



Key Knowledge

Need to know

- The oesophagus is the food highway that takes your food from your mouth down into your stomach so that digestion can begin.
- The stomach is filled with powerful acids that break down the food into smaller pieces. It also lets us know when we are hungry.
- The liver creates different enzymes to help process food nutrients that are collected in the small intestine.
- The main job of the small intestine is to absorb nutrients and minerals from food. In fact, 90% of food absorption takes place, making it our main digestion location.
- The outside of our teeth is covered with enamel and inside have blood vessels and nerves. The front teeth are called incisors, the four sharp teeth are called canines and the teeth at the back are called molars.
- A food chain is a series of organisms each dependent on the next as a source of food.

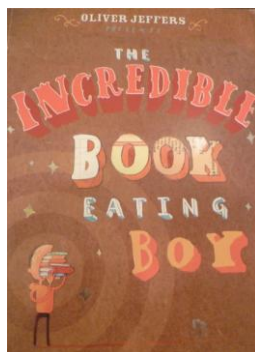
Neat to know

- The gallbladder is a storage unit for all of the bile and enzymes created by the liver. It stores them until they are needed for digestion.

Working Scientifically

- Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- Use straightforward scientific evidence to answer questions to support findings.

Text



Vocabulary

oesophagus

The oesophagus is like a stretchy tube that moves food from the throat to the stomach.



intestine

The main function of the small intestine is absorption of nutrients and minerals from food.



organ

The skin is the biggest organ of your body. Other organs include brain, lungs, heart, liver and stomach.



molars

Molars are the teeth that are used for chewing and grinding food.



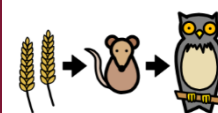
canine

Canines are the teeth used for ripping and tearing our food.



food chain

A food chain is a diagram that shows us how animals are linked by what they eat.





Key Knowledge

Need to know

- Matter can exist in three forms: liquid, solid or gas.
- Matter can change from state to another if it is heated or cooled.
- Gas can escape from an unsealed container. It fills up the space that it is in and does not have a fixed volume.
- When solids turn into liquids it is called melting and the reverse process is called freezing.
- When liquids turn into gases, it is called evaporation and the reverse process is called condensation.
- The melting point of water is 0°C and the boiling point 100°C .
- Water flows around our world in a continuous process call the water cycle.

Neat to know

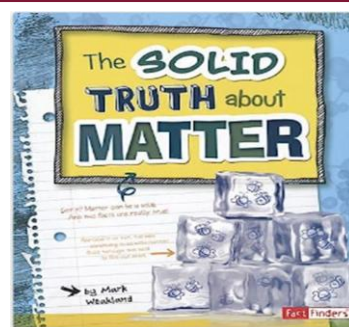
- About 70% of Earth is covered in water.



Working Scientifically

- Set up simple practical enquiries, comparative and fair tests.
- Observing over time – how water evaporates over time in different locations.
- Identifying, classifying and grouping – can you group materials into solids, liquids and gases?
- Fair testing – only change one variable.

Text



Vocabulary

water vapour	Water that is in the form of gas.	
condensation	When water vapour that is around us changes from a gas back to liquid.	
precipitation	Any watery substance such as rain, water, snow, hail or sleet that falls to Earth.	
evaporation	When liquids change into gases, usually when it heats up.	
solid	A substance that stays the same shapes. Its particles do not move.	
liquid	Liquids will flow as they are made up of loosely packed particles.	
gas	Gaseous matter is made up of matter that is so loose it is always moving.	
molecules	The very tiny particles that make matter.	



Key Knowledge

Need to know

- When objects vibrate, a sound is made.
- Vibrations make the air around objects vibrate and the air vibrations enter your ear. These are called sound waves.
- Inside your ear, the vibrations hit the eardrum and are then passed to the middle and then the inner ear. They are then changed into electrical signals and sent to your brain.
- Sound can travel through solids, liquids and gases. Sound travels as a wave, vibrating the particles in the medium it is travelling in.
- Sound cannot travel through a vacuum.

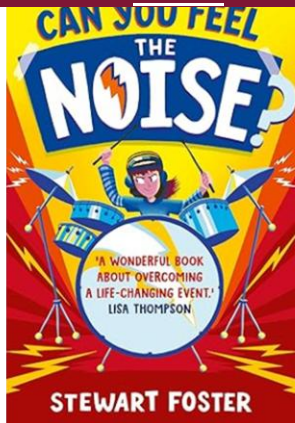
Neat to know

- A Theremin can be played without being touched. Produces a ghostly, eerie, or whiny sound, making it popular for sci-fi and horror soundtracks.

