Parts of a Plant

Summary

Children explore the parts of a plant (flower, seeds, stem, leaves, and roots) using a dandelion as an example.

Time Frame

2 class periods of 15 minutes each

Group Size

Large Groups

Materials

For the teacher:

pictures of actual plants showing roots, stems, leaves, and flowers

diagram of plant

word cards with plant parts listed on them

drawing paper

crayons

pencils

dandelion patch

bucket of water

For the student:

dandelion

spoon or garden trowel

piece of white paper

crayons

Background for Teachers

There are many different kinds of plants. There are plants that flower and plants that use cones to reproduce. Flowering plants such as roses, tulips, dandelions, and fruit trees have basic plant parts. These parts play a vital part in the life of the plant. These parts and their functions include: roots-support and anchor the plant while absorbing the water the plant needs; stems--support the plant and hold leaves up to the sunlight, as well as carry water, minerals, and sugar throughout the plant; leaves--capture energy from the sunlight and allow the plant to exchange the gases (carbon dioxide and oxygen) that are involved in photosynthesis; flower/seeds--allow the plant to reproduce. Some fruits are edible.

Student Prior Knowledge

Students should have had previous lessons on the different parts of a plant. Close examination of plant parts (such as the leaf) enables students to observe and draw pictures of plants with far greater detail.

Intended Learning Outcomes

Display a sense of curiosity.

Apply prior knowlege and processes to construct new knowledge.

Develop vocabulary.

Instructional Procedures

- 1. Display a picture of a plant. Using the word cards, have the children direct you in labeling each plant part. Example: This card says root....Where are the roots on this plant? Place the card saying "root" next to the plant root. Say the word together...."ROOT". What does the root do for the plant? Continue on with other parts, discussing the function of each part.
- 2. Show the students a large flowering plant that you have on display in your science center. Carefully uproot the plant, making sure you get most of the root system. Look at the picture of a plant and find the same parts on your plant. Ask students to name each plant part and to describe what each part does for the plant (function).
- 3. Go outside and ask each student to find a dandelion (or weed), and dig it up carefully to include the roots. You may want the students to gently rinse the dirt off the plant roots while still outside. Compare the plants. Ask the students if any parts are missing. Discuss their answers. Ask students to describe the similarities and differences in plant parts. (Depending on the season and their stage of maturity, many of the plants may not have all of the parts.)
- 4. Give each child a large sheet of paper and a pencil. Students tape the plant on the left-hand side of the paper and then label the parts of the dandelion or weed. Using their plant as a model, students draw and label their own plant on the right hand side of the page. Encourage students to pay close attention to the specific shape, pattern, and color of each part. Students will label the parts of their plant drawing. Have them share drawings with a partner and compare features, making notes of similarities and differences in their drawings.

Strategies for Diverse Learners

The labeled plant picture will be helpful as a model for students. As students are drawing their own plant, circulate around the class, and cite examples of plants with the same parts that vary in appearance. (Ask students to compare a dandelion stem with the stem of morning glory. "This stem looks like a straw, it doesn't have any leaves on it. It only has a flower at the top. But look at the stem on Mary's plant. It has leaves on both sides of the stem but no flower at all.") Reinforce students using colors that match the color of the leaves, roots and blossoms, and students who continue to refer to their model as they draw their sketch.

Extensions

Try growing plant roots by placing several types of plant parts in water for several days.

Play a matching game that matches plant parts to the functions they perform.

Paint a sunflower and label the parts.

Grow a plant from seed in cotton. Watch and record what happens each day to the plant. Record in science journals what is observed.

Collect different leaves. Make a book of leaves or rubbings. Write about the different leaves.

Engage class in a modeled writing activity. Have students write a sequenced story with you, recording the growth of the tiny seed as it goes up through the ground and each part appears.

Assessment Plan

Performance Assessment:
Student drawing of the plant
Labels of parts of a plant

Rubrics

Assessing My Drawing

Bibliography

Supporting Literature:

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