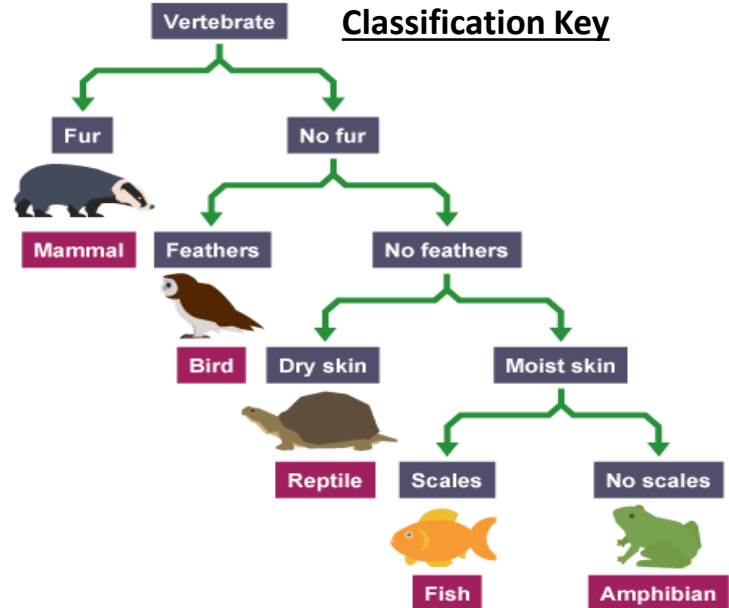
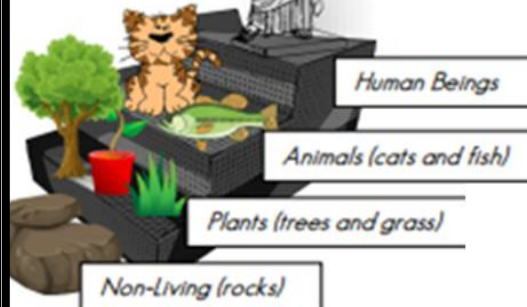


### Classification Key








In about 350 B.C. Aristotle (a Greek philosopher) classified all things into 4 main groups.



A classification key is a series of questions that help you identify and group something.

	vertebrate	An animal with a back bone
	invertebrate	An animal with no back bone
	living	Something that is alive
	non-living	Something that has never been alive (rocks)
	environment	Surroundings, habitat
	pollute	Make dirty, contaminate

### Tier 2 Vocabulary

	similarity	Things that are the same
	evidence	Proof
	accurate	Correct
	predictions	Think about what will happen
	conclusions	use evidence to make a decision

Environments can change and that this can sometimes pose dangers to living things.

Human made threats to the environment:  
 -Air pollution  
 -Water pollution  
 -Rubbish

	mammals	-fur or hair -warm blooded -drink milk when they are babies
	birds	-warm blooded -wings, feathers, a beak -babies hatch from eggs
	reptiles	-scales -cold blooded -usually lay eggs on land
	amphibians	-live in water and on land -moist skin -usually lay eggs
	fish	-live in water -have gills, scales, fins -cold blooded -usually lay eggs

## Rights of the Child/Global Goals

**Global Goal 14:** Life below water

**Global Goal 15:** Life on land

**Article 29** I have the right to an education which develops my personality, respect for others' rights and the environment.

## Big Ideas

Habitats provide living things with what they need.

Living things have systems, each with its own job.

## Prior learning

Animals can be put in to groups Y1

Alive, dead, never alive Y2

Basic food chains Y2

Basic needs for survival Y2

Use of keys to sort (rocks) Y3

## National Treasures

**Jane Goodall is a British scientist.** She is an expert on chimpanzees. She campaigns to protect the environment, for animal rights and for conservation.



# THE DIGESTIVE SYSTEM AND TEETH

## TOOTH DECAY



- 1.) Tooth decay is the destruction of your tooth enamel
- 2.) It can be a problem for children, teens and adults.
- 3.) Plaque, a sticky film of bacteria, constantly forms on your teeth.
- 4.) When you eat or drink foods containing sugars, the bacteria in plaque produce acids that attack tooth enamel.
- 5.) Tooth ache and bad breath are symptoms of tooth decay.

