




## Rocks (Year 3)

### Vocabulary

fossilisation	fossil	particle	rock	soil	sediment
					
Process of a fossil being formed.	Imprints in rocks of dead plants and animals.	Tiny pieces of matter.	Natural solid made by minerals coming together.	Mixture of tiny particles of rock, dead plants and animals.	Tiny bits of rock, minerals and organic matter found in water.

### Types of rocks

igneous rock	metamorphic rock	sedimentary rock
<ul style="list-style-type: none"> <li>➤ Contain crystals.</li> <li>➤ Some have holes from bubbles when the rock formed.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Often have grains that are all in the same direction.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Grains of sediment squashed together.</li> </ul>
 <p style="text-align: center;">Granite      Scoria</p>	 <p style="text-align: center;">Marble      Slate</p>	 <p style="text-align: center;">Sandstone      Limestone</p>

### 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)

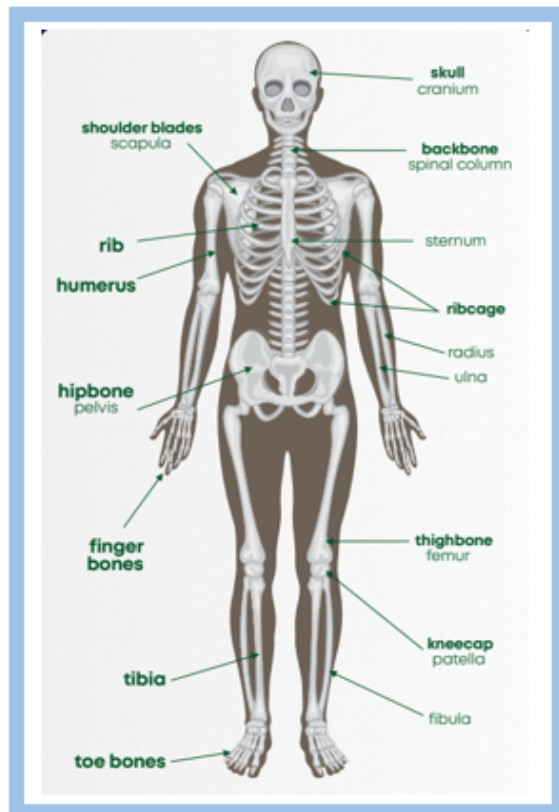
### Knowledge:

- There are many different types of rocks which can be grouped according to their properties.
- Sedimentary rocks are formed by layers of sediment under the sea. Metamorphic rocks are formed under huge heat and pressure. Igneous rocks are formed by volcanoes.
- Rocks have air spaces in them. Some let water pass through.
- Fossils are formed when rock forms around things that once lived. This takes thousands of years.
- Soil is made from rocks and organic matter. Organic matter is made from decaying remains of living things.

## Animals Including Humans (Year 3)

### Vocabulary

<b>voluntary</b>	<b>involuntary</b>	<b>joint</b>	<b>nutrition</b>	<b>skeleton</b>
Something that we choose to do.	Something that we do not choose. It happens without us thinking.	The place where two bones together.	Food or nourishment.	A framework of bones.



### Knowledge:


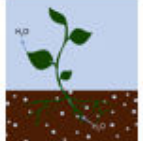




- Muscles help us to move and keep us alive. Some of our muscles are voluntary muscles that we control. Some of our muscles are involuntary muscles that we do not control, like the heart.
- Humans and some other animals have a skeleton and muscles on the inside of their bodies.
- Bones give us shape, help us to move and protect our bodies.
- A joint is the place where our bones come together.
- Humans get nutrition from what they eat.

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

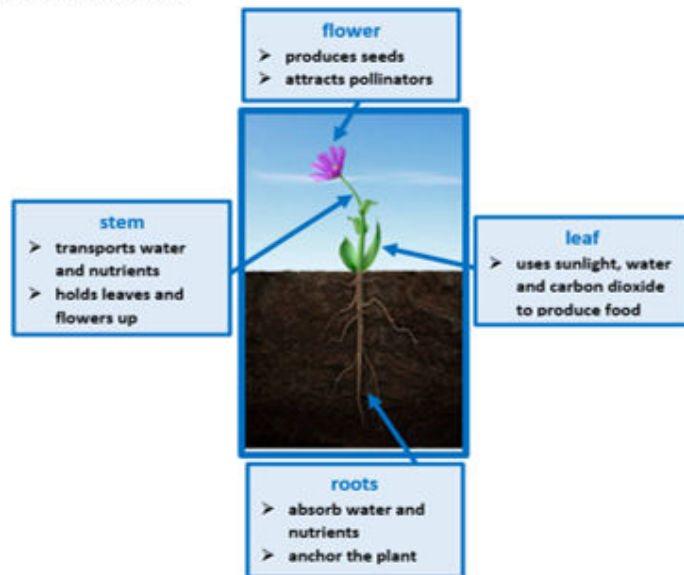
- I can describe which part of the body is associated with with sense. (Y1)
- Describe the basic needs of animals: food, air, water. (Y2)
- I know the importance of exercise and eating the right amounts of different types of foods. (Y2)

