

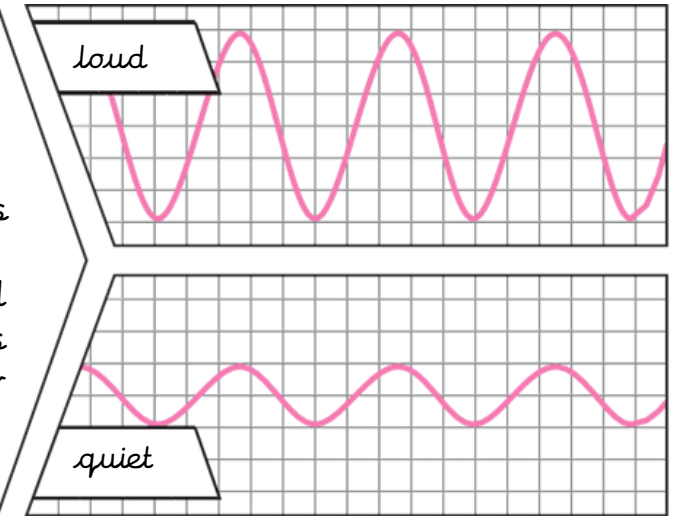
Year 4, Term 1, What's That Sound

Vocabulary

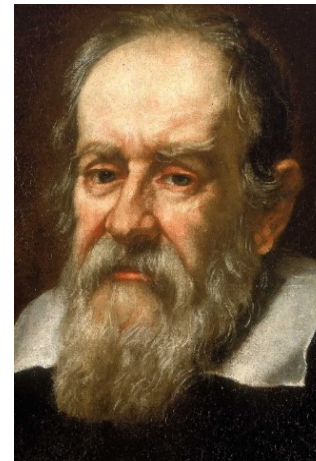
<i>vibration</i>	Something that moves in a quivering or shaking motion.
<i>volume</i>	How loud a sound is.
<i>sound wave</i>	Vibrations travelling from a sound source.
<i>amplitude</i>	The size of a vibration. A larger amplitude means a louder sound.
<i>pitch</i>	How high or low a sound is.
<i>ear</i>	An organ used for hearing.
<i>eardrum</i>	A part of the ear which is a thin, tough layer of tissue that is stretched out like a drum skin.
<i>particles</i>	Solids, liquids and gases are made of particles. They are so small we are unable to see them.
<i>vacuum</i>	A space where there is nothing. There are no particles in a vacuum.
<i>absorb sound</i>	To take in sound energy. Absorbent materials have the effect of muffling sound.

Sound Waves

The size of the vibration is called the amplitude. Louder sounds have a larger amplitude, and quieter sounds have a smaller amplitude.



Galileo Galilei



Some say that Leonardo DaVinci discovered sound waves and others suggest it was Roman philosopher Seneca, but it was Galileo Galilei who discovered more of the properties of sound waves. He discovered that the frequency of the sound wave is the factor that determines what pitch the sound will have.

Year 4, Term 2, Living Things

Vocabulary

organism	A living thing, animal or plant.
key	A series of questions that helps identify or group things.
classify	To group things so that they can be identified.
habitat	A place where something lives.
invertebrate	An animal without a backbone.
insect	An animal with six legs.
mammal	An animal that gives birth to live young.
bird	An animal that flies and has an internal skeleton.
amphibian	An animal with an internal skeleton that lives both in an out of water.
fish	An animal with an internal skeleton that lives in water and has gills.
reptile	An animal with an internal skeleton that lays eggs, but lives on land.