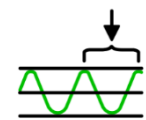
Working Scientifically

- Ask relevant questions and use different types of scientific enquiries to answer them.
- Describe a range of sounds and how they are made.
- Ways to change the pitch of sound.
- Sound affected by distance.

Text



Vocabulary

decibel	A unit of measurement given to the loudness of a sound.	
pitch	A high sound has a high pitch and a low sound has a low pitch.	
volume	Volume is the perception of loudness from the intensity of a sound wave.	
eardrum	The part of the ear that vibrates when receiving sounds.	
soundwave	A form that sound takes as it moves through air or water.	
ear	The ear is made up of three different sections: the outer ear, the middle ear, and the inner ear.	
vibration	A movement back and forth to create a sound.	
frequency	Frequency is measured as a number of wave cycles that occur in one second.	



Key Knowledge

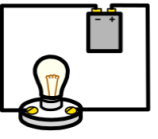
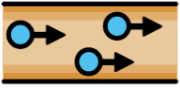
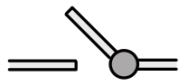
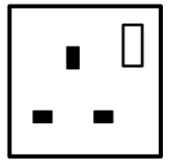
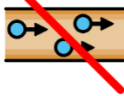
Need to know

- Common appliances run on electricity.
- AC is an alternating current.
- DC is a direct current.
- A series circuit consists of cells, wires, bulbs and switches.
- A switch opens and closes a circuit.
- Metals are good conductors.
- Plastics are good insulators.

Neat to know

- Nikola Tesla developed the first alternating current motor.
- Thomas Edison developed the first direct current.

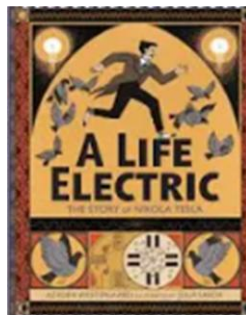
Vocabulary

circuit	An electrical circuit is a completed path through which electrical currents flow.	
conductor	A conductor is an object or type of material that allows the flow of an electrical current in one or more directions.	
battery	A battery is a device that stores chemical energy and makes it available in an electrical form.	
switch	A switch is an electrical component that can 'make' or 'break' an electrical circuit.	
socket	Sockets allow electrical equipment to be connected to the alternating current (AC) power supply in buildings and at other sites.	
appliance	An electrical appliance is a device that uses electricity to perform a function.	
insulator	An insulator is a material whose internal electric charges do not flow freely.	

Working Scientifically

- Report on findings from enquiry including oral and written explanations, displays or presentations of results and conclusions.
- Identify differences, similarities or changes related to simple scientific ideas and processes.

Text





Living things and their habitats

Key Knowledge

Need to know

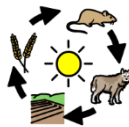
- The billions of organisms on earth have been divided up into groups (classified) according to similarities and differences.
- All living things can be classified into groups.
- The three main groups are animals, plants and micro-organisms.
- Humans fall into the mammal class as they have hair on their bodies and drink milk as babies.
- Vertebrates have a backbone.
- Invertebrates don't have a backbone.
- Plants can be grouped into categories such as flowering plants (including grasses) and non-flowering plants, such as ferns and mosses.

Neat to know

- A salamander can regrow a leg, and some fish can regenerate fins.



Vocabulary

habitat	The natural home or environment of an animal, plant or other organism.	
vertebrates	A vertebrate animal is one that has a backbone.	
invertebrates	An invertebrate animal does not have a backbone and 97% of creatures belong to this group.	
species	This is the grouping together of similar types of plants, animals and other organisms that can reproduce with each other.	
classify	Sorting people, animals or things into groups according to things that are similar.	
ecosystem	A community of living things together with their environment.	
pollution	The introduction of harmful materials to the environment known as pollutants.	
characteristics	A special quality or appearance that makes an individual or a group different from others physical characteristics. Being the only 1 of its type.	

Working Scientifically

- Make systematic and careful observations making accurate measurements using a range of equipment.
- Gather, record, classify and present data in a variety of ways to help answer questions.
- Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts or tables.

Text

