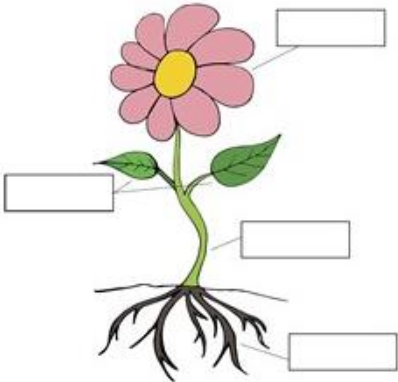


Year 3 Home Learning Summer Term

Science

This term in science, we will be learning all about flowering plants. Including the different parts of a plant and their jobs. This work will build upon what you learned about plants in Year 2.

1	<p><u>True or False?</u> Let's see what you already know about plants! Can you sort these statements about plants into true or false?</p> <ul style="list-style-type: none">• Trees are plants.• Roots put water into the soil from the plant.• All plants are green.• Plants get all that they need from their roots.• Plants can grow from seeds and bulbs.• Flowers only need sunlight to be healthy.• Roots take water from the soil around them.• Plants make their food in their leaves .• All trees make fruit we can eat.• Some plants eat meat. <p>Challenge: Can you add two more points to your True section about plants.</p>
2	<p><u>The Parts of a Plant</u> Below is a diagram of a flowering plant. Can you copy it out and label the different parts?</p> <div data-bbox="619 1279 1018 1659" data-label="Image"></div> <p>Once you have labelled it can you match the following descriptions to each part to say what they do?</p> <ul style="list-style-type: none">• This attracts insects for pollination and is where the seeds are made.• These are the first part of a plant to grow out of the seed/bulb. They stop the plant falling over and absorb nutrients and water that the plant needs to grow.• This holds the flower up and transports water and nutrients around the plant to where it is needed.• These take in sunlight and carbon dioxide to make food for the plant.

3

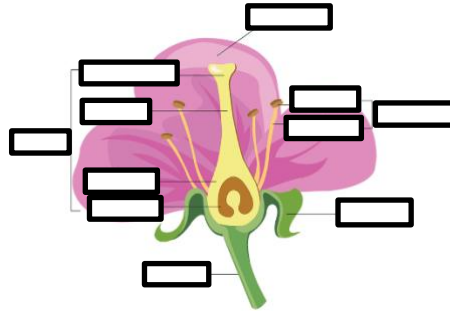
Parts of a Flower

Many but not all plants have flowers, for plants that do their flowers are very important. Let's zoom in on the flower itself and see what each part is.

Watch the following BBC Teach video which explains about all of the different parts of a flower:

https://www.youtube.com/watch?v=A5Pf4_LXyC4&list=PLcvEcrsF_9zU1enZ2h4kF396AtH90d9F&index=3

Then copy or print (there is a larger version of this at the end of the document) and label the following diagram showing the different parts of a flower.



There is also a great interactive eBook on the parts of a flower on Twinkl, search 'parts of a flower eBook Twinkl' to find it on google.

4

Flower Food – Photosynthesis

Most plants make their own food in a process called photosynthesis. This process happens inside the leaves of flowering plants and trees (that's why it is important we don't pick all of the leaves off plants).

Watch the following Dr. Binocs Show on photosynthesis and use it to help you put the missing words in the correct place to complete the paragraph. <https://www.youtube.com/watch?v=D1Ymc31IXS8>

The _____ of flowering plants have tiny _____ all over their surface. Water that has been taken in by the _____ evaporates through these pores. Plants make a substance called _____ in their leaves. This chemical is used to turn _____ and _____ into food for the plant. It also makes the leaves _____ in colour.

