

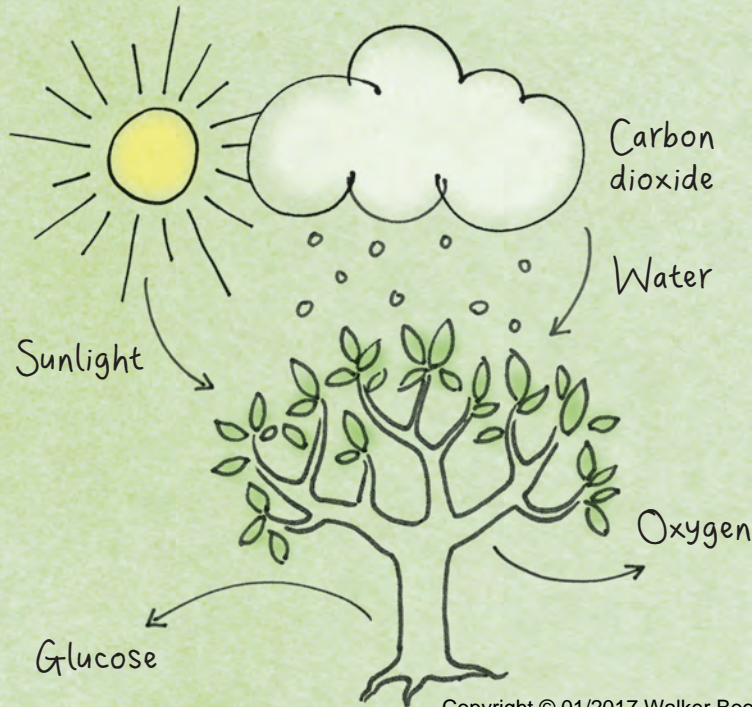


Plenty of plants

There are so many kinds of plant, including grasses, ferns, mosses, flowers and trees. As well as providing essential oxygen, plants also form the base of most food chains – without them nothing could survive.

What is a plant?

A plant is an **organism** made up of many cells. Plants can make their own food (**glucose**) by a process called **photosynthesis**. This happens when the leaves on a plant absorb light and the energy changes **carbon dioxide** and water into a sugar called **glucose**. Oxygen is produced as a by-product.



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Where do plants live?

Plants can live on land, in the water and on other plants.

Epiphytes

Epiphytes grow harmlessly upon other plants (such as trees) and get their moisture and **nutrients** from the air and rain. Mosses and orchids are both good examples of epiphytes.

Parasites

Parasitic plants live on other plants (or hosts). They take all the **nutrients** and water from their hosts, sometimes damaging their hosts in the process.



Choosy plants

Some plants like sunny, high and dry places. Others prefer shady, low and wet areas. A plant that usually lives under a canopy of tall trees is likely to prefer a shady **environment**, as it has developed broader, thinner leaves to absorb as much light as possible. If the plant was put into direct sunlight, it may absorb too much sun and die.

FIELD FACT

*Plants can warn each other of pests using their roots and thread-like strands from **fungi**. They then release chemicals to scare pests away.*

Homegrown habitats

It's easy to grow your own plants at home. Why not give it a try and record your observations as the plant grows?

You will need:

Sprouting seeds (such as cress)

3 small containers

Cotton wool

Water

A plastic bag or cling film



1. Put a piece of damp cotton wool in the bottom of each container. Sprinkle the seeds onto the cotton wool and press the seeds down gently.
2. Ask an adult to help you cover the pots with cling film or a plastic bag and put in a warm place (a windowsill is ideal).
3. Check every day and make sure the cotton wool does not dry out (add a little water if you think it is getting dry).
4. Once you can see small shoots, remove the cling film or plastic bag and leave the containers in a warm and sunny place for a week.
5. Keep checking to make sure the cotton wool does not dry out and take note as your plant grows.



FIELD ACTIVITY

Once the seeds have sprouted, ask an adult to help you plant them.

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Picking flowers

Flowers are very pretty and can smell nice, but that's not just for our benefit! They put on a show to attract **pollinators**, which carry their pollen to other flowers in a process called pollination. Flowers come in many colours, shapes and sizes but most have a similar structure.

Petals

Many flowers have colourful petals to attract insects and animals.

Stamen

Stamens produce dust-like grains, called pollen.

Carpel

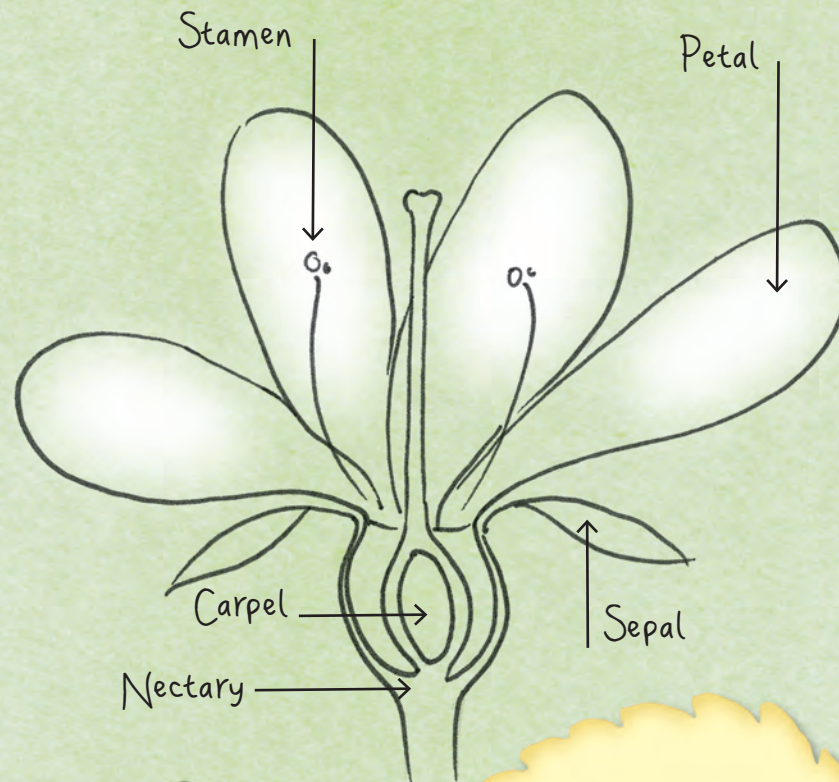
The stigma, style and ovary make up the carpel. The stigma receives the pollen from a **pollinator**. The pollen travels through the style to the ovary, which produces more seeds.