## Plants (Year 3)

### Vocabulary

<u>nutrients</u>	<u>transpiration</u>	<u>pollination</u>	<u>germination</u>	<u>seed dispersal</u>	<u>botanist</u>
					
Needed by living things to grow and survive.	Process of water moving through a plant.	Transfer of pollen to a stigma.	When a seed starts to grow.	Moving the seeds away from the parent plant so they can germinate and grow.	A scientist who studies plants.

### Parts of a plant



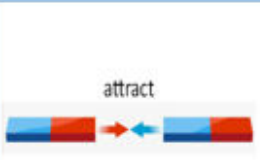




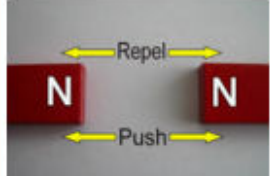
### Knowledge

- Flowering plants all have roots, a stem or trunk, leaves and flowers, but do not all look the same.
- Plants need air, light, water, nutrients from soil and room to grow. But plants need differing amounts of things in order to thrive.
- Water moves from the root of a plant upwards via the stem.
- Plants absorb water from the soil to help them live and grow.
- Plants with larger root systems can take more water from the soil.
- Flowering plants can only produce seeds if pollen is transferred from the anther to the stigma.
- Plants spread their seeds in different ways – wind, animals, gravity.

- Things I already know that I can connect new information with
- I can find the root, stem, leaf and flower of a plant. (Y1)
- Plants need water, light and a suitable temperature to grow and stay healthy. (Y2)

## Forces and Magnets (Year 3)

### Vocabulary

attract	force	friction	magnet	magnetic pole	repel
					
Draw towards using a magnet.	Push or pull.	When two surfaces rub together.	Object producing a magnetic field.	North or south on a magnet.	Drive back using a magnet.

### Forces in action



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



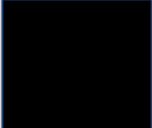




- Forces such as bending and squashing can be applied to materials and objects. (Y2)

### Knowledge:

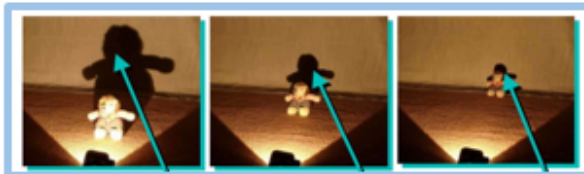
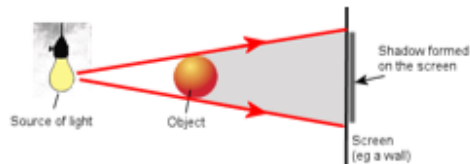
- A force is a push or a pull. A force makes something move, change speed, change direction or change shape.
- We can change the amount of force that we use when we push or pull.
- Friction is a force between two surfaces. Rough surfaces create greater friction. Smooth surfaces create less friction.
- Magnetic force is an invisible push or pull that can act from a distance.
- Magnetic materials are attracted to a magnet.
- A magnet has two opposite poles, the North and South pole. Unlike poles attract. Like poles repel.

## Light (Year 3)

### Vocabulary

transparent	opaque	dark	light	light source	reflect	shadow
						
A property of an object that means light can pass through.	A property of an object that means light cannot pass through.	The absence of light.	Form of energy that travels in waves.	Something that produces light.	When light bounces off a surface.	Dark shape made when something blocks light.

### Shadows



### 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)

### Knowledge:

- Light enables us to see things. Darkness is the absence of light.
- The Sun is the most important source of light for life on Earth. Light from the Sun can be dangerous.
- Light is reflected from surfaces.
- Light travels in straight lines. It can pass through transparent materials, but cannot pass through opaque materials.
- A shadow is created when an object blocks the path of light.
- If a light source is closer to an object, the shadow appears larger.