Unit 5: Plant Growth and Changes

Overview

Students learn about the structure and growth of plants by raising plants in the classroom and by observing plant growth within the community. They learn to recognize and describe different forms of leaves, stems, roots and flowers and learn their functions in supporting the growth and reproduction of the plant. They learn various ways of starting new plants and the plants' requirements for growth.

Students will be able to:

- Describe the importance of plants to humans and their importance to the natural environment. Students who meet this expectation should be able to give examples of plants being used as a source of food or shelter, and be aware of the role plants play in the environment; e.g., preventing erosion, maintaining oxygen.
- Identify and describe the general purpose of plant roots, stems, leaves and flowers.
- Describe common plants, and classify them on the basis of their characteristics and uses.

- Recognize that plant requirements for growth; i.e., air, light energy, water, nutrients and space; vary from plant to plant and that other conditions; e.g., temperature and humidity; may also be important to the growth of particular plants.
- Identify examples of plants that have special needs.
- Recognize that a variety of plant communities can be found within the local area and that differences in plant communities are related to variations in the amount of light, water and other conditions.
- Recognize that plants of the same kind have a common life cycle and produce new plants that are similar, but not identical, to the parent plants.
- Describe ways that various flowering plants can be propagated, including from seed, from cuttings, from bulbs and by runners.
- Nurture a plant through one complete life cycle—from seed to seed.
- Describe the care and growth of a plant that students have nurtured, in particular: identify the light, temperature, water and growing medium requirements of the plant identify the life stages of the plant identify the reproductive structures of the plant.
- Describe different ways that seeds are distributed; e.g., by wind, by animals; and recognize seed adaptations for different methods of distribution.

Vocabulary for the unit:

Adaptation, anther, biennial, bulb, chlorophyll, cotyledons, cutting, deciduous, dispersal, dormant, embryo plant, erosion, evergreen, flower, fruit, germination, leaves, life cycle, nutrient, phloem, photosynthesis, pistil, pollination, propagation, roots, runner, seed, tuber, xylem