** Knowledge Organiser – Plants (Science Year 3 and 4)**

Parts of a plant

Life cycle of a plant

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| **Key Vocabulary** | **Definition** |
| Air | An invisible gas, made up of mainly oxygen and nitrogen. |
| Nutrients | Parts of foods that a living thing uses to survive and grow. |
| Soil | Substance on the surface of the Earth in which plants grow, made up of pieces of rock and humus. |
| Fertiliser | Substance that is added to soil to help the growth of plants. |
| Pollination | When pollen is moved from plant to plant to produce more plants. |
| Seed dispersal | When seeds are carried away from the parent plant. |



Germination

Growing and flowering

Pollination

Fertilisation and seed formation

Seed dispersal

Develops into new plants.

Seeds

Makes food for the plant using sunlight, carbon dioxide and water.

This is called photosynthesis.

Leaves

Take up water and nutrients from the soil.

They ‘anchor’ the plant in the soil.

Roots

Attracts pollinators to the plant so that it can be fertilised and produce seeds.

Flower

Carries water and nutrients from the root to different parts of the plant.

Stem









eaten

water

carried

wind

explosion

Seeds need to be dispersed in order to have space to grow well. There are different ways in which this can happen.

It is here that the seeds are found.

Fruit formation

Flower

Withering

Pollination is the transfer of pollen from the stamens of one flower to the stigma of another flower of the same type.

Water is used in PHOTOSYNTHESIS to help the plant make its own food. Water moves nutrients from the soil up through its stems and leaves. Water helps plants stay upright.

Plants take in carbon dioxide from the air to use in the process of PHOTOSYNTHESIS. This process gives off oxygen which we use to respire.

Provides energy for plants to make their own food energy in their leaves. It also provides warmth to help growth.

The water lily is adapted to have wide, flat leaves which keep the lily afloat.

Adaptations

The cactus has modified leaves so that it can survive in a dry desert. The spines are better at conserving water by limiting evaporation.

Vitamins and minerals