Sepal

Sepals are leaf-like outer parts of the flower that protect the bud until it opens.

Nectary

Nectaries are glands that ooze out a sugary fluid to attract **pollinators**.



FIELD FACT


You might not think it, but trees, grasses and even cacti produce flowers!

FIELD ACTIVITY

Can you pick apart a flower to see if you can find the parts listed here?



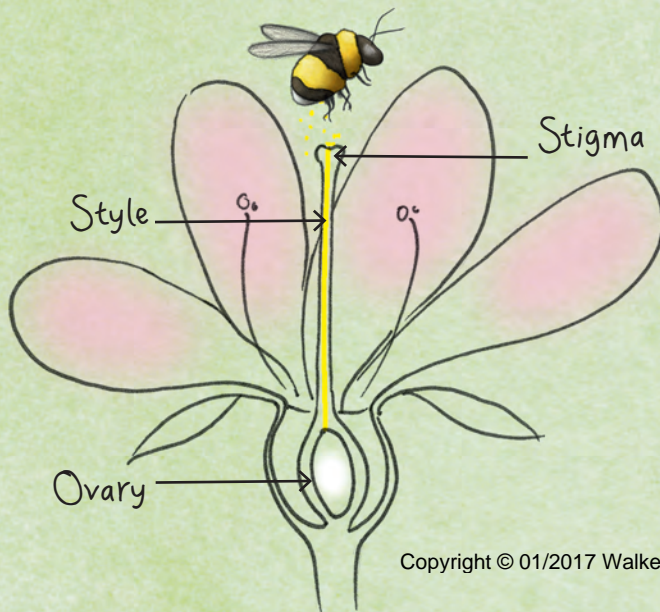
Pollinators



Plants have helpers who move the pollen for them so that they can make seeds and reproduce. Just like plants, these **pollinators** come in all shapes and sizes. They can be insects (bees and butterflies), animals (such as birds and bats) and even humans.

Here is an example of how it all happens:

1. A bee drinks a flower's nectar and pollen sticks to its body.
2. The bee visits a second flower and transfers the pollen to this flower's stigma.
3. The pollen travels down the style to the ovary. This fertilises the egg cells, which turn into seeds.



Seed journey

In order for new plants to grow from the seeds, the seeds must leave the plant. This happens in many ways:

Fruit

Many plants produce tasty fruit which animals eat. The seeds then come out in the animals' poo!

Wind

Some plants have seeds that are specially designed to travel in the wind.

Animals

Some seeds are covered in hooks or sticky mucus and hitch a ride on the fur of passing animals before falling off.

Humans

Humans can help by planting seeds – either by buying them from shops or collecting them from the wild.

Bursting seeds

Some plants do their own work when dispersing seeds. The fruits dry up and create seed heads, which burst open, forcing the seeds out.





Tall, tall trees

Trees are the biggest plants on the planet. They cover large areas of land and are home to many living things – even other plants. Trees are important as they provide us with oxygen that we need to breathe. There are two main types of tree:

Deciduous trees

Deciduous trees are huge flowering plants. Most **deciduous** trees are broadleaved, and every autumn these trees shed their leaves to save energy.

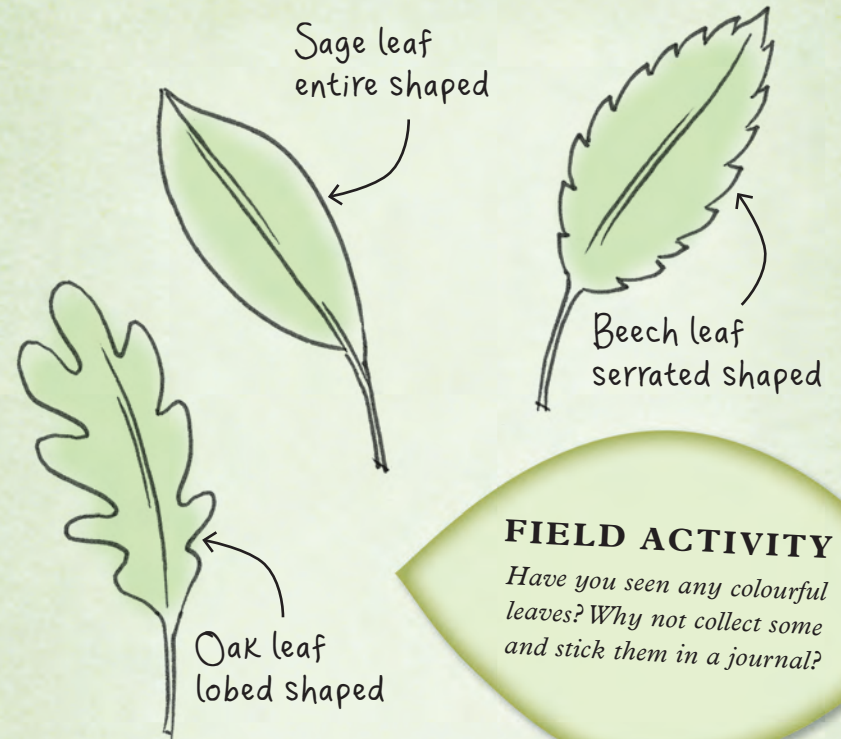
Evergreens

Evergreens look green throughout the year. Although they do lose leaves, most lose them gradually. When people think of **evergreen** trees they often think of conifers (such as Christmas trees). They have thin or needle-like leaves and their seeds come from cones instead of flowers.



Leaf shapes

There are many technical names used for leaf shapes but here are just a few that describe the edges (or **margins**):



FIELD ACTIVITY

Have you seen any colourful leaves? Why not collect some and stick them in a journal?

The veins of a leaf support the plant and transport the water and **nutrients** that it needs. Leaves also help to identify plants. The surface of a leaf is covered in tiny pores called **stomata**.

