Plants

Objectives

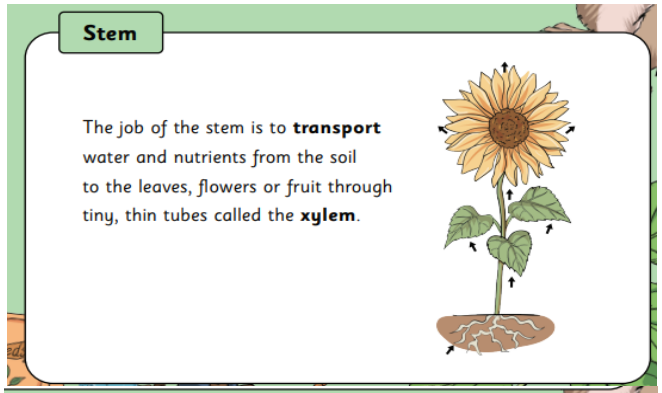
Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant
Investigate the way in which water is transported within plants
Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

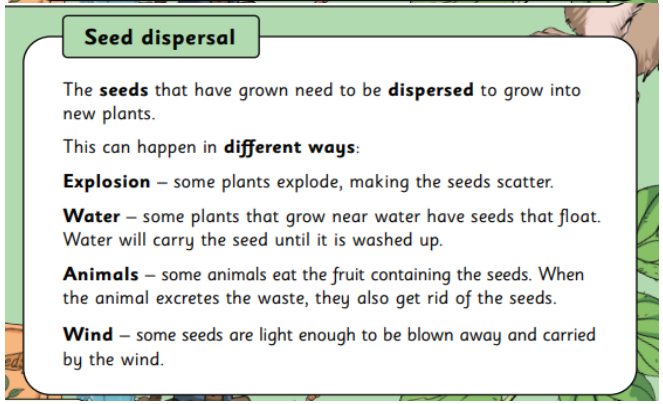
Questions

1) What do plants need to grow and be healthy?
2) Describe two functions of the roots.
3) Describe the function of the petals.
4) Name a pollinator.
5) Describe the function of the stem.
6) Name a flowering and a non-flowering plant.
7) What are the requirements of plants for life and growth?
8) Plants in the desert or in sandy areas have longer roots. Why do you think this is?
9) What are the four main ways that seeds can be dispersed?

Scientist: Jane Colden 1724-1766

Jane Colden lived in America hundreds of years ago. A botanist is a scientist who studies plants. Jane kept extensive notebooks with detailed drawings and notes of every plant she studied. The wilderness around Jane's home proved to be ideal for studying plants. Jane set herself the challenge of finding and classifying as many local species as she could. She soon gained an excellent reputation among other botanists.





Scientific Terminology

Carbon dioxide – a common gas present in air; plants absorb carbon dioxide from the air. Human exhale carbon dioxide.
Germination -the process of a seed becoming a seedling; the beginning of a plant's growth.
Nectar - a sweet substance created by flowers to attract insects, who then accidentally carry pollen from one plant to another.
Nutrients - something which contains vital nourishment for the plant, such as potassium; food.
Oxygen- a common gas found in the air. Plants create more oxygen than they need during photosynthesis and release any waste into the air.
Photosynthesis - photosynthesis is the way plant uses sunlight, water and carbon dioxide to make food.
Pollinator – an animal (bees, birds, butterflies and wasps) that helps transfer pollen from one flower to another, which is necessary for plants to reproduce.
Seed dispersal - methods of spreading seeds over a wide area, for example on the wind, inside berries or by bursting.