Staplegrove Church School

Knowledge and Skills Progression in Science

Plants

Year group	Knowledge	Skills	Unit
1	Plants are living things. Common plants include the daisy, daffodil and grass. Trees are large, woody plants and are either evergreen or deciduous. Trees that lose their leaves in the autumn are called deciduous trees. Examples include oak, beech and rowan. Trees that shed old leaves and grow new leaves all year round are called evergreen trees. Examples include holly and pine. The basic plant parts include root, stem, leaf, flower, petal, fruit, seed and bulb. Trees have a woody stem called a trunk.	Identify, compare, group and sort a variety of common wild and garden plants, including deciduous and evergreen trees, based on observable features. Label and describe the basic structure of a variety of common plants.	Plants Parts Seasonal Changes Plants Parts
2	Plants grow from seeds and bulbs. Seeds and bulbs need water and warmth to start growing (germinate). As the plant grows bigger, it develops leaves and flowers. Plants need water, light and a suitable temperature to grow and stay healthy. Without any one of these things, they will die.	Observe and describe how seeds and bulbs change over time as they grow into mature plants. Describe how plants need water, light and a suitable temperature to grow and stay healthy.	Plant Survival
3	Flowers are important in the life cycle of flowering plants. The processes of a plant's life cycle include germination, flower production, pollination, seed formation and seed dispersal. Insects and the wind can transfer pollen from one plant to another (pollination). Animals, wind, water and explosions can disperse seeds away from the parent plant (seed dispersal). Water is transported in plants from the roots, through the stem and to the leaves, through tiny tubes called xylem.	Draw and label the life cycle of a flowering plant. Investigate how water is transported within plants.	Plant Nutrition

	Plants need air, light, water, minerals from the soil and room to grow, in order to survive. Different plants have different needs depending on their habitat. Examples include cacti, which need less water than is typical, and ferns, which can grow in lower light levels. The plant's roots anchor the plant in the ground and transport water and minerals from the ground to the plant. The stem (or trunk) support the plant above the ground. The leaves collect energy from the Sun and make food for the plant. Flowers make seeds to produce new plants.	Describe the requirements of plants for life and growth (air, light, water, nutrients and room to grow) and how they vary from plant to plant. Name and describe the functions of the different parts of flowering plants (roots, stem, leaves and flowers).	
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