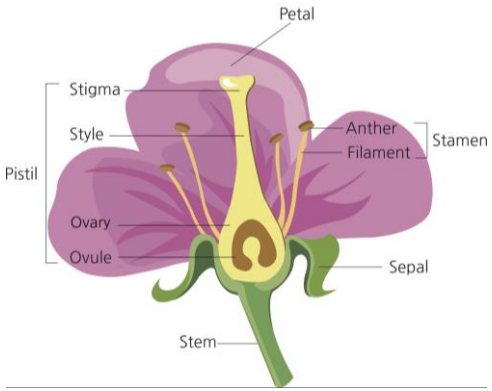
Key Vocabulary

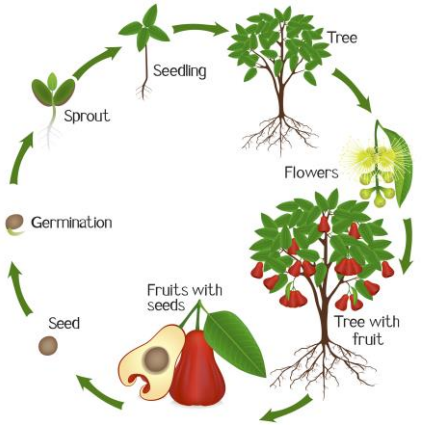
Key Word	Definition
Photosynthesis	the process in which green plants use sunlight to make their food
Pollen pollination	**A fine power produced by certain plants**
Seed formation	Plants form their seeds inside flowers or cones. In flowering plants a fruit often surrounds the seeds.
Seed dispersal	**Seeds are dispersed by wind, animals, water, insects**
Stamen Male part	Male part of the flower **Stamen = anther + filament**
Pistil Female part	Female part of the flower **Stigma, style, ovary ovules**
germinate **gemination** germinating	Seeds need the right conditions to germinate (grow into a new plant.) They need air, water, right temperature, good soil and the right amount of light.
nectar	A liquid produced by the flower of plants

LKS2 Science
Unit Plants and Life cycles

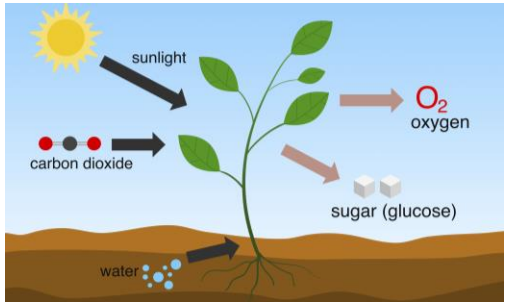
Parts of a flower

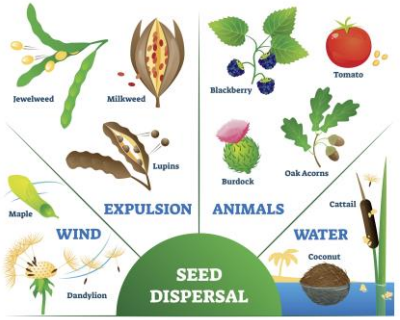


Life cycle



Photosynthesis





Working Scientifically Skills

Science Enquiry

Learning Sequence

Lesson 1 — Compare the effects of different factors on plant growth

Lesson 2 — What are the functions of different parts of a flowering plant? What is photosynthesis?

Lesson 3 — How is water transported within plants?

Lesson 4 — What is the role of the flower in the life cycle of a flowering plant?

Lesson 5 — What is pollination? How are seeds dispersed?

Lesson 6 — Assessment Compare the effects of different factors on plant growth.

Prior Learning	Future Learning
• Observe and describe how seeds and bulbs grow into mature plants. (Y2 - Plants) • Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. (Y2 - Plants)	• Describe the life process of reproduction in some plants and animals. (Y5 - Living things and their habitats) • Reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms. (KS3)

Year	3	Topic	Plants

• 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.