The **stomata** open to allow plants to “breathe” in **carbon dioxide** for **photosynthesis**. As the stomata open, **water vapour** is also lost in a process called **transpiration**. This lost moisture is replaced by water sucked up through a plant’s roots.

Tree houses

It's not just humans that need trees. Trees provide many creatures with homes, food and shelter.

Birds

Birds use twigs and leaves to make their nests in the safety of the branches.



Insects

Insects such as caterpillars and beetles feed on the leaves. Some beetles may tunnel into the bark and lay their eggs.



Squirrels

Squirrels forage for nuts on the forest floor, storing them to survive over winter.



Other Plants

Other tiny plants can grow on the tree bark, such as **algae**, **lichen** and moss.

FIELD FACT

***Lichen** can be found in a variety of colours and is a sign of good air quality.*

How tall is tall?

Trees are some of the oldest and tallest plants on the planet – but how can you tell just how tall they are? Ask an adult to help you with this simple exercise to estimate the height of a tree.

Pick a tree to guess the height of. Ask an adult to stand near to the tree.

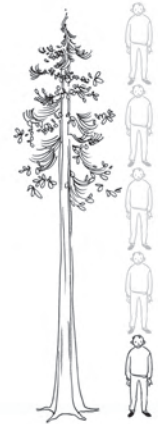
Stand back from the tree and guess how many times the height of your adult goes into the height of the tree.

Write down your guess.

Next, using a metre ruler measure the height of your adult (in centimetres).

Write down the height.

Times the two measurements together. This number roughly equals the height of the tree.





Incredible Creepy-Crawlies

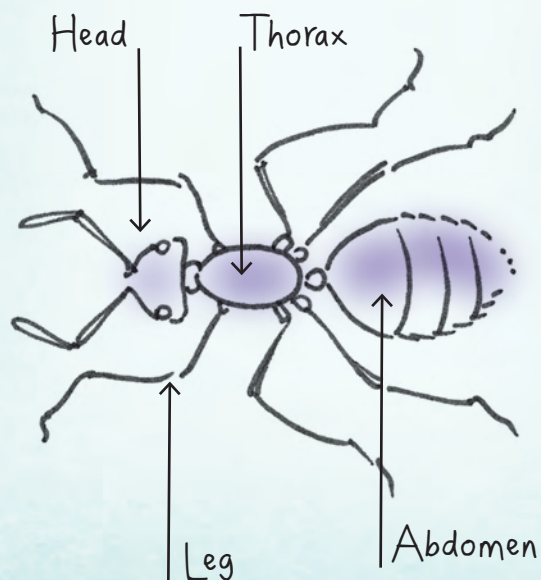
Bugs everywhere!

You must have seen them – there are millions of bugs creeping and crawling all over the world! The word “bug” is often used to describe all insects but a true bug is a particular kind of insect. Do you know what a true insect is?

What is an insect?

Insects belong to a large group of creatures called **arthropods**, which means “jointed legs”. This group includes many creatures that are not insects, such as spiders, woodlice, millipedes and centipedes.

All **arthropods** have jointed legs and a hard outer skeleton, but no backbone. However, an insect has three segmented body parts (the head, thorax and abdomen), plus six legs.



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True bugs

“True bugs” don’t bite into their food. Instead, they inject juices into prey with their beak-like mouths and then suck it up. Most true bugs have two pairs of wings.

Beetles

If you see a creature with a hard wing case, it is likely to be a beetle. The beetle’s hard front wings fold over the soft hind wings, when not in use, like a protective shield.



The search for bugs!

When you next go outside, lift up a rock and see what’s hiding there. Can you:

Count the legs on any insects that you find?

See if any of the creatures have hard wing cases?

Spot any true bugs?

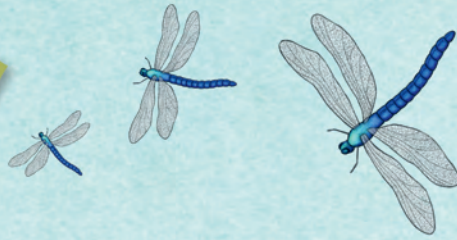


Flying high

There are many other winged insects. Flying skills help them to survive. They can quickly escape from hunters, and go long distances to find mates and food.

FIELD ACTIVITY

How many winged insects can you name?



Dragonflies and damselflies

You can tell the difference between a dragonfly and a damselfly by watching them at rest. Dragonflies hold their wings out wide like an aeroplane, while damselflies close up their wings.

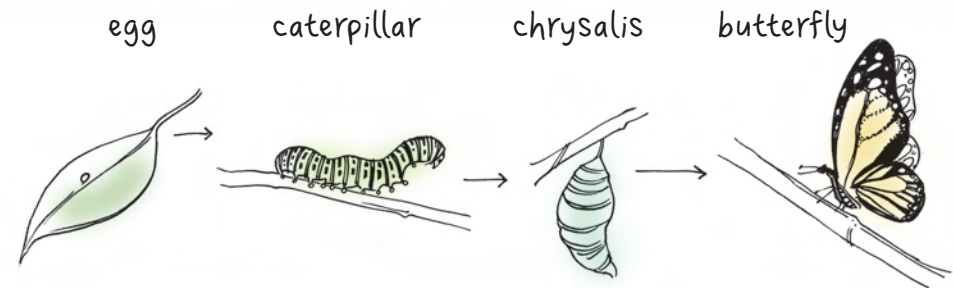
Flies

With no jaws, flies can only eat liquid food. They turn solid food into liquid by vomiting onto it before sucking it up!

Butterflies and moths

These delicate insects flitter and flutter around our heads, showing off their beautiful wing patterns. Butterflies tend to come out at daytime to warm their flight muscles in the sun. Most moths come out at night and warm up by vibrating their wings.

Butterflies and moths start out as caterpillars, which hatch from eggs. They eat and grow, then form a **chrysalis**. The caterpillar undergoes an amazing transformation inside, finally emerging as a moth or butterfly!





Living together

Some insects live and work together in groups called **colonies**. Numbers in the groups can range from thousands to millions! Each member of the group has a job to do, from finding food to looking after the nest.