## Topic (Tier 3) Vocabulary



digestion

Changing food in to energy



saliva

Liquid that helps you chew and digest food



predators

An animal that hunts other animals



prey

An animal that is hunted

## Tier 2 Vocabulary



similarity

Things that are the same



evidence

Proof



accurate

Correct



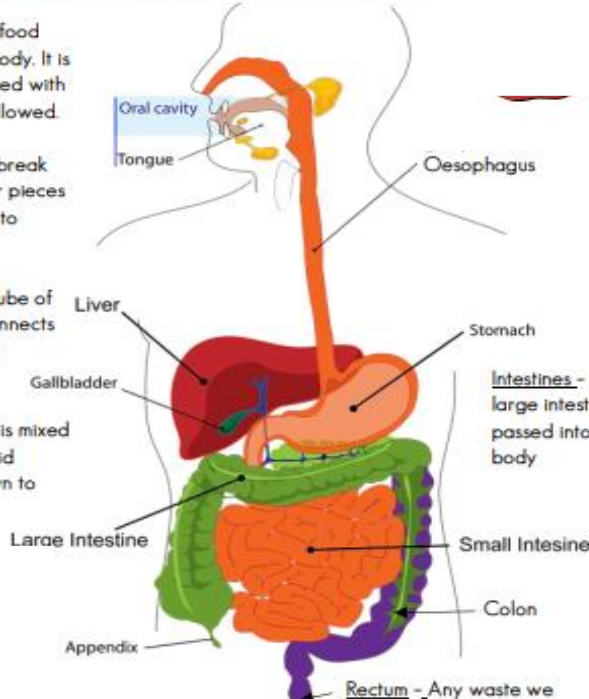
predictions

Think about what will happen



conclusions

use evidence to make a decision

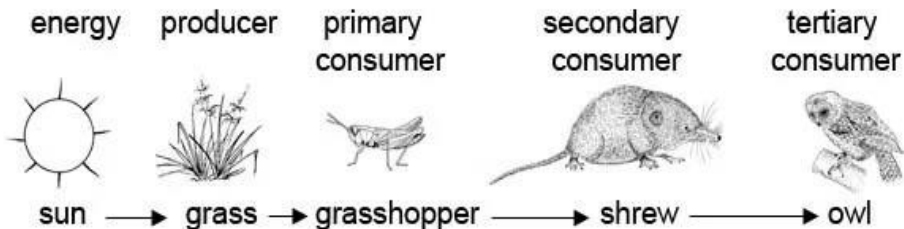
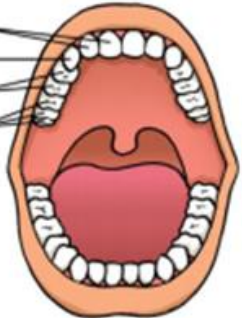


**Intestines** - Liquid from the stomach passes into the small and large intestines. This is where nutrients and water we need is passed into the blood stream and transported around our body

**INCISORS** - At the front of the mouth and used for biting  
**CANINES** - Sharpest teeth. Next to incisors and used for tearing. Sharp and pointed in predators for killing prey.  
**PREMOLARS** - Flat, wide and used for chewing towards the back of the mouth.  
**MOLARS** - At the back of the mouth. Used for chewing and grinding food. Wide and flat in shape, including wisdom teeth at the back which appear in adulthood.

**Rectum** - Any waste we do not need is stored here until it is ready to leave the body.

incisors  
canines  
premolars  
molars



## Rights of the Child/Global Goals

**Article 24:** Every child has the right to the best possible health.

**Global Goal 3:** Good health and wellbeing.

## Big Ideas

Living things have systems, each with its own job.

