



Lesson Plan: Plant Parts

Grades: K – 4

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(Lesson edited and formatted
by Real Curriculum, Inc.)

Summary	Students learn about the parts of plants and their functions through reading, observation, experimentation and art.
Topic(s)	<ul style="list-style-type: none">• Skills of a Scientist: Observation, collection and presentation of information about specimens• Life Science: Plant structures and functions
Concepts	<ul style="list-style-type: none">• Root• Stem• Leaf• Flower• Seed• Bud• Petal• Sepal• Vein• Root Hair
Knowledge and Skills	The main parts of a plant and their functions
Equipment and Materials	<p>Learning Environment: The Discovery Center classroom is open and bright with three walls of windows that provide a view of the adjacent schoolyard Hardwood Hammock habitat and vegetable garden. Lab tables are arranged in a large square in the middle of the room for individual and group activities. Stools surround the tables for seating or can be pushed under for standing. Lab materials for each student are placed on the table with labeled science folder. A plant unit Hands-On table with a visual display is located along one wall. Examples of Nature Art and books are displayed on the remaining two walls. Student artwork is displayed on the perimeter windows. Live plants and flowers are placed throughout the room. The computer, printer, digital microscope, digital cameras, and scanner are located next to the Hands-On table. A white board is in front of carpeted area for student group activity introduction and instruction.</p> <p>Technologies: Digital microscopes for students to observe, save, and print pictures of plant details. Scanner and printer to create visual map of the parts of a plant for plant puzzles. White board for lesson objectives, brainstorming, vocabulary word list, and steps of lab activity.</p>



Procedure

Preorganizer:

Display assorted live plants with hand-held magnifiers on lab tables.

Bridge to prior knowledge:

Students create KWL of plants. Students share experiences of prior plant and garden experience.

Share objectives:

Write objective on white board and ask why it is important to know the parts of plants and their functions. (Objective: Students will be able to recall, through drawing, matching, and vocabulary review, the parts of a plant and their functions with 100% accuracy.)

Introduce new knowledge:

Brainstorm and list student input on white board as to how plants grow. Illustrate parts of plants and label on board. Students read literature and highlight key vocabulary words.

Students observe plant samples with hand-held magnifier. Students cut plants in half with partners and use magnifiers to observe. Students use digital microscope to view, observe and compare plant parts.

Reinforce knowledge:

Students use digital microscope at 50X and 200X lens to compare with hand-held magnifier view. Students view image, save, and print digital microscope magnified plant part images.

Students make paper plants using construction paper.

Using digital microscope images, students create, match and assemble “plant part” puzzles.

Students observe and note different types of leaves. Students make leaf rubbings to create leaf collage.

Students observe patterns in magnified plant images.

Students create paintings of “Magnified Flowers”.

Students place white carnation in food coloring and record changes with digital microscope images. Students cut flower, leaf, and stem in half to observe with digital microscope views.



Culminating review:

Check student observations and vocabulary labels.

Evaluation:

Evaluation will be completed through student performance on plant label matching activity and student illustration with labels.

Reflection

Students observed the patterns in the plant parts and reflected these patterns in their art.

Examples



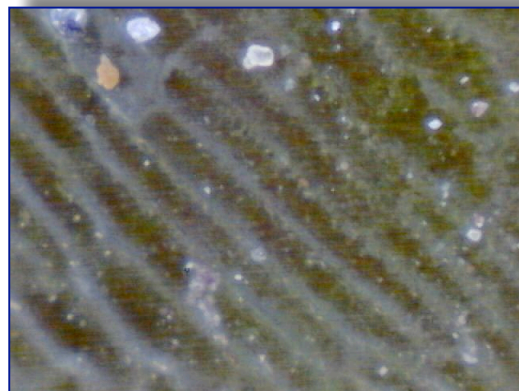
Astromeria lily petal 50X magnification



Astromeria lily petal 200X magnification



Astromeria lily ovary 50X magnification



Astromeria lily leaf 200X magnification