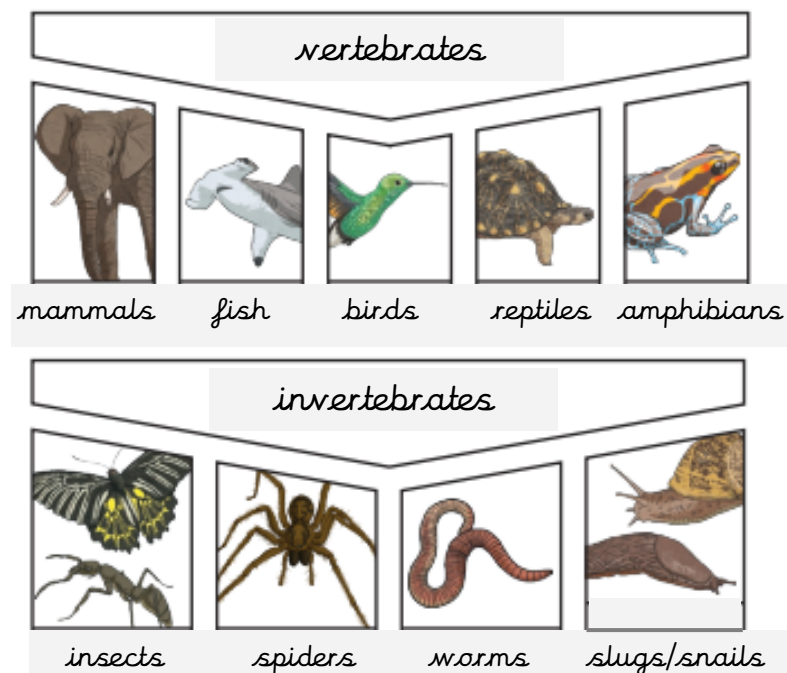
Life Processes

To stay alive and healthy, all living things need certain conditions that let them carry out

Movement
Respiration
Sensitivity

Growth
Reproduction
Excretion
Nutrition

Animals

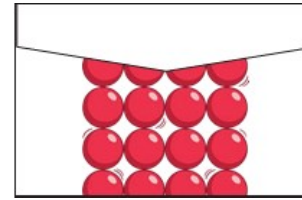


Year 4, Term 3, Looking at States

Vocabulary

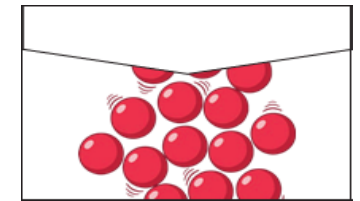
<i>solid</i>	<i>A state of a material when it cannot change shape, but holds the shape of whatever container it was frozen in.</i>
<i>liquid</i>	<i>A state of a material when it can flow from one place to another, and can be poured.</i>
<i>gas</i>	<i>A state of a material when it fills the entire space available.</i>
<i>matter</i>	<i>Another name for 'material': what an object is made of; not just fabric.</i>
<i>melt</i>	<i>This is when a solid changes to a liquid.</i>
<i>freeze</i>	<i>Liquid turns to a solid during the freezing process.</i>
<i>evaporation</i>	<i>When a liquid turns into a gas, below its boiling point.</i>
<i>condensing</i>	<i>The process by which a gas turns into a liquid.</i>
<i>precipitation</i>	<i>Liquid or solid particles that fall from a cloud as rain, sleet, hail or snow.</i>
<i>boiling</i>	<i>When a material reaches a temperature when it bubbles and rapidly turns into a gas.</i>
<i>water cycle</i>	<i>How water moves around to create clouds, rain and the weather.</i>

State of Matter

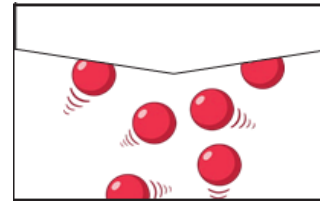


Particles in a solid are close together and cannot move. They can only vibrate.

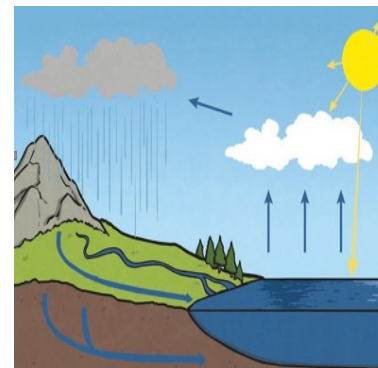
Particles in a liquid are close together but can move around each other easily.



Particles in a gas are spread out and can move around very quickly in all directions.



Water Cycle



Water from lakes, puddles, rivers and seas is evaporated by the sun's heat, turning it into water vapour.

