









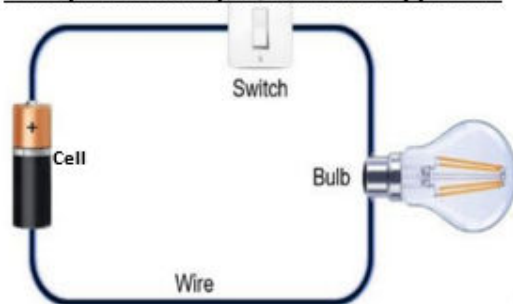


Electricity (Year 4)

Vocabulary

appliance	bulb	buzzer	cell	circuit	component	conductor	insulator	switch	wire
									
Machine. Electrical appliances are powered by electricity.	Glass part of an electric lamp, which gives out light.	Component that makes a sound.	Used for generating <u>current</u> and power.	A complete and closed path for electricity to <u>flow</u> .	One of the parts of a circuit.	Material that electricity flows easily through.	Material that electricity doesn't flow through.	Breaks the current in a circuit.	Used to carry electricity.

A simple circuit to power a home appliance



Things I already know that I can connect new knowledge with








- Different materials are suitable for different uses. (Y2)

Knowledge

- Electricity is a form of energy which can be converted into heat, light in our homes and school. It is useful to power appliances but can be very dangerous.
- An electrical circuit is a loop that allows electricity to travel through it. An electrical circuit must have wires and a cell.
- A switch opens and closes a circuit. Opening a circuit prevents electricity from flowing.
- Materials that allow electricity to flow through them are called conductors.
- Materials that do not allow electricity to flow through them are called insulators.
- Many (but not all metals) conduct electricity.

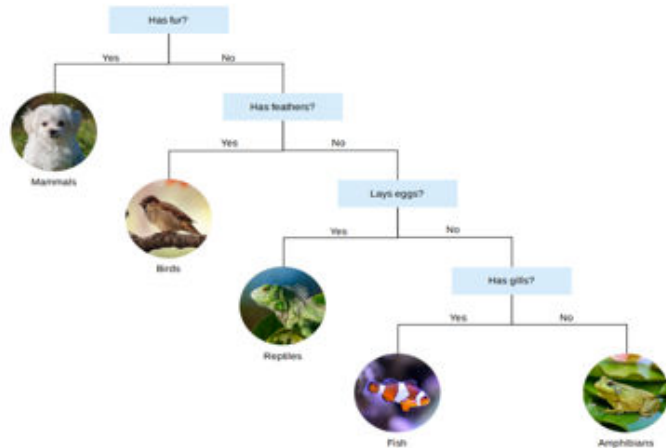
Living Things and Their Habitats (Year 4)

Vocabulary

characteristic	classify	vertebrate	invertebrate	flowering plants	non-flowering plants
	<p>Has it got more than eight legs?</p> <p>Yes:  Centipede</p> <p>No:  Spider</p>				
Feature which helps identify something.	To arrange a group of objects according to their characteristics.	An animal with a backbone.	An animal without a backbone.	Plants that produce flowers and seeds.	Plants that produce no flowers and grow from spores.

Classification key

➤ Used to identify living things using 'yes or no' questions.



Knowledge:


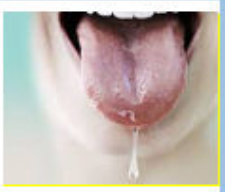




- A vertebrate is an animal with a backbone. An invertebrate is an animal without a backbone.
- Fish are cold-blooded vertebrates that live in water and have gills that help them take oxygen from the water.
- Amphibians are cold-blooded vertebrates that live in water and on land.
- Reptiles are cold-blooded vertebrates with scaly skin.
- Birds are warm-blooded vertebrates with feathers that can fly.
- Mammals are hairy, warm-blooded vertebrates that breathe air.
- Insects are invertebrates with six legs and three body parts.
- Arachnids are invertebrates with eight legs and two body parts.
- Some plants produce flowers and seeds. Some produce no flowers and grow from spores.
- If an environment changes, this can threaten the things that live there.