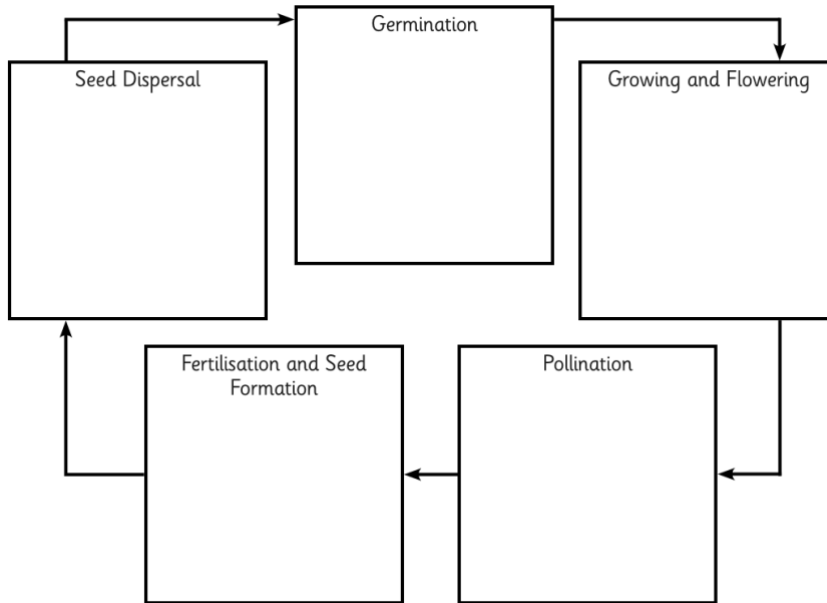
Word Bank






air stomata chlorophyll
sunlight roots green leaves

Challenge: There are a lot of different plants on our planet and some are very strange. For your challenge see if you can find three plants that are carnivorous, this means that they eat meat!

5 The life cycle of a Plant

Can you put the cards in the correct order so that they show the life cycle of a flowering plant? Use the PowerPoint slides at the end of this document to help you with the order and to fill in the missing words.



<p>The plant grows _____ and forms a flower.</p>	<p>The fully formed _____ are moved away from the parent plant.</p>	<p>The seed _____ to grow.</p>	<p>The pollen joins with an _____ and a seed starts to form.</p>	<p>Pollen from the _____ lands on the stigma and travels down the style.</p>
				

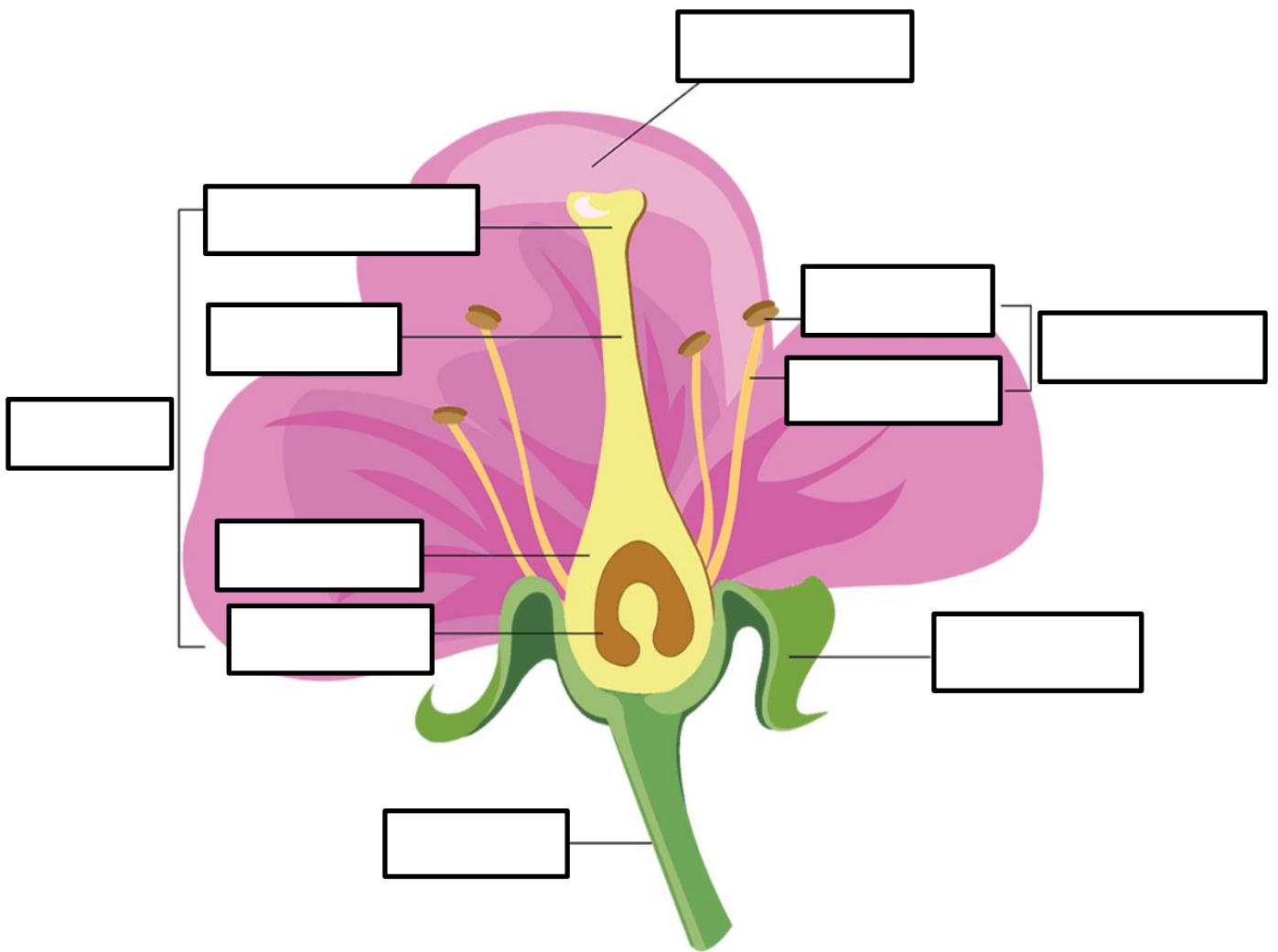
Key Words
seeds
ovule
starts
anther
bigger

