

# ROCKS, Shocks, Shakes & WILD WEATHER



## WHAT WAS THE STONE AGE?

Prehistory	The period of time before history began. Before any written records were found.
Paleolithic	'The Old Stone Age'
Mesolithic	'The Middle Stone Age'
Neolithic	'The New Stone Age'
Stone Age	A period in prehistory when early humans used stone.
Bronze Age	A period in prehistory when humans used bronze.
Iron Age	A period in history when humans used Iron.
Archeologist	A historian who digs to find evidence about what life was like in the past.
Artefact	An object from history that tells us what life was like in the past.



The Stone Age is a period in prehistory that covers over 3 million years. It began when the first human-like animals came into existence. It is called The Stone Age because early humans used stone tools.

## LIFE IN THE STONE AGE

### Stone Age Homes

During the Palaeolithic Period, early humans sheltered from the cold in caves. During the Mesolithic and Neolithic periods, early humans began building shelters and homes.

### Stone Age Clothes

During The Stone Age, early humans wore animal skins to keep them warm. These were sewn together using bone needles. They also made jewellery from teeth.

### Stone Age Food

The main source of food during The Stone Age was meat from animals which they hunted. They also gathered plant-based foods like leaves, berries, nuts and seeds.

### Communication during The Stone Age

Symbols have been found on cave walls and it is believed that these were used to communicate.

### Things to do in The Stone Age

During The Stone Age, people gathered food and hunted animals to eat, they built shelters, made tools and weapons from stone, made their own clothing from animal skins, painted on cave walls, made fires to cook on and keep warm, made jewellery and made objects from clay.



# D&T: STONE AGE SHELTERS

Structure	A structure is a building or object constructed from different parts.
Strengthen	To make something stronger or more stable.
Audience	The audience of a product is who it is being made and designed for. Our shelters are being designed and made for Stig, a Stone Age Man.
Purpose	The reason a product is being made. The purpose of our structures is to provide warmth and shelter.
Foundation	The lowest part of a building that everything is built onto.
Shelter	To provide protection and cover from bad weather..
Natural Materials	Things that occur naturally and can be found in nature. For example, sticks, leaves, stones.
Design	To plan carefully what a product will look like and how it will be made.



# CAVE ART



Early humans used to paint on the walls of caves, using natural sedimentary rocks like coal, chalk, yellow ochre and red oxide rocks. They would grind up these coloured rocks to create a powder which was mixed with water to make a paste that could be used to paint with.



Most cave paintings were of prehistoric animals, hunters or handprints. Symbols have also been found on cave walls and it is believed these were used to communicate.

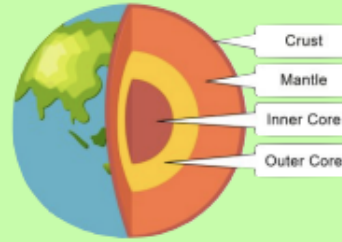




# GEOGRAPHY

## The Earth's Structure

The Earth's structure is made up of 4 layers: the **crust**, the **mantle**, the **outer core** and the **inner core**.



## Tectonic Plates

The Earth's crust is broken into large pieces of rock. These are called **tectonic plates**. The tectonic plates can move in different ways. They can rub together, move apart and move towards each other.



## Earthquakes

An **earthquake** is the sudden shaking of the Earth's surface. This is caused by movement of the **Tectonic Plates** that make up the Earth's surface.



## Volcanoes

A **volcano** is an opening in the Earth's crust that allows **magma and hot ash** to escape. Volcanoes are caused when pressure builds up inside the Earth. This is caused by the **tectonic plates** moving towards each other, which produces **eruptions**.



## Tsunami

A **tsunami** is a **large wave** usually caused by an underwater earthquake or a volcanic explosion. Tsunamis are caused by movement of the tectonic plates in the Earth's crust, under the water.



# ART

Hokusai was a famous Japanese artist. He enjoyed painting landscapes and used different techniques, including painting, sketching and printing. He is most famous for his series named *The Thirty-Six View of Mount Fuji*, which includes his most famous print, *The Great Wave off Kanagawa*.



## SCIENCE: ROCKS, FOSSILS and SOILS

There are 3 different types of **ROCK**. They are formed in different ways and have different properties and uses.