This water vapour rises, then cools down to form water droplets in clouds (condensation).

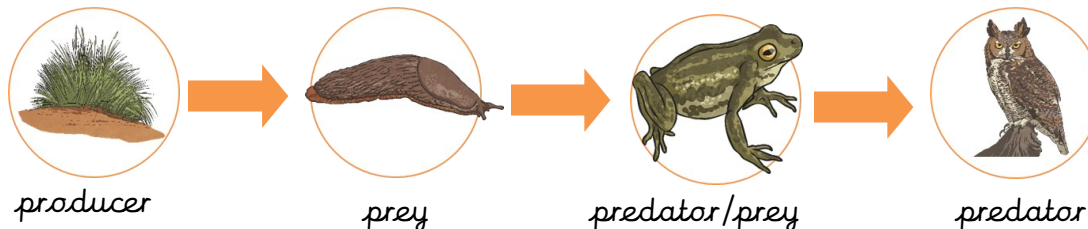
When the droplets get too heavy, they fall back to the earth as rain, sleet, hail or snow (precipitation).

Year 4, Term 4, Teeth and Eating

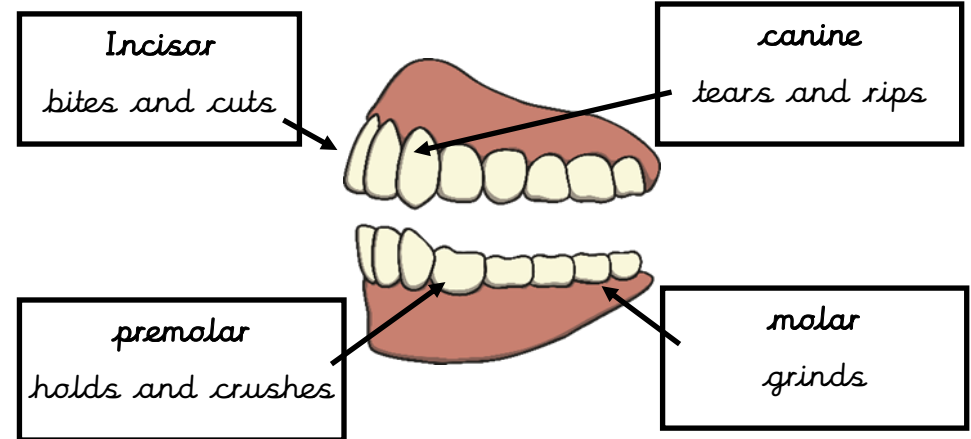
Vocabulary

<i>carnivore</i>	Animals such as lions whose main way of getting food is to kill and eat other animals, or to scavenge their dead flesh.
<i>herbivore</i>	Animals such as cows that mainly eat plants.
<i>omnivore</i>	Animals that eat both plants and meat.
<i>enamel</i>	The hard covering of the tooth.
<i>decay</i>	What happens when teeth aren't cared for.
<i>digestion</i>	Breaking down food Mouth: where digestion starts and food gets into the body.
<i>nutrients</i>	Chemicals needed for growth, movement, repair and health in general.
<i>energy</i>	Used to help us move, grow and repair our body.