FIELD ACTIVITY

Can you spot any insect colonies in the garden or further afield?

Ants

Believe it or not, ants are actually related to wasps and bees. Ants evolved from wasp-like ancestors millions of years ago.

Bees and wasps

Wasps are more brightly coloured than bees, and bees are rounder and hairier. Bees feed on nectar and pollen, while wasps eat fruit, nectar and other insects.



Grasshoppers

These cleverly coloured creatures are well **camouflaged** (hidden) from enemies and can hop away for a quick escape.



More garden critters

Although none of the following are insects or bugs, they can still be spotted living nearby!

Spiders

Spiders are eight-legged meat-eaters. They trap insect prey in webs before injecting them with venomous fangs to stop the insects moving.



Woodlice

There are thought to be over 3,000 different species of woodlouse around the world. Some can roll themselves up into an almost perfect ball to protect themselves.

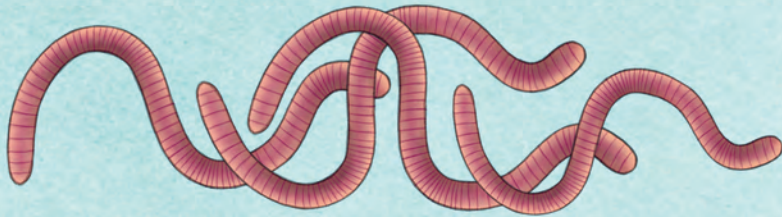
FIELD FACT

Snails and slugs are not insects or arthropods. Can you remember which group the freshwater snail belongs to? That will give you a clue!



Centipedes and millipedes

Most centipedes have thirty-five pairs of legs on average and can move quickly, while most millipedes have up to two hundred pairs of legs and move slowly.



Earthworms

These slithering creatures belong to a large group of segmented worms called **annelids**. They live in the soil and play a crucial role in breaking the soil down – allowing **bacteria** to feed on it and release the **nutrients**.



Build a worm farm

Why not make a worm farm to see these clever creatures in action? You will need:

A glass jar with lid Soil and leaves
A sheet of black paper Water

1. Take a jar and fill it with alternate layers of soil and sand, leaving a small gap at the top.
2. Collect some earthworms and carefully put them in the jar.




3. Add some old leaves, vegetable peelings or overripe fruit.

4. Ask an adult to make some small holes in the lid of the jar, then screw on the lid.



5. Place black paper around the jar and put it into a cool, dark cupboard.
6. Always keep your worm farm moist (but not too damp) and check there is enough food.

7. Check on it every few days to see what's happening – but remember to return the worms to their natural habitat when you're done!

An illustration of a child's face in profile, looking through a magnifying glass at a crab on a beach. The child has reddish-brown hair. The magnifying glass is held by a hand, and its lens is focused on a brown crab. In the background, a sandy beach stretches out with a small grassy dune. Further back, a black dog with a red collar is playing with a child in a pink shirt. A woman in a pink top and white skirt is holding a baby, and a man in a blue shirt and jeans is standing nearby. The sky is a pale blue and yellow, suggesting a sunset or sunrise.

Extraordinary Creatures

On the wing

Birds are extraordinary creatures that take to skies all over the world – tweeting, squawking and chirping as they go. Birds belong to the group of animals called **vertebrates**, meaning animals with a backbone (you are a vertebrate). All birds share the same basic features.

Light bones

Bird bones are hollow with a honeycomb-like centre. This makes birds light enough to fly.



Flight feathers

Birds have different feathers for different jobs. “Flight feathers” are found on the tail and the wings and provide “lift”. Imagine your arm is a wing. Primary flight feathers line your lower arm and secondary flight feathers line your upper arm.

Downy feathers

Downy feathers are soft fluffy feathers found on a bird's body that keep the bird warm.



FIELD FACT

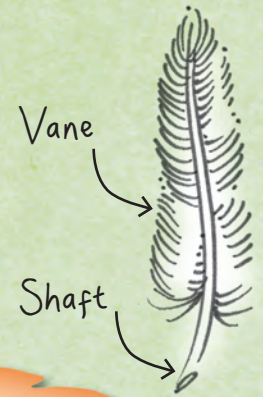
Did you know that birds are descended from dinosaurs?

Shaft

The shaft is the supporting part of the feather that runs through the middle.

Vane

The vane is the flat part of a feather found on both sides of the shaft.



IMPORTANT NOTE

If you see an egg or baby chick that has fallen out of the nest, do not touch it – the parents may be nearby.

Eggs

Birds lay a wonderful variety of eggs. The largest egg in the world belongs to the ostrich and is roughly the size of twenty-four hen eggs! Hummingbirds tend to have the smallest eggs, which can be less than one centimetre long.

Migration

Many birds move (**migrate**) around the world, from their breeding grounds in the north to their wintering homes in the south. Look for large flocks of birds flying in formation in spring and autumn.





A cake fit for a bird

In winter, birds may find it hard to find food.
You can help by making a bird cake for them.

You will need:

Yogurt pots
Suet or lard
Grated cheese

String
Birdseed
Raisins



1. Ask an adult to make a small hole in the bottom of a yogurt pot. Thread string through the hole and tie a knot on the inside (make it long enough to tie to a tree).

2. Bring the suet/lard to room-temperature then cut into small pieces.

3. Add the suet/lard plus all other ingredients to the bowl and squidge it all together with your hands.



4. Fill your yogurt pots with the mixture and put them in the fridge for an hour or so to set.

5. Hang on a tree or bird table and become a birdwatcher!



Bird sounds

Birds often live in pairs or groups – they make sounds to attract mates, mark territory or to warn other birds of danger. Some songbirds are dull in colour, which **camouflages** them when nesting. You can't always see them, but you can certainly hear them!

FIELD ACTIVITY

*Can you recreate some of the birds' songs with an instrument?
Recorders are great for this.*

Blackbirds

Often the first one up in the morning, singing sweet melodies.



Owls

Owls can make a “**t-wit twooo**” or “**hoo hoo**” sound.

Ravens

Can you hear the “**kraa... kraa... kraa...**” of a raven?