Sedimentary Rock is made from lots of small pieces of materials. It is formed when plant or animal remains, sand, mud and other small pieces of rock get squashed together over time. Sedimentary rocks are soft and permeable, so useful for drawing.

Igneous Rock is made from melted rocks. It is formed when magma cools. They are tough and strong so useful for building.

Metamorphic Rock is made from igneous or sedimentary rock. It is formed when rock is heated and compressed under great pressure. It is hard, glossy and impermeable and often used for kitchens and bathrooms.



**FOSSILS** are found in sedimentary rock. They are formed when a plant or animal dies. The animal or plant sinks to the ground and gets covered in mud and sand. Over time a layer of rock is formed and a cast of the animal or plant is left in the rock.

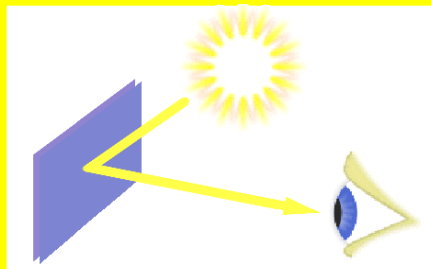
**SOIL** is made up of four things and is very important to life as it allows things to grow.



# Science: LIGHT

Light	A form of natural energy that travels in a wave from a source.
Light Source	An object that makes its own light.
Dark	The absence of light.
Reflection	The process where light hits the surface of an object and bounces back to our eye.
Reflect	To bounce off
Reflective	A word to describe something that reflects light well.
Ray	Waves of light are called light rays or beams.
Pupil	The black part of the eye which lets light in.
Retina	A layer at the very back of the eye. It takes the light the eye receives and changes it into nerve signals to send to the brain.
Shadow	An area of darkness where light has been blocked.
Opaque	A word to describe objects that do not let light pass through.
Translucent	A word to describe objects that let some light through. You can't see through these objects properly.
Transparent	A word to describe objects that allow light to travel through them easily, meaning you can see through the object.

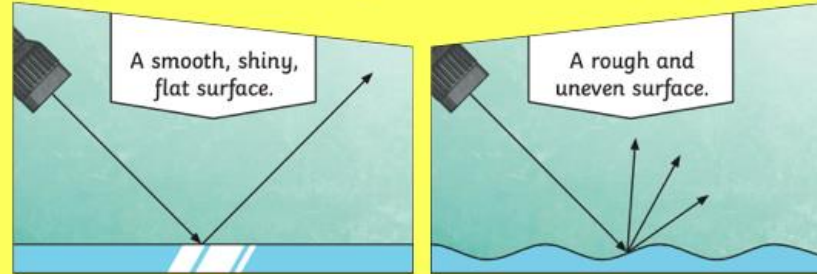
We need light to be able to see things. Light travels in a straight line. When light hits an object, it is reflected (bounces off). If the reflected light hits our eyes, we can see the object. Different parts of our eyes help us to see light.



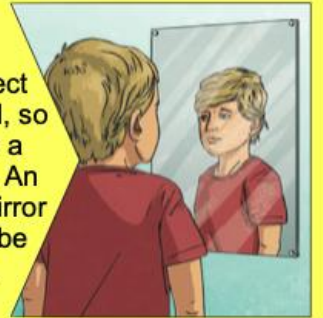
## REFLECTIVE MATERIALS

Some surfaces and materials reflect light well. Other materials do not reflect light well. Materials that reflect light well are called reflective materials.

The surfaces that reflect light best are smooth, shiny flat surfaces.



Mirrors reflect light very well, so they create a clear image. An image in a mirror appears to be reversed.



## THE EYE

The pupils control the amount of light entering the eyes. This is the black circle in the middle of the eye. It changes size to control the light. If too much light enters, then it can damage the retina. To help protect the eyes, you can wear a hat with a wide brim and sunglasses with a UV rating. The retina is at the very back of the eye and it takes the light the eye receives and changes it into nerve signals to send to the brain.



## SHADOWS

A shadow is caused when light is blocked by an opaque object. A shadow is larger when an object is closer to the light source. This is because it blocks more of the light. Where the light source is effects where the shadow appears.

