

# Pye Bank CE Primary DSAT Knowledge Organiser

YEAR 5

BIOLOGY: How do plants reproduce?

SCIENCE

## KEY VOCABULARY

**Asexual Reproduction:** needs only one parent, which creates offspring that are exact copies of the parent.

**Cutting:** taking part of a plant away by cutting off a part.

**Ovary:** the part of the plant which contains the ovule and later turns into a fruit.

**Ovule:** a small part of the ovary which becomes a seed when it receives the contents of a pollen grain.

**Parent Plant:** the original plant growing the seeds.

**Runners:** the stem of a plant which grows horizontally to create a new plant.

**Sexual Reproduction:** requires two parents to make one offspring.

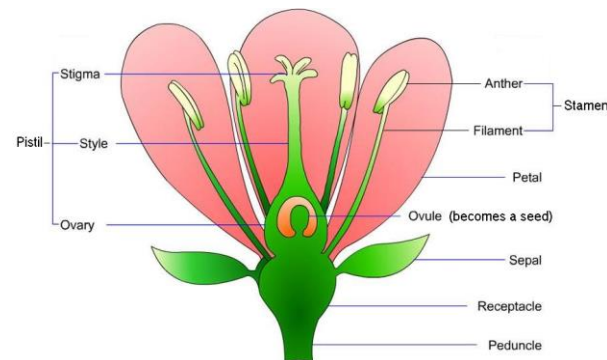
**Stigma:** a sticky surface in the centre of a flower which holds onto pollen grains.

**Style:** a piece at the centre of a flower which connects the stigma to the ovary.

**Tubers:** part of a plant used for storage of nutrients.

## VOCABULARY

Parts of a flower:



## KEY CONCEPT

Sexual reproduction in plants

- The stamen is the male part of the flower which holds pollen
- The ovary is the female part of the flower which contains eggs.
- Pollen travels from the anthers of one flower to the stigma of another plant. This is called pollination.

Plants rely on bees or other insects to carry their pollen while some pollen floats in the wind.

- After pollination, the pollen grain and the egg join together. This is called fertilisation.
- The fertilised egg will develop into a seed.

## STICKY KNOWLEDGE

1. Plants can reproduce (make more) through sexual or asexual reproduction.
2. In sexual reproduction an egg is fertilised and the new plant will have two parents.
3. In asexual reproduction, one plant creates offspring on its own. These are clones of the parent plant.
4. Plants spread their seeds in many different ways: being blown in the wind, attaching to animals, through water and by bursting.
5. Humans can force plants to reproduce in different ways, to create more.

## KEY CONCEPT

Asexual reproduction in plants

Three methods of plant asexual reproduction are:

- **Bulbs** – a bulb is an underground short stem which has one or more buds enclosed in special thick leaves (or scales) which are full of stored food - this gives energy to the buds when they start to grow in the Spring. Examples of bulbs are onions, garlic and tulips.
- **Runners** – these have a slender fast growing stem that grows sideways (horizontally) over the soil surface and pushes down roots to form new plants e.g. spider plant and strawberry. The new plants are called plantlets.
- **Tubers** – many plants naturally develop underground food storage organs that later develop into the following year's plants. The tuber is the swollen, fleshy underground stem of a plant, bearing buds from which new plant shoots grow. These new shoots use stored food in the tuber to grow.

## KEY CONCEPT

Plants disperse (spread) their seeds in different ways:

How Seeds Travel