Woodpeckers

Birds don't just call and sing, woodpeckers

“**tap, tap, tap**”

into tree trunks to find insect food, make nests and communicate with other woodpeckers.



Bats

Bats are the only **mammals** that can fly. They have thin, hollow bones, which make them light. Their delicate arm and finger bones form a frame, over which a thin layer of skin stretches to make wings.

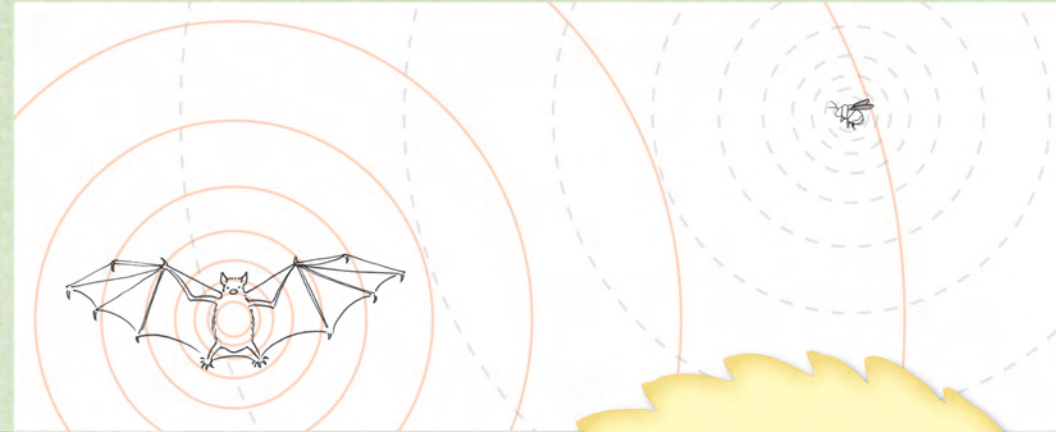


Hanging around

Bats are most active at night when they snatch up insects and other small animals. During the day they rest by hanging upside down on trees, under bridges or sometimes in caves.

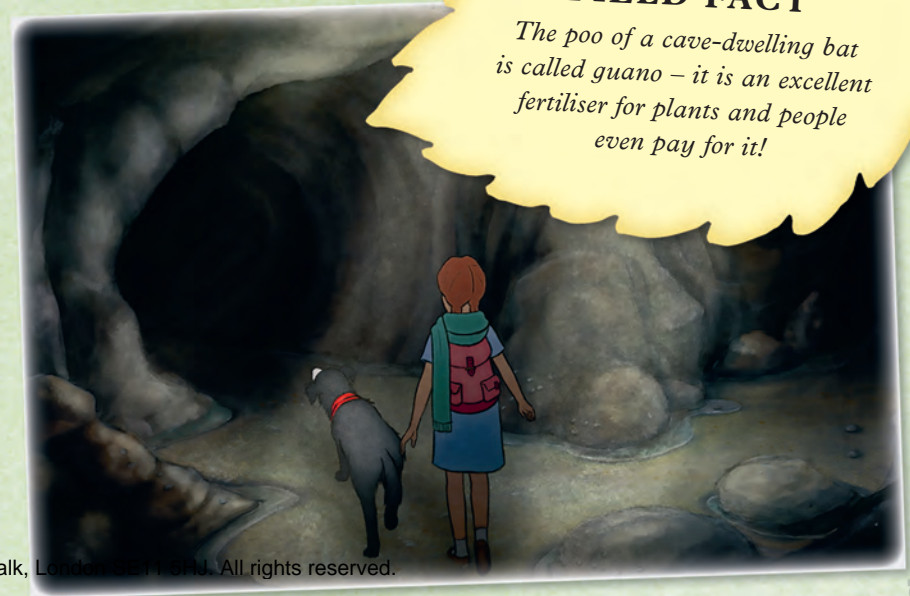
Hearing their way

Most bats find their way in the dark using a process called **echolocation**, sending out high-pitched clicks through their mouth or nose. When the sounds hit an object, the echoes let the bat know how far away that object is.



FIELD FACT

The poo of a cave-dwelling bat is called guano – it is an excellent fertiliser for plants and people even pay for it!



Mighty mammals

A **mammal** is a warm-blooded **vertebrate** animal, often covered in hair or fur. Rodents are the largest group of **mammals** and are known for having sharp front teeth. Some mammals such as bats are **nocturnal** (active at night), whilst others like deer are **diurnal** (active in the day).

IMPORTANT NOTE

Wild animals can be dangerous. Never approach them and always watch from afar.



On the lookout

When you're out and about, you might catch a glimpse of an animal or hear something rustling. What might it be?



Deer

In all species of deer (except reindeer) only the male has antlers. They shed these every year to grow bigger ones, which are used to attract females and to fight rival males.

Fox

Foxes can live in towns or the countryside, but they are most active during the night. A fox's home is called a den.



Rabbit

Rabbits are one of the most commonly spotted **mammals**. They have large families, and they live in a system of **burrows** called a warren.

Wild boar

The wild boar belongs to the pig family. Like most pigs, it has excellent hearing and an even better sense of smell, helping it to find food buried in the ground.

Hedgehog

Hedgehogs are **nocturnal** animals that sleep all day. They love eating worms and slugs.



Start searching!

With all of the nature facts you've read, you should be set for a bear hunt of your own. Bears can be found in the forests, grasslands and mountains across Europe, Asia, North America and South America. They are even found in the Arctic!

Bears

Bears are **mammals**. They are big and strong and tend to spend a lot of their time alone. Most bears are **omnivorous** (they eat both meat and plants).

FIELD FACT

*Most bears will eat almost anything, including berries, roots, insects, salmon, deer and small **mammals**.*



There are many types of bear in the world. Here are some of the most commonly known ones:

Black Bear

The black bear is not just black. It can have a lighter brown fur – and in some rare cases it can be white. It lives in forest and mountain **habitats** and has tall ears and short, black claws.

Grizzly Bear

The grizzly bear is larger and rarer than the black bear. It is intelligent and highly unpredictable. The grizzly bear can weigh up to an impressive 400 kilograms.



