Alder Coppice Primary School – Knowledge Organiser

Subject: Science	Year: 3	Unit 5: Plants	Links to: Y2 Plants

What I Should Already Know:

- The main parts of plants: roots, stem, leaves, flowers.
- That plants need light, water and warmth to begin to grow.

Skills and Enquiry:

A) What do plants need to grow well?

B) How do plants move water?

C) How do seeds move around to grow into new plants?

Unit Specific Vocabulary:

fertilisation – how a new plant is made

flower – the reproductive part of a plant

germination – the sprouting of a seed – the first part in a plant's life cycle

leaf – a part attached to the stem which helps the plant to make food.

photosynthesis – how a plant makes its own food

pollination – when pollen is moved from one plant to another

root – the part of the plant beneath the soil which attaches the plant to the ground and takes in water

seed dispersal – how seeds are moved away from parent plants

shoot – the part of a new plant which is just above the ground.

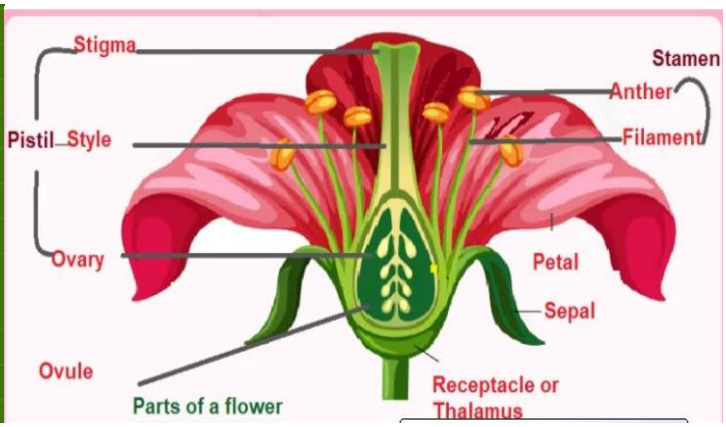
stem – the main body of the plant that help keep the plant up and transports water to the leaves

stomata – the tiny holes on the back of leaves which water is released from

What I should know by the end of this Unit:

- The functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.
- What plants need to grow successfully, and how this can sometimes vary from plant to plant.
- How water is transported through plants.
- Understand the role of flowers in making producing new plants.
- How seeds are dispersed in order to make new plants.

Key Facts:



What is the function of the plant parts?

Root	Stem	Leaf	Flower
The roots anchor the plant into the ground and absorb water and nutrients. They also store some food for the plant.	The stem transports water and nutrients from the roots to the leaves. It also holds the plant up towards the sunlight.	The leaves produce food for the plant. They use sunlight, carbon dioxide and water and this is called photosynthesis.	The flower is the part of the plant that makes seeds so that new plants can grow. The petals attract bees for pollination.

How are seeds dispersed?

Seeds from plants like dandelions are specially designed so that they can be carried long distances by the wind. Another example is the seed of a sycamore tree.	Coconuts are seeds from palm trees and seeds like this are specially designed so that they can float on water to new places. Another example is the seed of a waterlily plant.	Animals help with seed dispersal in different ways. When they eat seeds, they pass through them and are excreted in new places. Also some seeds are designed to stick to animals so they can be carried to new places.	Some plants can burst their seed pods when they are ready to and throw their own seeds to new locations. An example of this is a pea pod.