Flowering plants and growth—Science

What you've learnt already

- to describe a plant's basic structure, using the terms roots, stems/trunks, leaves and flowers (Year 1 Biology – Plants)
- that seeds need water to germinate and that most do not need light (Year 2 Biology – Plants)
- that mature plants need water, light and a suitable temperature to grow and stay healthy (Year 2 Biology – Plants).

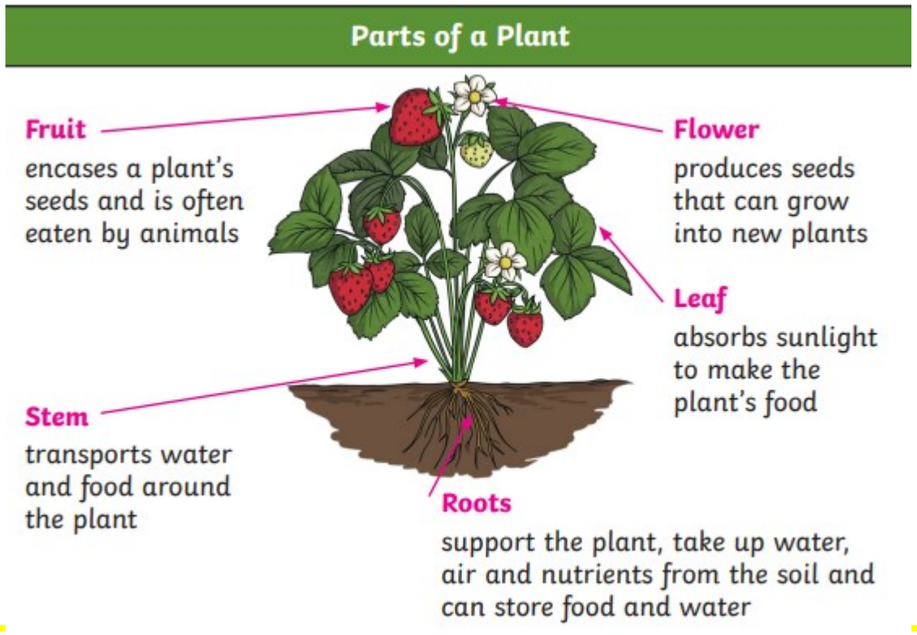
Choices

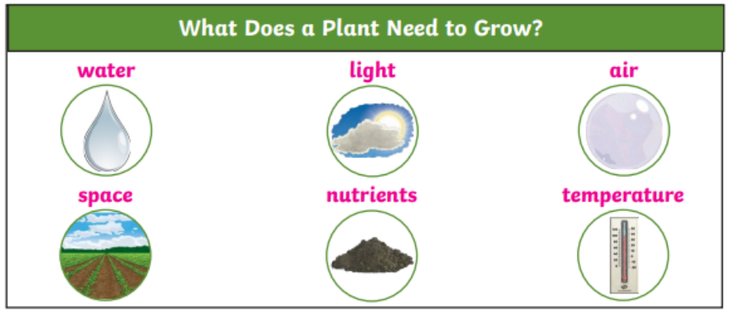
- Children will choose their own POP task to complete at the end.
- How could you explain this to a younger student? What method would you use?
- How will you conduct your investigation? Children to choose own methods and equipment.

Key Vocabulary

Food chain:	a series of living things where each one is food for the next
Seed:	a plant part from which a new plant germinates and grows
Habitat:	a place where an animal or plant finds the things it needs to live and grow
Sunlight:	the combination of visible and invisible forms of light (e.g. ultraviolet) produced by the Sun
Stem	The part of the plant which keeps it upright and transports water from the roots to the rest of the plant
Function:	the purpose of something
Transport:	to move something about.
Investigate	investigate: to find out more about a process or object by measuring or observing it

Diagrams





Lesson Sequence

L1	Lesson 1: What do leaves do?
L2	Lesson 2: What do roots and stems do?
L3	Lesson 3: What are the functions of the parts of a flowering plant?
L4	Lesson 4: What happens if plants do not have enough space?
L5	Lesson 5: How are plants different?

Key Knowledge

- Leaves capture sunlight. The energy from the sunlight is used to produce the plant's food. Some of this food is used to make the plant grow.
- Roots anchor the plant into the soil. Roots absorb water and minerals from the soil. This water is transported to the leaves and flowers via small tubes in the stem. The stem also provides support for the plant and holds the leaves and flowers up.
- Leaves have tiny little holes in them which allow air into the plant. The energy from the sunlight is used to turn air and water into the plant's food.
- When plants are overcrowded, they compete with each other for sunlight, water and nutrients. Plants which are able to get more sunlight, water and nutrients will grow faster and bigger than the others.
- Different plants live in different habitats. Different plants have different-shaped leaves, stems and roots, and the parts can have different functions depending on the conditions in that particular habitat. Plants are adapted to the habitat in which they live.

UNIT

Do all plants have flowers?	What is the purpose of the root of a plant?	What does the stem of a plant do?	What are nutrients?
What does the leaf of a plant do?	What is pollen?	Name 2 different common garden plants.	What is pollination?
All plants have leaves—true or false?	All plants need the same conditions to grow and live—true or false? Explain.	Name the 3 different types of seed dispersal.	Name 3 things that most plants need to live and grow.
What is transpiration?	Describe how water is transported through a plant.	Describe the life cycle of a flowering plant.	How can you tell a plant is struggling to live and grow?

One Point	Two Points	Three Points	Four Points