Polar Bear

Polar bears spend most of their time on sea ice, hunting seals. Their white fur means that they blend very well with the snowy backgrounds of their **habitats**.

Panda

Pandas are easily recognizable for the large, distinctive black patches around their eyes and body. Pandas love to eat bamboo.

FIELD ACTIVITY

During the ice age there was a cave bear that lived in Europe. Can you find out more about it?



The life of a bear

Bears that live in cooler places become less active in winter. They sleep in dens to avoid the cold and to save their energy. Bears can go for more than one hundred days without eating or drinking. Bears have an amazing sense of smell, and rely on this to find food.

IMPORTANT NOTE

*If you spot a bear in real life, back away slowly.
Walk, don't run, and make yourself
look as big as possible.*

Standing tall

Sometimes bears rear up onto their hind legs. They might do this if they're scared (to make themselves look bigger) or just to get a better view!



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Bake your own bear paws

What better thing to do after a long day of nature watching than baking some yummy bear paw biscuits?



Ingredients:

250g butter (at room temp)

140g caster sugar

1 egg yolk

1 teaspoon vanilla extract


250g plain flour

50g cocoa powder

Chocolate buttons or whole blanched almonds

** Always ask for adult supervision and follow the recipe carefully.*

1. Ask your adult to preheat the oven to 180°C /gas mark 4.
2. Beat the butter and sugar in a big bowl with a wooden spoon until it is light and fluffy.
3. Ask your adult to separate the egg. Add the yolk and the vanilla extract to your mixture. Stir until it is all combined.
4. Sift in the flour and cocoa powder and mix it all together until you have a nice thick dough.
5. Using your hands, shape the dough into thirty equal-sized balls and squash them down onto a baking tray.
6. Add chocolate buttons or almonds for the bears' claws.
7. Bake for 12–15 minutes. When they're ready, get your adult to transfer the biscuits onto a wire rack to cool.



Keeping on Track

Paws for thought

To get one step closer to wildlife, it helps if you can identify paw prints, or tracks. Snow, mud and sand are excellent places to follow marks left by animals. Visit the woods, a riverbed or seashore and scan the ground carefully for evidence of prints.

IMPORTANT NOTE

*Be careful when following tracks.
Never travel far by yourself – always
explore with an adult.*



Take a look at which animals these prints belong to:



Rabbit



Fox



Deer



Horse



Squirrel



Bird

FIELD ACTIVITY

*Have you spotted any
animal prints? Can you
identify them?*

FIELD FACT

*Some animals leave tail
tracks too, like beavers.*

A poo hunt!

Don't worry if you can't find any animal tracks – there are plenty of other signs that say there might be animal activity in your area.

Whose poo?

One of the things you can look for is animal poo (or “scat”). Animals don't just poo to get rid of waste – they do it as a way of sending messages to each other or marking territory.

IMPORTANT NOTE

*Look, don't touch!
Animal poo can carry horrible germs.*

Rabbit and hare poo

Rabbits and hares poo out round pellets, which contain finely chewed fragments of grass.

Fox poo

Fox poo looks like small dog droppings, and is often twisted at one end. Fresh ones smell very strong!

Squirrel poo

These cylindrical, 5mm-long pellets are deposited at random but can appear in large numbers beside a squirrel's favourite feeding spot.



Deer poo

Deer pellets are usually black and shiny when fresh. They can appear as one big clump and are often left in small piles in woods. The pellet size depends on the species.

Otter poo

Otter poo is called “spraint”. It usually contains fish bones and is known for its strong smell! Otters leave their poo where it can be seen, such as on a rock or tree stump, so that another otter can tell if the poo's owner is male or female.



Look even closer

If you look closely, you may find other signs of animals living nearby. Fur, nests and chew marks are all things that indicate animal activity. Here are a few other pointers to look out for:

- Can you see signs of a **burrow**? Tread quietly and look for entrance holes – they are often among tree roots.

FIELD FACT

A good place to start is where animals feed, drink, bathe or gather.

- Examine plants and trees carefully. Are they flattened or has anything been chewing, scratching or rubbing on them?
- You may find an animal skeleton – either a creature that has died naturally or an animal that has been eaten by another animal. If you're lucky you might find an antler shed by a deer.
- It's not always about what you can see. Can you hear any rustling or squawks? What can you smell?



The Big, Wide World





Threats to our world

The world is beautiful and hopefully after reading this book, you will have a better understanding of just how special it is. Such a wonderful place deserves to be looked after, but human activity is threatening our world.

Climate change

The climate of the earth has been changing. However the **climate change** people talk about today is to do with the impact of **global warming** – a gradual heating of the earth, which causes the type of weather we experience to change. For instance, as the earth heats up, glaciers melt and sea levels rise.

Pollution

There are a lot of people competing for the planet's resources, and we rely too much on **fossil fuels** (coal, oil and gas) which release deadly amounts of **carbon dioxide** into the **atmosphere**. But humans can't take all the blame – cows produce a massive amount of **methane** gas, which also adds to the **greenhouse effect**.