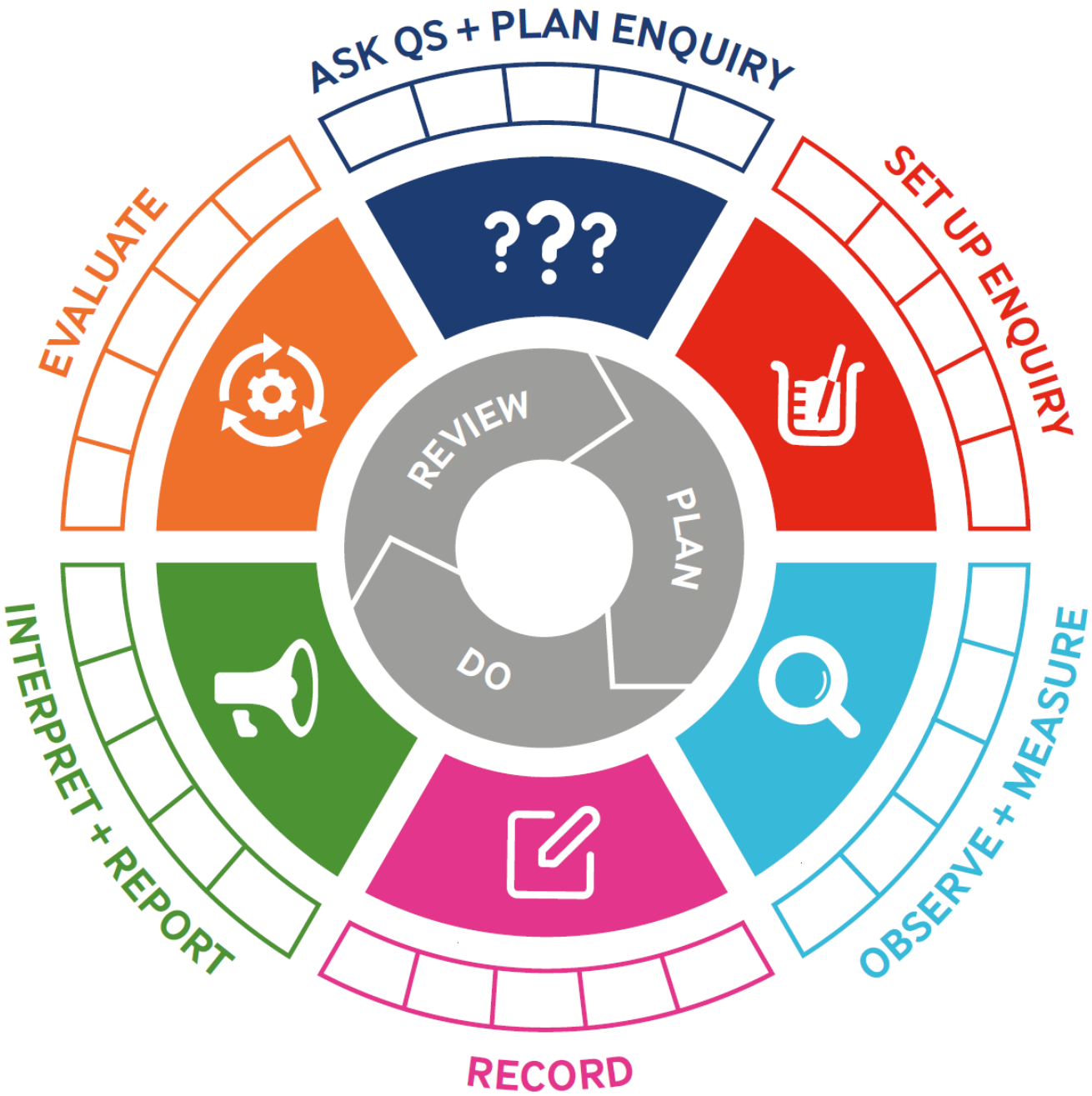
Understanding Concept assessment

• Can explain the function of the parts of a flowering plant
• Can describe the life cycle of flowering plants, including pollination, seed formation, seed dispersal, and germination
• Can give different methods of pollination and seed dispersal, including examples

Applying Knowledge assessment

• Can explain observations made during investigations
• Can look at the features of seeds to decide on their method of dispersal
• Can draw and label a diagram of their created flowering plant to show its parts, their role and the method of pollination and seed dispersal

Today, we are focusing on:



Working Scientifically

Asking questions
Asking questions that can be answered using a scientific enquiry.

Making predictions
Using prior knowledge to suggest what will happen in an enquiry.

Setting up tests
Deciding on the method and equipment to use to carry out an enquiry.

Observing and measuring
Using senses and measuring equipment to make observations about the enquiry.

Recording data
Using tables, drawings and other means to note observations and measurements.

Interpreting and communicating results
Using information from the data to say what you found out.

Evaluating
Reflecting on the success of the enquiry approach and identifying further questions for enquiry.

Types of Enquiry

Comparative / fair testing
Changing one variable to see its effect on another, whilst keeping all others the same.

Research
Using secondary sources of information to answer scientific questions.

Observation over time
Observing changes that occur over a period of time ranging from minutes to months.

Pattern-seeking
Identifying patterns and looking for relationships in enquiries where variables are difficult to control.

Identifying, grouping and classifying
Making observations to name, sort and organise items.

Problem-solving
Applying prior scientific knowledge to find answers to problems.