

Paganel Primary School –Knowledge Organiser

Year Group: 3 Topic: Plants

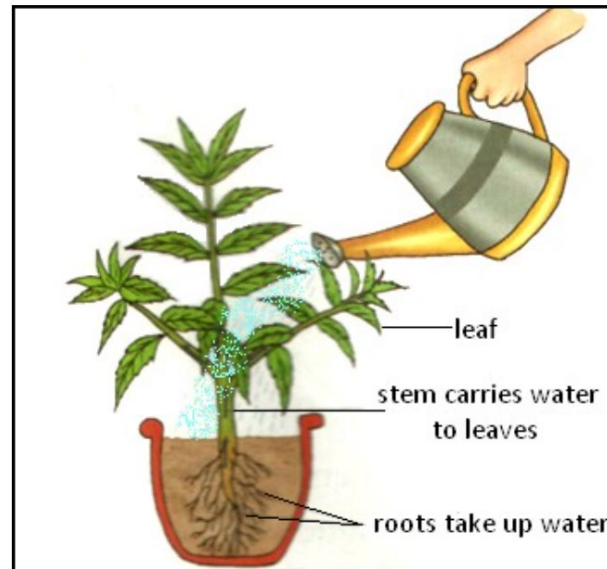
What? (Key Knowledge)	
Functions of the parts of a plant	
The main parts of a plant	<ul style="list-style-type: none"> Flowers Leaves Stem Roots
Flowers	They have colour and smell to attract insects.
Leaves	They change Carbon Dioxide and water into food for the plant and Oxygen.
Stem	They hold the plant up and carry water from the roots to the rest of the plant.
Roots	They hold the plant in the ground and soak up water and minerals from the soil.
Sometimes plants bear fruit	Fruit is the part of the plant we often eat but its main job is to keep the seeds safe.
How plants grow and survive	
To grow and survive, plants need:	<ul style="list-style-type: none"> Light Water Carbon Dioxide This is so that they can make their own food.
	<ul style="list-style-type: none"> Warmth This is because if plants get too hot or too cold then they will die.
How does a plant get water?	<ul style="list-style-type: none"> The roots take up water from the soil. The water travels through the stem of the plant to the leaves.
The importance of flowers	
The job of the flower	<ul style="list-style-type: none"> The flower exists to make new plants. The flower contains the pollen and eggs which make seeds. The seeds grow into new plants.
Parts of the flower	<ul style="list-style-type: none"> Petal Stamen (The male part of a flower) Carpel (The female part of a flower) (Look at the second diagram)
Pollination and Fertilisation	For a plant to grow a new seed, Pollen needs to get to its Carpel from another plant.
How does Pollen get from one plant to another?	Insects: <ul style="list-style-type: none"> The insect goes to the first flower looking for Nectar. Pollen gets stuck to it. When it goes to another flower, the Pollen gets stuck to that flower. Wind: <ul style="list-style-type: none"> Pollen is blown from one flower to another.
Fertilisation	<ul style="list-style-type: none"> When the Pollen joins the Egg of the new flower a seed or many seeds are formed.
How do the new seeds get to the soil to grow?	The seeds are dispersed. This can be done in 3 main ways: <ol style="list-style-type: none"> By wind, for example like Dandelion seeds. By animals, (they get eaten and pooped out). By explosion. Dry seed pods split open and shoot out the seeds.

What? (Key Vocabulary)	
Spelling	Definition/Sentence
Photosynthesis	the process by which green plants use sunlight to gain nutrients from carbon dioxide and water.
pollen	a fine powdery substance, typically yellow, consisting of grains discharged from the male part of a flower, which can fertilise the female part of the flower.
pollination	the transfer of pollen to a stigma, ovule, flower, or plant to allow fertilisation.
Seed formation	the formation of the seed completes the process of reproduction in plant
Wind dispersal	movement of seeds away from the parent plant via wind
Animal dispersal	movement of seeds away from the parent plant via animal digestion
Water dispersal	movement of seeds away from the parent plant via water transportation.

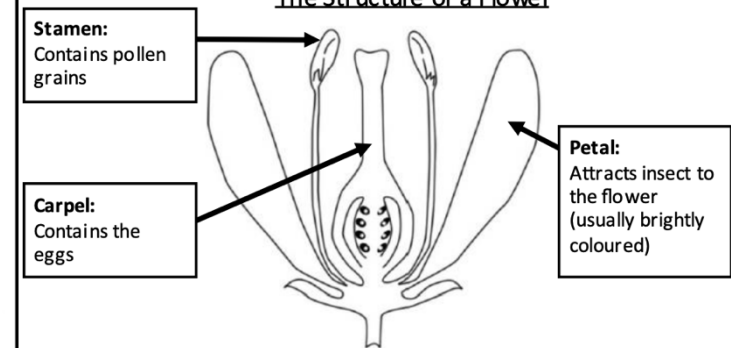
Take it further at home...
<ul style="list-style-type: none"> Can you make a seed germinate without soil? Find ways to prove that a plant needs water to stay healthy Find ways to prove that a plant needs light to stay healthy. Label the lifecycle Fill in the vocabulary chart – try and do this from memory with them!

Diagram and symbols

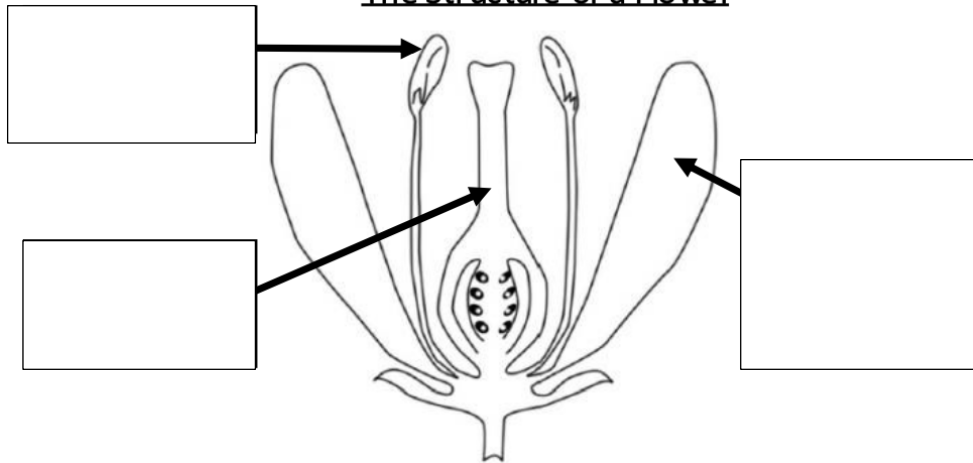
How a plant takes in water.



The Structure of a Flower



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	movement of seeds away from the parent plant via animal digestion
Water dispersal	