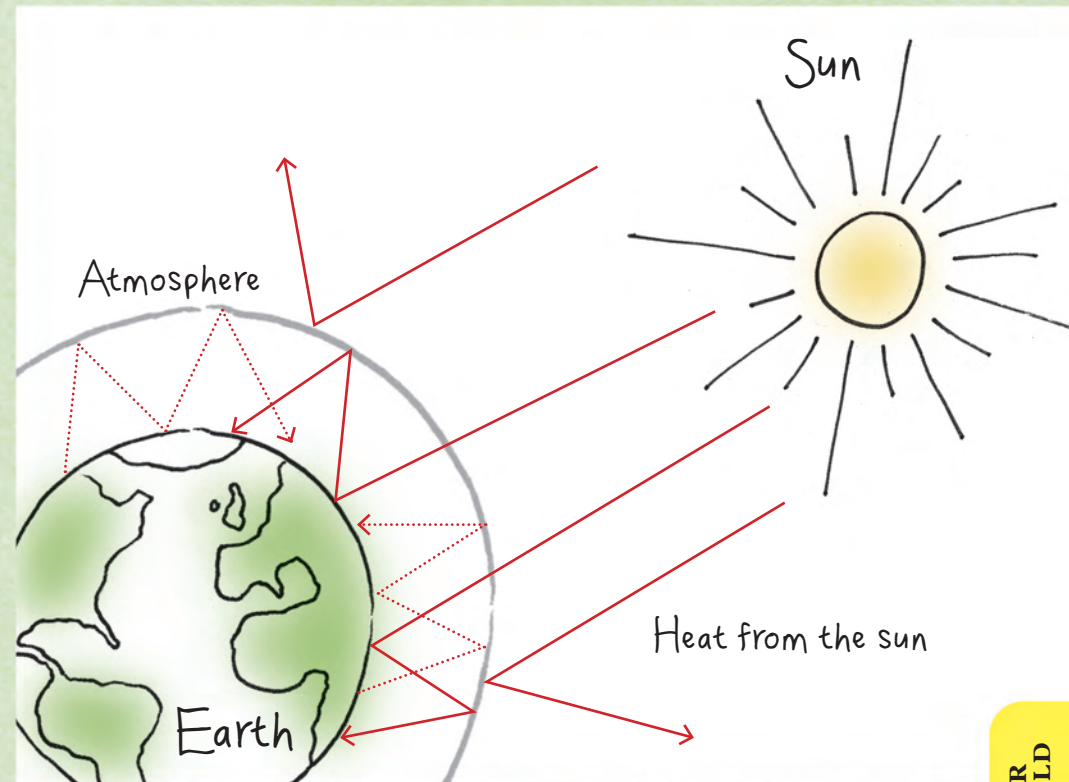
FIELD FACT

Experts say that each cow can produce 250–500 litres of **methane** a day!

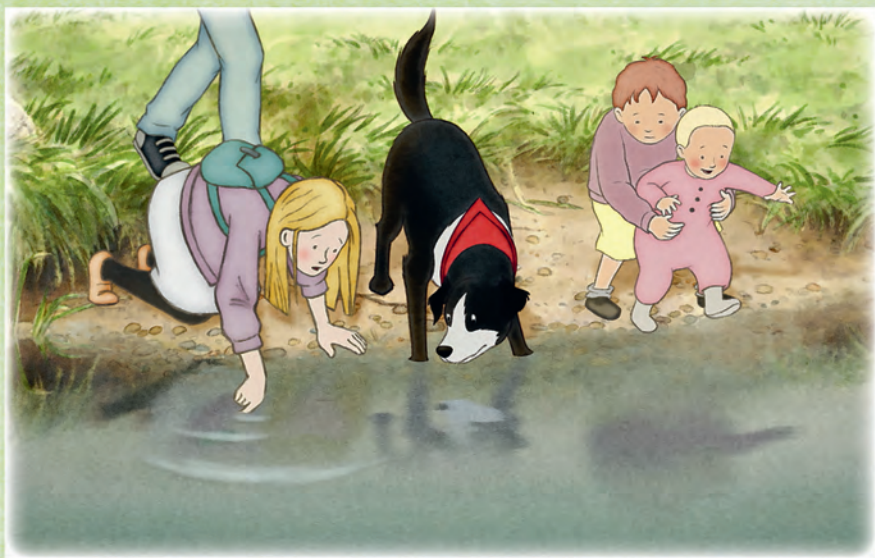
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What is global warming?

- The **greenhouse effect** is when the **atmosphere** that surrounds our planet traps some of the heat from the sun and keeps the earth warm.
- Without the **greenhouse effect**, the earth would be too cold for life to exist.
- However, as we burn **fossil fuels** more gases are released into the **atmosphere**. The more gases there are, the more heat becomes trapped by the **greenhouse effect**.
- This warming of the earth's surface and **atmosphere** is called **global warming**.



The effects of global warming



Disappearing habitats

The North **Pole** and the South **Pole** may become too warm for many of the creatures that live there. Warming oceans are destroying parts of the coral reef.

Endangered species

Global warming will make life difficult for plants and creatures all over the world. For example, if all the sea ice disappears in the Arctic, polar bears may no longer be able to survive.

Drought and flooding

Rising temperatures cause severe droughts, which in turn causes crops to fail. Rising sea levels mean that some islands may be completely underwater in the next few years.



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How can you help?

It's not too late to start saving our planet. There are a lot of little things you can do to be a bit friendlier to the world.



