



**Year:** Year 5

**Subject:** Science

**Title:** Reproduction

**What key knowledge do I need to have before this unit?**

Plants are made up of different parts, which have different functions. • The roots absorb water from the soil and hold the plant in place. • The stem carries water to different parts of the plant. • The leaves absorb sunlight to make food for the plant. • The flowers help the plant to reproduce and create new life.

A dissection is the method of separating something into its parts. • The roots absorb water from the soil and hold the plant in place. • The stem carries water to different parts of the plant. • The leaves absorb sunlight to make food for the plant. • The flowers help the plant to reproduce and create new life.

**Key outcomes:**

**What I need to know by the end of this unit of work:**

- I can explain the sexual reproduction of mammals.
- I can explain the reproductive parts in plants.
  - I can explain the process of pollination.
  - I can explain Asexual reproduction.
- I can plan and investigate how to clone plant.

**Key knowledge:**

**Key Vocabulary:**

**Definition:**

Sexual reproduction involves two parents producing offspring.  
 Offspring produced by sexual reproduction are not identical to the parents.  
 Fertilisation is the process by which a sperm cell joins with an egg cell to create a new life.  
 The female part of a flowering plant is called the pistil, which consists of the stigma, style and ovary.  
 The male part of a flowering plant is called the stamen, which consists of the anther and filament.  
 The female sex cells in a plant are called ovules and are found in the ovary.  
 The male sex cells in a plant are called pollen grains and are found on the anthers.  
 Plants reproduce sexually through pollination. Pollination involves the transfer of pollen from the male anther of a flowering plant to the female stigma of a flowering plant.  
 Pollen grains attach to the sticky stigma and travel down the style into the ovary.  
 Fertilisation occurs when a male pollen grain joins with a female ovule inside an ovary.  
 Asexual reproduction involves only one parent.  
 Offspring produced by asexual reproduction are identical to the parent.  
 Some plants reproduce asexually by producing new plants at the end of runners or by producing bulbs or tubers.  
 A starfish is an example of an animal that reproduces asexually.

**fertilisation**  
  
**embryo**  
  
**sperm cells**  
  
**egg cells**  
  
**sexual reproduction**  
  
**anther**  
  
**filament**  
  
**stigma**  
  
**style**  
  
**ovule**  
  
**ovary**  
  
**pollen**  
  
**stamen**  
  
**pistil**  
  
**asexual reproduction**

the joining of a male and female sex cell to create a new life  
  
 the earliest stage of development after fertilisation  
  
 the male sex cells that are produced in the testes  
  
 the female sex cells that develop in the ovaries  
  
 a process of making non-identical offspring which requires two parents  
  
 contains the pollen  
  
 holds up the anther  
  
 sticky part of the style, to catch pollen  
  
 a tube from the stigma to the ovary  
  
 the female sex cell found in the ovary of plants  
  
 contains ovules  
  
 tiny grains which carry the male sex cell in plants  
  
 the male parts of a flowering plant  
  
 the female parts of a flowering plant  
  
 the production of identical offspring from only one parent

