to briefly explain seed dispersal. <i>Part of how a plant grows and changes over time is <b>seed dispersal</b>. Seeds have to move to locations where the conditions are right for them to grow. They need to have enough space so that they are not fighting for resources like minerals and water. The book is telling us the many different ways this movement happens.</i></p>
<p>page 19</p>	<p><i>Turn and talk to a partner. What do we know so far about how a plant grows and changes over time?</i></p> <p>Stop today's reading here. Move children into small groups.</p>
<p><b>Key Discussion</b> 12 minutes</p>	<p>Synthesize learning using the Numbered Heads Together routine with two prompts.</p> <p>Prompt 1. <i>Describe how seeds and plants depend on other living things.</i></p> <p>Prompt 2. <i>Why do you think knowing about plants and how they grow and change over time is important to animals and people? In other words, why did Gail Gibbons write this book?</i></p>
<p><b>Writing Station Prompt</b> 2 minutes</p>	<p>Introduce the Writing Station. <i>In Text Talk today, we read a text about how plants grow and change over time. At the Writing Station, you will draw and write about this.</i></p> <p>Show the sheet, read the prompts, and clarify children's questions about the prompt.</p>

<p><b>Closing</b> 1 minute</p>	<p><i>Today we read the first part of From Seed to Plant written and illustrated by Gail Gibbons. We read to find out some big ideas and details. Now we know a bit about how plants grow and change, and we are starting to learn about pollination!</i></p>
<p><b>Standards</b></p>	<p><b>R.4.2</b> Ask and answer questions about who, what, when, where, how, and why.  <b>R.6.2.b</b> Describe the relationship between a series of events, ideas, or concepts, using language that pertains to time, sequence, and cause/effect.  <b>R.9.2.b</b> Identify the main purpose of a text, including what the author wants to answer, explain, or describe.  <b>2-LSS2-3(MA).</b> Develop and use models to compare how plants and animals depend on their surroundings and other living things to meet their needs in the places they live. Clarification Statement: • Animals need food, water, air, shelter, and favorable temperature; plants need sufficient light, water, minerals, favorable temperature, and animals or other mechanisms to disperse seeds.</p>
<p><b>Ongoing assessment</b></p>	<p>Consider how children participate in this discussion, using key vocabulary about seeds and plants such as pollen, fruit, and ripen.  How do children describe key details from the text?  How do they identify what the author wants to convey and why it matters?</p>

**Notes**