



## HOW DOES YOUR GARDEN GROW?

### Vocabulary

**carpel:** female part of the flower – made of stigma, style and ovary flower: the part of the plant where seeds are made.

**germinate:** when a seed starts to grow and produce a root and shoot.

**leaves:** catch sunlight and use this to make food.

**life cycle:** the stages a living thing goes through during its life.

**nutrients:** materials in the soil that help to nourish plants.

**ovary:** the part of the flower that contains the ovules.

**ovule:** these are like eggs; they develop into seeds.

**petal:** part of the flower that attracts insects, often brightly coloured.

**photosynthesis:** how green plants make their own.

**food pollen:** dust-like powder made in the stamen of a flower.

**pollination:** transferring pollen grains from the male anther of a flower to the female stigma so that new plants can be made.

**root:** helps anchor the plant into the soil; takes up water and nutrients.

**root hairs:** tiny hairs on a root that take water and nutrients from the soil.

**seed dispersal:** the way seeds get from the parent plant to a new place so that they can grow.

**sepals:** protect the rest of the flower as it grows.

**stamen:** the male part of the flower which produces pollen.

**stem:** holds the plant upright and supports the leaves; it contains tubes that allow water to travel from the roots to the rest of the plant.

**style:** the middle part of the carpel, connecting the ovary to the stigma.

**stigma:** part of the carpel that pollen grains attach to during pollination.

**veins:** tubes in the leaf that carry water and food

## We are learning to:

- 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.

## WORKING SCIENTIFICALLY

- Ask relevant questions and use different types of scientific enquiries to answer them.
- Set up simple practical enquiries, comparative and fair tests.
- Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment including thermometers and data loggers.
- Gather, record, classify and present data in a variety of ways to help in answering questions.
- Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.
- Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Identify differences, similarities or changes related to simple scientific ideas and processes.
- Use straightforward scientific evidence to answer questions or to support their findings.

## OVERVIEW

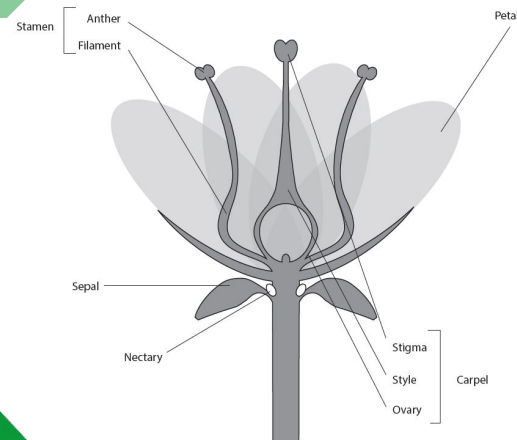
Children work scientifically on a variety of quick challenges and longer tasks to learn about plants. They learn about the different parts of plants, what plants need to live, water transportation in plants and pollination.

## PRIOR LEARNING

- The basic structure of a plant (Year 1).
- That plants need water, light and a suitable temperature to grow and stay healthy (Year 2).
- How seeds and bulbs can grow into mature plants (Year 2).

## PLANTS

- Male parts of flowers produce pollen. Female parts produce ova (eggs).
- To make a new plant, one pollen has to join up with one ova.
- The pollen has to get from one flower to another flower.
- Some flowers use insects to do this. Some use the wind to carry the pollen instead.



## LET'S THINK LIKE SCIENTISTS

### Predict what will happen



Predict what will happen.

Write your prediction down.

Explain why you think this will happen.

