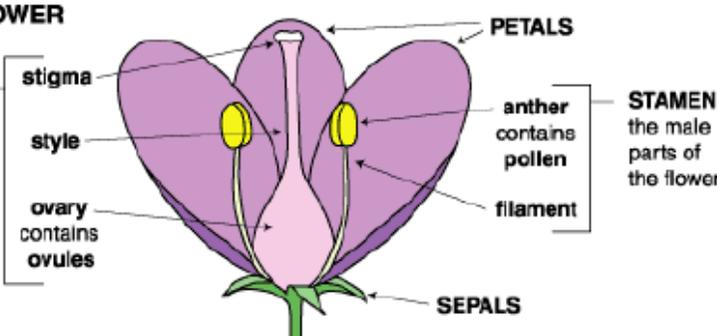


Knowledge organiser on Plants

1. Plants	
<ul style="list-style-type: none"> • A healthy plant is usually upright with green leaves. • Plants need air, light, water, nutrients, temperature and space to grow. • A plant that grows in the dark will be tall and spindly because it is searching for light. • A plant that is not watered will have a weak stem and dried up leaves. • A seed that is too cold will not grow at all. 	
2. Parts of a Flowering Plant	
<p>INSIDE A FLOWER</p>  <p>PISTIL the female parts of the flower</p> <ul style="list-style-type: none"> stigma style ovary contains ovules <p>STAMEN the male parts of the flower</p> <ul style="list-style-type: none"> anther contains pollen filament <p>PETALS</p> <p>SEPALS</p>	
Pollination	An insect is attracted to a flower because of its bright petals . It picks up pollen from the stamen (male part of the flower). The insect leaves pollen on the stigma (female part) of another plant.
Fertilisation	The stigma produces ova (eggs). On the stigma, the pollen joins with an egg to fertilise it.
Germination	Each fertilised egg develops into a seed . As this happens the flower changes and loses its petals . The ovary (the pod where the fertilised egg becomes a seed) swells up and turns into a fruit .
Seed dispersal	The plant's seeds are sometimes inside fruit or nuts. They are dispersed in four different ways: <ul style="list-style-type: none"> • Water • Wind • Explosion • Animals <p>The seeds grow into new plants. The plants grow new flowers and the cycle starts again.</p>

3. Water Transportation	
Roots	<ul style="list-style-type: none"> • Grow into the ground. • Pull nutrients and water from the ground. • Also help to keep the plant steady and upright in the ground. • Grow wide under the ground to search for water.
Stem/ Trunk	<ul style="list-style-type: none"> • Carries water to the leaves. • Carries food from the leaves to the rest of the plant • Grow upwards towards the sun.
Leaves	<ul style="list-style-type: none"> • Use light from the sun and with carbon dioxide from the air and water to make food for the plant (called photosynthesis) • Have veins inside them and are different shapes to fit the needs of the plant.
Stages of Water Transportation	<ol style="list-style-type: none"> 1. Water is found in the soil by the roots 2. The water is drawn up from the roots to the stem 3. The water travels up small tubes in the stem, called xylem 4. Water reaches the leaves and flowers, keeping them hydrated 5. Water escapes as a gas (vapour) through tiny holes in the leaves
4. Key Figure	
Agnes Arber	<ul style="list-style-type: none"> • Born in England on February 23rd 1879 • Died on March 22nd 1960 • Made important contributions to botany and wrote many books about a range of topics • First female botanist to be selected as a Fellow of the Royal Society