## Prior learning

Body parts that link to senses Y1

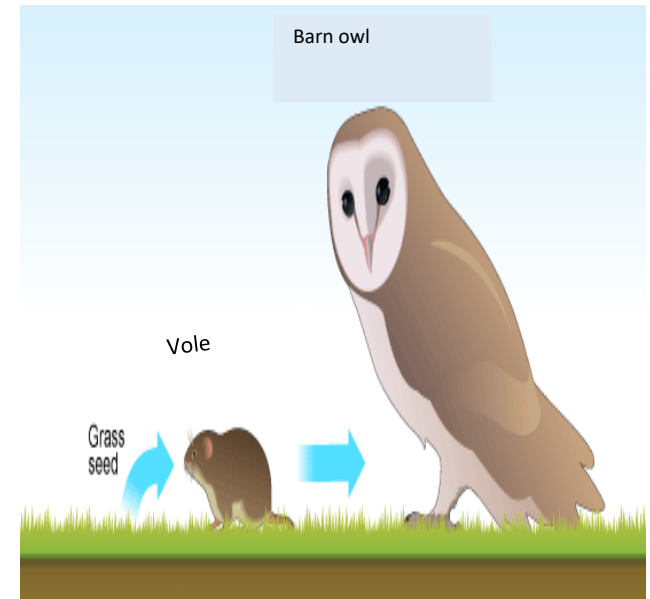
Basic needs for survival Y2

Skeleton Y3

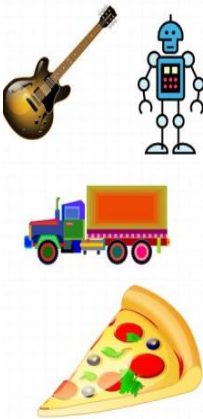


Healthy eating KS1/Y3

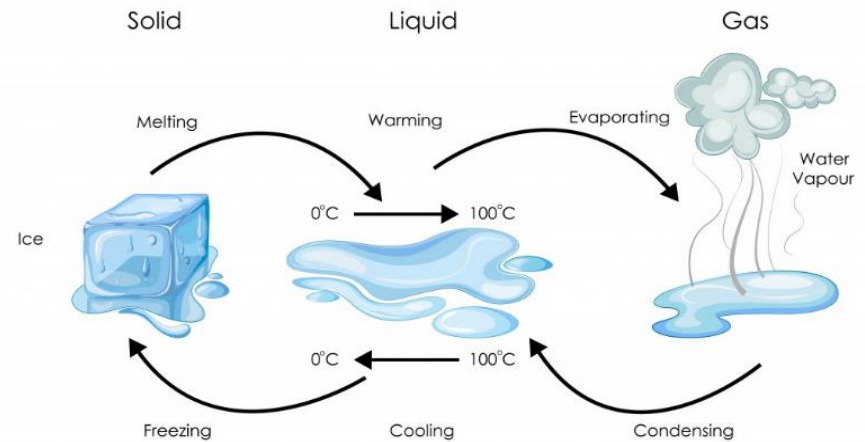
## National Treasures

**British wildlife and their food chains**

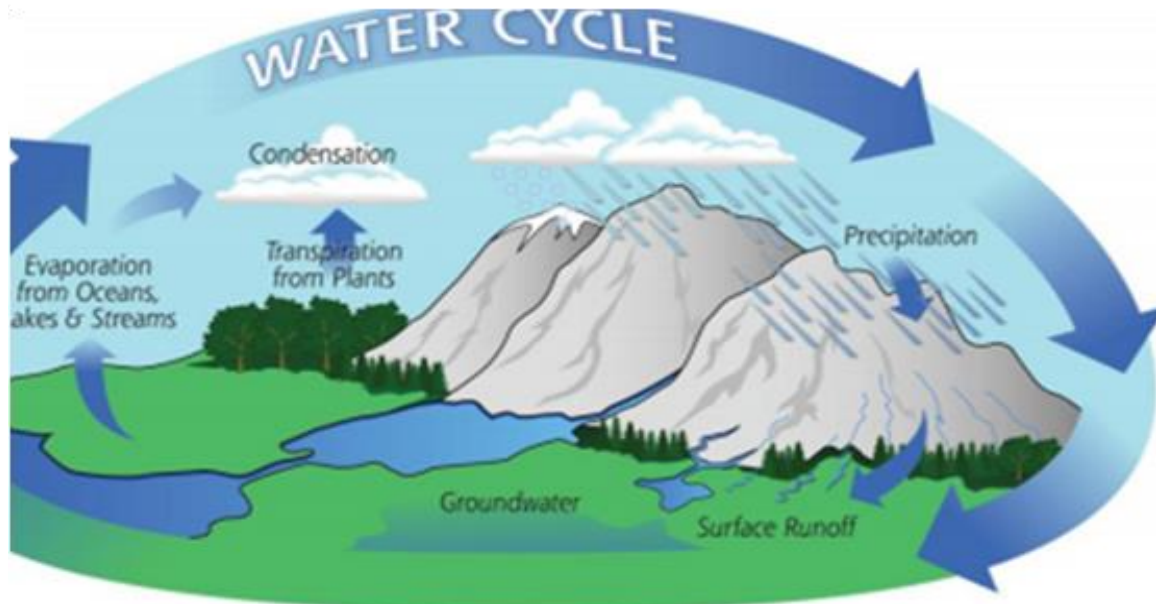









Solids	Liquids	Gases	FEATURES
			<ul style="list-style-type: none"> <li>• Solids hold their shape. (Salt, sand and sugar are tiny solids so they pour like a liquid but they pile up and are not wet.)</li> <li>• Liquids form a pool not a pile!</li> <li>• Gases escape from an unsealed container and fill the entire volume of space.</li> </ul>








The rate of evaporation increases as temperature increases.



### Tier 2 Vocabulary

	similarity	Things that are the same
	evidence	Proof
	accurate	Correct
	predictions	Think about what will happen
	conclusions	use evidence to make a decision

### Topic (Tier 3) Vocabulary

	state	Solid, liquid or gas
	melting	Changing from solid to liquid
	evaporation	Changing from liquid to gas
	condensation	Changing from gas to liquid
	thermometer	Used to measure temperature

## Rights of the Child/Global Goals

### Article 13

I have the right to find out and share information.

**Global Goal:** responsible consumption and production.

## Big Ideas

Materials can exist in different states; these states can sometimes be changed.

