

Plants and Photosynthesis

Threshold Concepts
 Classification and Identifying
 Observing and Pattern Finding
 Describing and Explaining
 Analyse and Evaluate

Summary: Exploring the world of plants using a variety of plants as a stimulus. We will be identifying the different parts of plants, including, flower, stem, leaves and roots and describing the functions of these parts. Using the 7 processes of life we will explore how plants move, respire, sense, grow, reproduce, excrete and obtain nutrition (MRS GREN). We will be focusing on water transport and pollination, seed formation and dispersal. A trip to Kew gardens will be arranged at the end of the unit to apply knowledge with the variety of plants on display at Kew.

Knowledge Areas identifying, observing, recording, describing, analyse, evaluate, apply



Identifying
 Be able to identify the following structures on various plants: Flower (including parts of the flowers), stem (including the xylem), leaves and roots.
 Identifying adaptations of plants to live in their environment.

Observing
 Observe effects of some experiments on plants and be able to see the differences and changes in the plants.

Describing
 Be able to describe the processes of life in relation to plants, in particular reproduction and photosynthesis. Be able to describe the function of each part of the plant in the processes.

Recording
 Be able to draw labelled scientific diagrams to represent plants and the parts of plants.

Analyse
 Be able to analyse experimental data, with a focus on identifying anomalous results.
 LKS2 – verbally and written
 UKS2 – written in report

Evaluate
 Be able to evaluate an experiment. Suggest reasons for anomalous results, recognise the impact of human error and ways in which an experiment can be improved.
 LKS2 – Verbal class discussions and some written
 UKS2 – written reports

Apply
 Be able to identify structures on a variety of different plants using knowledge. Be able to look at plants that are adapted for certain conditions and suggest ways in which they have adapted.