

# Bomere and the XI Towns Federation Knowledge Organiser—Science

Topic: Science— Plants

Class/Year Groups: Grinshill

Term: Summer

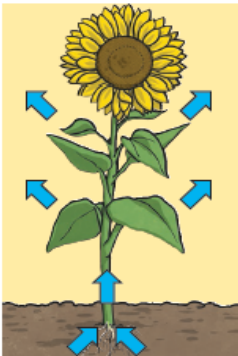
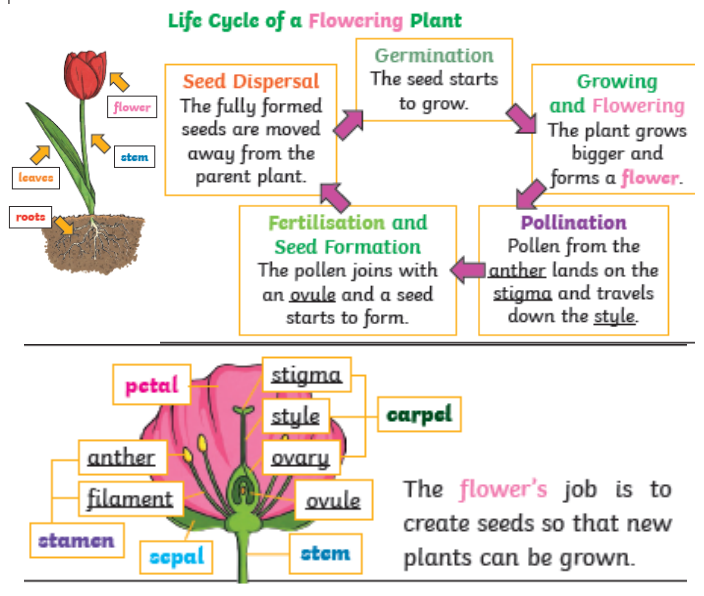
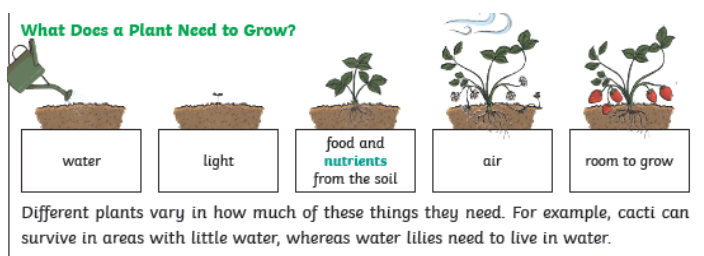
**What you already know?**  
 Pupils will have learned the basic structure of a flowering plant in Key Stage 1 and should be familiar with the names of the main structures: root, stem, leaf flower. They will know that plants grow from seeds and that they exhibit the characteristics of living things. They will know that seeds do not need light to germinate.

**What you will learn and understand.**

**How Water Moves through a Plant**

1. The **roots** absorb water from the soil.
2. The **stem** transports water to the **leaves**.
3. Water **evaporates** from the **leaves**.
4. This **evaporation** causes more water to be sucked up the **stem**.

The water is sucked up the **stem** like water being sucked up through a straw.

**Key vocabulary:**

Fertilisation	When the male and female parts of the flower have mixed in order to make seeds for new plants.
Stamen	The male parts of the flower. The stamen is made up of the anther and the filament. The filament's job is to hold up the anther. The job of the anther is to make the pollen.
carpel (pistil)	The female parts of the flower. Made up of the stigma, style and ovary. The job of the style is to hold up the stigma. The stigma collects the pollen when a pollinator brushes by it. The ovary contains the ovules, which are the part of the flower that gets fertilised and eventually becomes the new seed.
Sepal	Leaf-like structures that protect the flower and petals before they open out.

- National Curriculum Objectives:
- To identify and describe the functions of different parts of flowering plants: roots, stem, leaves and flowers
  - To 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
  - To investigate the way in which water is transported within plants
  - To explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