6 Seed Dispersal

Plants use many different methods to spread their seeds far and wide. By doing this, plants are giving each seed more of a chance of becoming its own plant. Look at the four different methods below and sort the plants into how they disperse (spread) their seeds.

<p>Flyers</p> <p>These seeds are small and light enough to be blown away and dispersed by the wind. They might have wings, fluffy fibres on them or even feathery 'parachutes' to help them 'fly'.</p>	<p>Clingers</p> <p>These fruits (containing seeds) get caught on the fur of animals that brush past the plant. They might have small spikes or hooks that attach easily to the fur of passing animals.</p>
<p>Tasty Treats</p> <p>These fruits are irresistible to animals! They are often brightly coloured and juicy. The juicy fruits have hard seeds inside that can withstand passing through an animal's body. They land on the ground in the animal's droppings.</p>	<p>Pepper Pots</p> <p>These fruits disperse their seeds when they are shaken. Just like a pepper pot, they have holes at one end. When they are shaken by the wind or passing animals, seeds fall out of the holes.</p>

<p>Dandelion</p> <ul style="list-style-type: none"> •small seeds •very light •feathery 'parachutes' 		<p>Burdock</p> <ul style="list-style-type: none"> •small fruits •light •covered in spikes 	
<p>Poppy</p> <ul style="list-style-type: none"> •fruit grows holes in top •lots of tiny seeds inside •fruit on top of long stalk 		<p>Goosegrass</p> <ul style="list-style-type: none"> •'sticky weed' •small, round fruits •light •covered in tiny, hair-like hooks 	
<p>Blackberry</p> <ul style="list-style-type: none"> •strong colour •juicy fruit 		<p>Mulberry</p> <ul style="list-style-type: none"> •Bright colour •lots of small seeds •juicy fruit 	
<p>Cotton</p> <ul style="list-style-type: none"> •small seeds •very light •fluffy 		<p>Red Campion</p> <ul style="list-style-type: none"> •round fruit with hole in top •lots of tiny seeds inside •fruit on top of long stalk 	



1.

Life Cycle of a Flowering Plant

The life cycle of a flowering plant shows the changes that happen to the plant over the course of its lifetime.

The main stages of the life cycle of a flowering plant are:

1

Germination

2

Growing and
flowering

3

Pollination

4

Fertilisation
and seed
formation

5

Seed dispersal

Let's find out more about what happens at each stage!

2.

Germination

Germination is when a seed begins to grow.



3.

Growing and Flowering

Once the seed has germinated the plant grows bigger and then forms flowers.



4.

Pollination

Pollination occurs when pollen from the anther is transferred to the stigma, often by an insect.



5.

Fertilisation and Seed Formation

Fertilisation happens when the pollen travels from the stigma down the style to the ovary.

The pollen joins with an ovule to form a seed.
The seed forms inside the ovary.



6.

Seed Dispersal

Once the seeds are fully formed, the plant needs to disperse them.

This means that the plant needs to move or transport the seeds away from the parent plant in some way so that they don't all try to grow in the same place.

There are lots of different ways that seeds can be dispersed.

