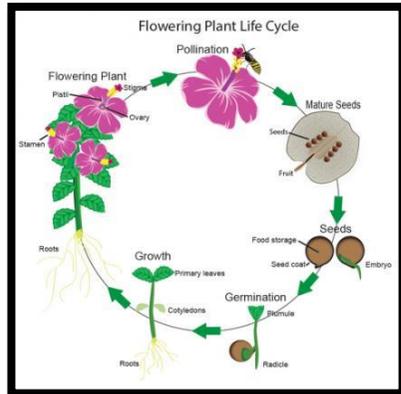




### Key Questions

- What are the different ways plants reproduce?
- What is the life cycle of a plant?
- What are the functions of different parts of a plant?
- How do gardeners modify plant to meet their needs?



### Key Knowledge

#### What I should already know

- You should know that reproduction as one of the seven life processes of all living things.
- Some examples of life cycles for example a tadpole or caterpillar.
- You should know that plants disperse seeds.
- Be able to describe parts of a plant, their features and what their basic functions are (e.g. roots to gather water and nutrients, flowers to help attract insect, the stem is a transport system)

#### What I will know by the end of the unit

- That plants reproduce both sexually and asexually.
- That sexual reproduction in flowering plants occurs through pollination, usually involving wind or insects.
- That asexually reproduction in plants involves only one parent plant and doesn't require pollination. Examples include bulbs, tubers, runners and plantlets.
- Gardeners may force plants to reproduce asexually by taking cuttings to create more of the plants they need.
- Many famous naturalists (for example David Attenborough) have made a huge contribution on the study of plants and natural history.

### Key Vocabulary

**Anther**- the part of a stamen that produces and releases the pollen

**Asexual reproduction**- a type of reproduction which does not involve the fusion of gametes or change in the number of chromosomes.

**Dissect**- to carefully cut something up in order to examine it scientifically

**Fertilisation**- male and female gametes meet to form an embryo or seed

**Fertile soil**- soil that can supply essential plant nutrients and water in adequate amounts for plants growth and reproduction

**Germination**- if a seed germinates or if it is germinated, it starts to grow

**Life cycle**- the series of changes that an animal or plant passes through from the beginning of its life until its death

**Naturalist** - an expert in or student of natural history.

**Ovary**- a female organ which produces eggs

**Pollen**- a fine powder produced by flowers. It fertilises other flowers of the same species so that they produce seeds

**Pollination**- To pollinate a plant or tree means to fertilise it with pollen. This is often done by insects

**Reproduction**- when an animal or plant produces one or more individuals similar to itself

**Seed dispersal**- When seeds scattered, separated, or spread through a large area

**Species**- a group of similar living organisms that are able to reproduce.

**Stamen** - the male fertilizing organ of a flower, typically consisting of a pollen-containing anther and a filament.

**Stigma**- the top of the centre part of a flower which takes in pollen

**Style**- a long, slender stalk that connects the stigma and the ovary.

### Key People

David Attenborough- Natural Historian (Life of plants)

Chris Packham – Naturalist, nature photographer, television presenter and author



### Useful Website Links

**BBC Bitesize and programmes**

<https://www.bbc.co.uk/programmes/b00p90d6>

<https://www.bbc.co.uk/bitesize/topics/zy66fg8>

<https://www.bbc.co.uk/programmes/articles/Mf5rhbTkHLZ3fbJzScyDvC/pri-mary-science-plants>

**STEM**

<https://www.stem.org.uk/resources/elibrary/resource/36134/life-cycles>

### Scientific enquiry

Use first hand sources to observe the parts of a flower. e.g. Dissecting Lilies.

Take cuttings of asexual plants e.g geranium, money plant