Things I already know that I can connect new knowledge with:

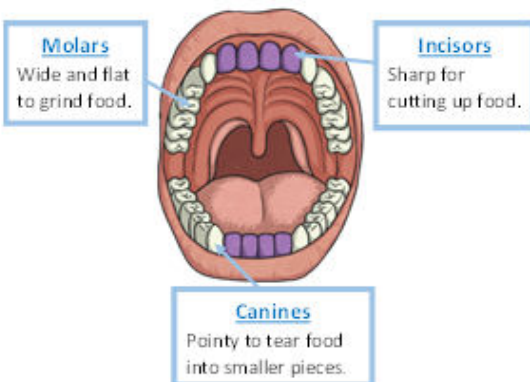
- Many animals can be grouped into: fish, birds, mammals, reptiles, amphibians. (Y1)
- Plants and animals live in habitats to which they are suited. (Y2)
- Humans and some other animals have a skeleton for protection and support. (Y3)

Animals Including Humans (Year 4)

Vocabulary

digestion	plaque	saliva	food chain	producer	predator	prey
						
Process of breaking down food and drink.	<u>Build up</u> of germs that cause tooth decay.	Liquid produced in the mouth containing enzymes.	Shows how plants and animals get their energy.	Living thing that produces its own food.	Animal that hunts another animal.	Animal that is hunted by another animal.

Teeth



Knowledge:






- There are different types of teeth. Incisors cut, canines tear, molars grind food.
- Humans have teeth for ripping and grinding because we are omnivores.
- Saliva softens the food which helps digestion.
- The stomach stirs up food and mixes it with acid.
- The intestines move the food around. Whilst in the intestine, nutrients are absorbed by the blood.
- Animals eat plants or other animals. These often exist together in the same area.

Things I already know that I can connect new knowledge with:

- Some muscles move voluntary and some move involuntarily. (Y5)
- Humans get nutrition from what they eat. (Y5)
- Animals get food from plants and other animals. I can use a simple food chain. (Y2)

Sound (Year 4)

Vocabulary

medium	pitch	sound	vibration	volume
				
Something that sound energy travels through.	How high or low a sound is.	Energy made by an object vibrating.	Quickly moving back and forth.	How loud or quiet a sound is.

Measuring sound



- Sound is measured in decibels.
- What medium sound travels through affects how well we can hear it.

Knowledge









- Sound is caused by a back and forth movement called vibration.
- Sound waves move out from a vibrating object and into the ear.
- Sound travels through the air and can travel through different types of medium.
- Loud sounds are made by big vibrations.
- Quiet sounds are made by small vibrations.
- When different objects vibrate they can create a high or low pitch.
- Sounds get fainter as the distance from the sound source increases.

Things I already know that I can connect new knowledge with

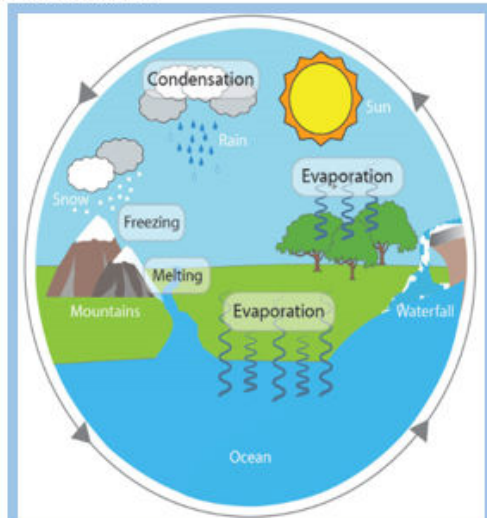
- I can describe properties of materials. (Y1)
- Different materials are suitable for different uses. (Y2)

States of Matter (Year 4)

Vocabulary

cool	condensation	evaporation	freeze	melt	precipitation	solidify	water vapour
							
Lower the temperature of something.	Water vapour or gas turning into liquid.	Liquids change to a gas or vapour.	At 0°, water turns into a solid.	Solid turns into a liquid when it is heated.	Water that falls to Earth.	Become a solid when cooled.	Mist, steam and clouds. Water in the state of gas.

The water cycle



Knowledge:

- There are three main states of matter: solids, liquids and gases. Water exists in all three of these states and can change in both directions.
- The repeated process of water in nature changing state is called the Water Cycle.
- Water evaporates from all water sources. When water evaporates it becomes water vapour.
- Evaporation occurs faster at higher temperatures.
- Condensation is when water vapour turns back into liquid.
- High in the sky, the air is cooler and this turns water vapour back into water droplets. When the water droplets get large enough, they fall as rain, sleet or snow. This is called precipitation.

Things I already know that I can connect new knowledge with:

- I can describe properties of materials. (Y1)
- Different materials are suitable for different uses. (Y2)