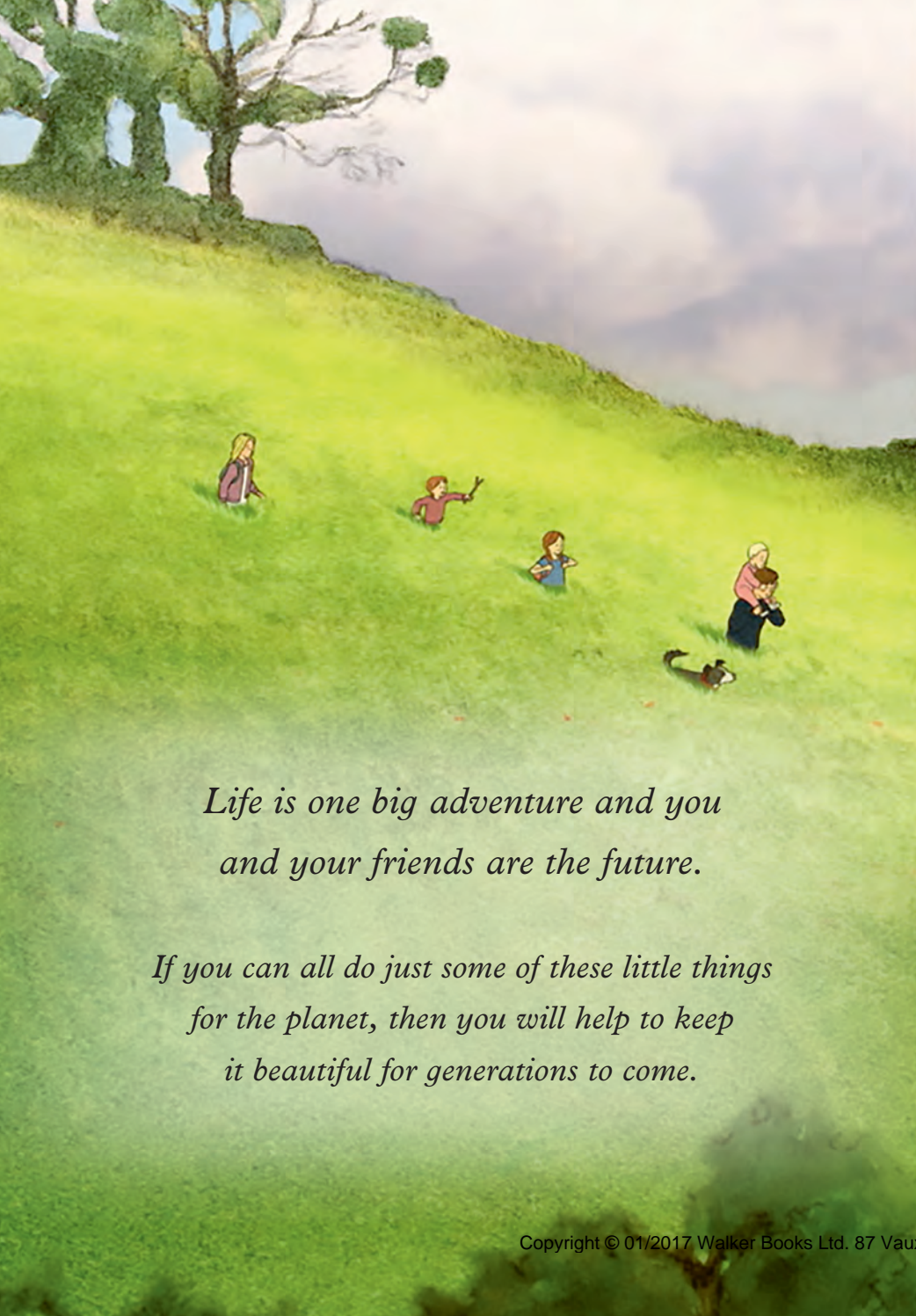
Top tips to stay green



- * Save electricity by wearing a jumper instead of turning the heating up.
- * Save water by turning off the tap while you brush your teeth.
- * **Reduce, reuse, recycle.** For instance:
Reduce the amount of paper you use, or reuse old pieces of paper and recycle it when you are done with it!
- * Plant bee-friendly flowers in your garden to create new **habitats**.
- * Adopt or sponsor an endangered animal.
- * Don't be a litterbug, as this can harm local wildlife.

FIELD FACT

*Just as you leave footprints in mud, you also leave a carbon footprint behind. This is the amount of **carbon dioxide** produced every time you use energy that comes from **fossil fuels**.*



*Life is one big adventure and you
and your friends are the future.*

*If you can all do just some of these little things
for the planet, then you will help to keep
it beautiful for generations to come.*



– Glossary –



Algae: a simple, non-flowering plant.

Amphibian: an animal that lives on the land and in the water.

Annelids: worms with ringed or segmented bodies.

Arthropod: a group of creatures that have jointed legs and hard outer skeletons.

Atmosphere: gases that surround our planet.

Bacteria: tiny organisms that can be harmful.

Blossoms: pretty flowers that cover fruit trees in the spring.

Burrow: a hole or tunnel dug by a small animal for shelter.

Calcite: a mineral found in limestone.

Camouflage: colouring or patterns that allow an animal to blend in with its surroundings.

Carbon dioxide: the gas formed when carbon is burned, or when people and animals breathe out.

Chrysalis: the stage at which a caterpillar turns into an adult butterfly or moth.

Climate change: changes in the weather patterns around the world.

Condensation: water vapour, which changes back to a liquid.

Constellation: a group of stars that form a pattern in the night sky.

Crystals: hard substances formed when minerals heat up or cool down.

Deciduous: plants that lose their leaves in autumn.

Dissolve: when a solid mixes with a liquid to form a solution.

Diurnal: animals that are active during the day.



Echolocation: a process where animals use sound to “see” their way in the dark.

Environment: the conditions that surround a living creature.

Erosion: the wearing away of rock or soil by forces such as water or wind.

Evaporation: when water turns into vapour.

Evergreen: trees that look green all year round.

Fossil fuels: natural fuels that release carbon dioxide.

Fungi: organisms such as mushrooms that feed on organic material.

Global warming: a gradual increase in the temperature of the earth’s atmosphere.

Glucose: an important source of energy for animals and plants.

Gravity: a force that tries to pull two objects towards each other.

Greenhouse effect: when the atmosphere surrounding earth traps heat from the sun.

Habitat: the natural home of an animal, plant or organism.

Lichen: a simple slow-growing plant.

Mammal: a warm-blooded vertebrate.

Margin: a word that describes the edges of a leaf.

Metamorphosis: the several different stages of life before becoming an adult.

Methane: a colourless, odourless gas.

Migrate: move from one habitat to another according to the seasons.

Mollusc: animals with soft, unsegmented bodies.

Mouth: where a river enters a lake, larger river or the sea.

Nocturnal: animals that are active at night.

Nutrients: substances that provide nourishment for growth.

Omnivorous: animals that eat both meat and plants.

Orbit: the repeated course of an object around a star or planet.

Organic material: substances in the soil that were once alive.

Organism: a form of life such as a plant or animal.

Photosynthesis: a process where plants make their own food.

Pole: the two opposite points on the earth’s surface.

Pollinators: helpers that move pollen from one plant to another.

Precipitation: when water particles fall from the clouds.

Source: the place where a river starts.

Spectrum: a band of colours, as seen in a rainbow.

Stalactites: a build-up of calcite hanging from the roof of a cave.

Stalagmites: a build-up of calcite on the ground of a cave.

Stomata: tiny pores on the surface of a leaf.

Tectonic plates: huge sections of the earth’s surface.

Transpiration: the release of water vapour through plant leaves.

Tributaries: a river or stream flowing into a larger river or lake.

Vertebrates: animals that have a backbone.

Water vapour: a substance that is formed from heating a solid or a liquid.

Wavelength: the distance of one point of energy as it travels to another.



