

Grade 4 Science - Earth Systems

Activity #6

Structures of Plants

Grade 4 Science - Living Systems

Activity #6

The Structures of Plants

Duration: approx. 60 - 80 minutes

Lesson Objective	Overview:
By the end of the lesson, students should be able to: <ul style="list-style-type: none">- Understand the different structures of plants.- Understand the function of different structures of plants.- Understand how structures of plants can vary depending on the plants needs and environment.	<ul style="list-style-type: none">- This lesson introduces students to the concept of plant structures. Students will explore the structures and their functions as well as the differences in these structures. Through research, reflections and conversations students will gain a deeper understanding of the structures of plants.

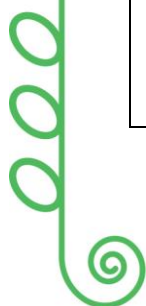
Science Guiding Question	Learning Outcome
In what ways do the structures of organisms support survival?	Students analyze organisms and relate external structures to functions.
Knowledge	<ul style="list-style-type: none">- Organisms have external structures that can vary; e.g., plants may have roots, stems, leaves, flowers, fruit, or other structures.
Understanding	<ul style="list-style-type: none">- A variety of organisms live on Earth and have external structures that support various functions.
Skills and Procedures	<ul style="list-style-type: none">- Relate the external structures of plants to their functions.- Compare external structures of various plants and animals in relation to function.



ELA Guiding Question	Learning Outcome
How can text organization influence communication?	Students examine how the form and structure of texts can support the communication of ideas and information.
Knowledge	<ul style="list-style-type: none"> - Literary forms of fiction and non-fiction texts include - novels - journal entries - media
Understanding	<ul style="list-style-type: none"> - Text form or structure can support the enjoyment and communication of ideas and information for a variety of purposes.
Skills and Procedures	<ul style="list-style-type: none"> - Explain how personal preferences for texts inspire, fascinate, or expand understandings.

Teacher Materials	Student Materials	Safety Concerns
Smartboard	Pencil, journal	Weather

Timing	Instructional Element	Student Tasks
Introduction (10 minutes)	<ul style="list-style-type: none"> - Teacher tells students they will be talking about plants and their differences today. - Think, Pair, Share: <ol style="list-style-type: none"> 1. Teacher asks students to think about 3 different types of plants that they know. 2. Teacher wants students to think about what makes these plants different from each other visually, internally and what we can use them for. 3. Teacher asks students to have a conversation with a nearby partner to discuss what they have thought about. 	<ul style="list-style-type: none"> - Students listen to the teacher. - Students participate in the think, pair, share activity.
Development (10 minutes)	<ul style="list-style-type: none"> - Teacher explains to students that plants have common structures that accomplish functions but there is a large variety between these structures depending on the plants needs. 	<ul style="list-style-type: none"> - Students listen to the teacher and ask questions to clarify expectations.



	<ul style="list-style-type: none"> - Teacher presents the following presentation about plant structures. Students can take notes or have the presentation printed for them. <p>Structures of Plants – Use accompanying slides or pdf</p>	
<p>Independent Work (40-50 minutes)</p>	<ul style="list-style-type: none"> - Teacher tells students they will be going outside to document some plants in nature. - The teacher explains how the students will need to find two plants outside and draw a sketch of them. In both sketches, the teacher wants them to label the different parts of the plants (roots, stem, leaves, flowers, fruits, seeds) - The teacher then wants students to compare the two plants they have drawn and highlight the similarities and differences between them using a Venn diagram. - If a classroom garden is already in use, this can be done in the garden area. 	<ul style="list-style-type: none"> - Students complete the plant sketching activity.
<p>Conclusion (10 minutes)</p>	<ul style="list-style-type: none"> - Teacher displays the sketches of the students around the class and then has the students do an “Art show walk” around the room to reflect on the observations of the other students. 	<ul style="list-style-type: none"> - Students share their sketches and participate in the art show around the class.