## Prior learning

Materials' properties and uses KS1

## National Treasures

### The Snowman



## VIBRATIONS

Sound is made when an object vibrates and therefore causes the air around it to vibrate too. These vibrations are carried to your ear for you to hear them.



Sound vibrations can travel through different materials:

**SOLIDS:** metals, stone, wood  
**LIQUIDS:** water  
**GASES:** air

Sound travels better through some materials than others. It travels very well through metal pipes for example.

The louder the volume, the bigger the vibrations. The size of the vibration is called the amplitude. Quieter volumes have smaller amplitudes and louder sounds have larger amplitudes.



Sounds travel in a wave. The vibrations make air particles close to the object vibrate, which then passes the vibrations to the particle next to it and so on - like dominoes falling!



# SOUND

## DID YOU KNOW?

Sounds get fainter (quieter) as the distance from the sound source increases.

The volume of a sound is how loud or quiet the sound is. It can be altered by changing the strength of vibrations e.g. banging harder on a drum. Sounds are vibrations that travel through the air.

## PITCH

The pitch of a sound is how high or how low it sounds. A high pitch has a high sound and a low pitch has a low sound.

### Stringed Instruments

Tighter, thinner or shorter strings make higher pitches. Faster vibrations make pitches high and slower vibrations make pitches low.



### Wind Instruments

The column of air inside the instrument causes it to vibrate. Shortening this makes a higher sound, lengthening it makes a lower sound.



### Percussion Instruments

The surface is struck and it therefore vibrates. Smaller instruments have higher sounds (smaller keys of a xylophone, hand bells etc.). The tighter or thinner the skin on a drum, the higher the pitch.



## Tier 2 Vocabulary



similarity

Things that are the same



evidence

Proof



accurate

Correct



predictions

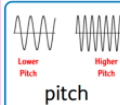
Think about what will happen



conclusions

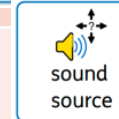
use evidence to make a decision

## Topic (Tier 3) Vocabulary



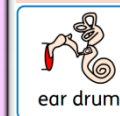
pitch

High or low



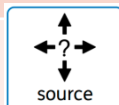
sound source

The object that makes the sound



ear drum

Part of the ear that vibrates when sound reaches it causing you to hear things



source

Where something comes from



volume

Loud or quiet

## Rights of the Child/ Global Goals

### Article 13

I have the right to find out  
and share information.

## Prior learning

Solid, liquid and gas (Y4)  
Properties of materials (KS1 and Y3)

## Big Ideas

Light and sound can be reflected  
and absorbed; They enable us to  
see and hear.

## National Treasures

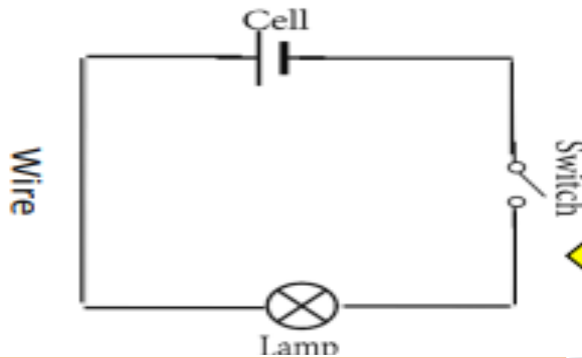
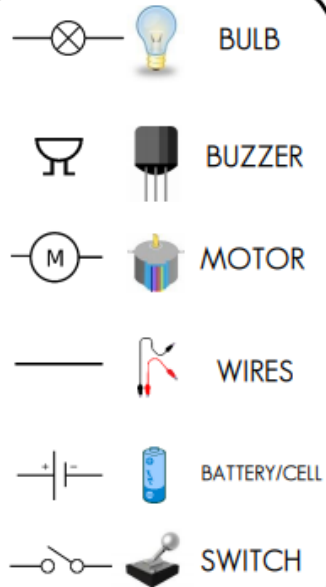
### British orchestras:

Groups of musicians who play together.





# ELECTRICITY



An electrical conductor lets electricity pass through. They are often metals but it also includes water.



An electrical insulator does not let electricity pass through.



## Appliances That Use Electricity



### Topic (Tier 3) Vocabulary



This can open and close an electrical circuit



A closed path followed by an electrical current.



A type of energy that can power electrical appliances

### Tier 2 Vocabulary



Things that are the same



Proof



Correct



Think about what will happen

use evidence to make a decision

## Rights of the Child/Global Goals

### Article 13

I have the right to find out and share information.

### Global Goals 7 and 12:

- Affordable and clean energy
- Responsible consumption and production.

## Prior learning

Some sources of light are electrical Y3

## Big Ideas

Electricity can make circuits work and can be controlled to perform useful functions.

## National Treasures

**Wind farms:** These are a renewable sources of electricity around the UK.