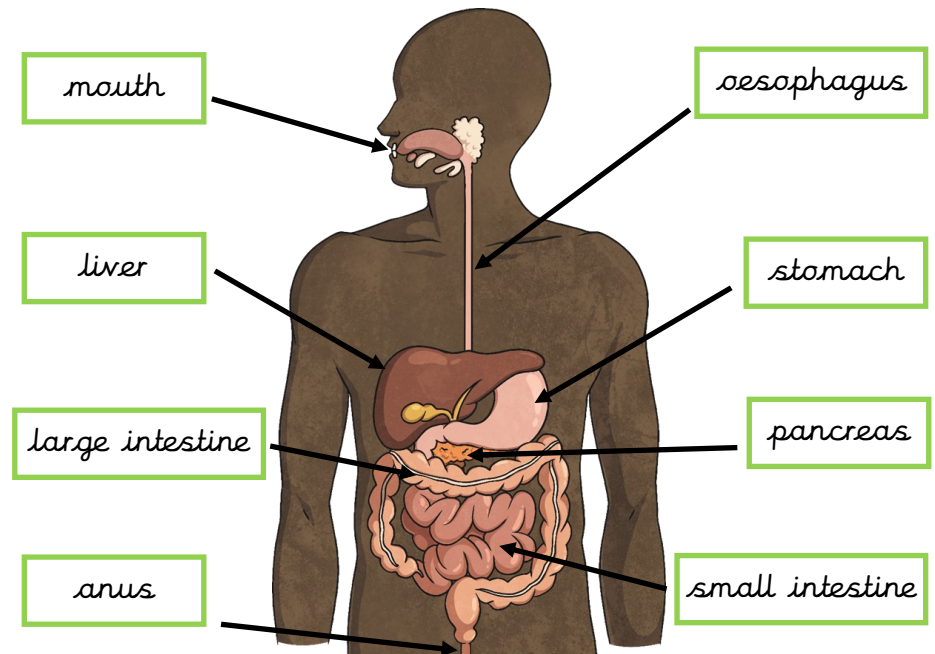
Food Chain



Teeth



Digestive System

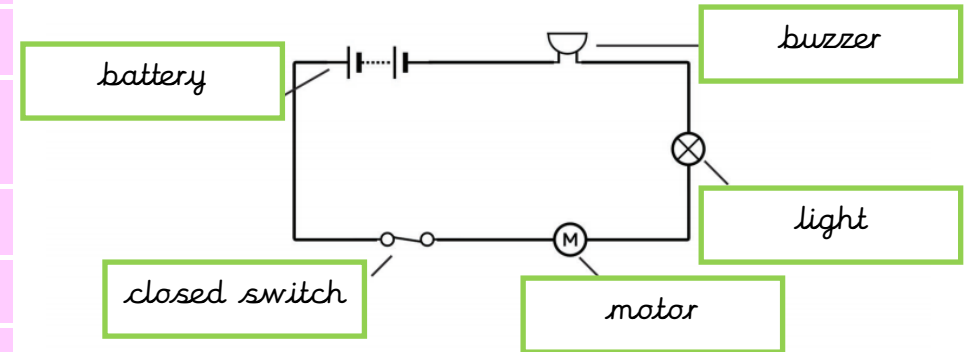


Year 4, Term 5, Power It Up

Vocabulary

battery	A portable electricity supply.
bulb	Part of a circuit that gives out light.
mains	The electricity that comes from a socket in the wall and through wires.
rechargeable	A battery that we can put 'electricity' back into.
cell	The scientific name for a battery.
bulb	A component that gives out light.
components	The items that make up a circuit.
terminals	The ends of the battery. One is negative and one is positive.
wires	Used to connect components together.
switch	A component that turns a circuit on and off.
conductor	A material that transmits electricity.
insulator	A material through which electricity cannot flow.
circuit	The path followed by an electric current. Electricity must flow in a circuit to do useful work.

Circuit



Two types of electric current



Battery electricity: batteries store chemicals which produce an electric current. Eventually, even rechargeable batteries will stop producing an electric current.



Mains electricity: power stations send an electric charge through wires to transformers and pylons. Then, underground wires carry the electricity into our homes via wires in the walls and out through plug sockets.

Year 4, Term 6, Brilliant Bubbles

Vocabulary

diluted	A solution with a lot of water.
concentrated	A solution with a small amount of water.
concentration	The ratio of water (solvent) to substance (solute).
melt	When solids change to a liquid.
Carbon dioxide	A gas found in the air and in fizz.
gas	One of three states of matter that is light and spreads easily.
liquid	One of three states of matter in which the particles are close tog.
sphere	A shape that's round like a ball.
evaporates	It is when a liquid turns into a gas.

Facts



The biggest bubble ever made was 2.98 cubic meters in volume.

No matter what shape the bubble is at first, it will always try to become a sphere.



The film that makes the bubble has three layers. A thin layer of water is sandwiched between two layers of soap.

Glycerine is a sticky liquid that helps bubbles last longer.



Some chocolate bars and sweets have bubbles in.

