

Welcome aboard your journey towards new adventures in year 4. We hope it will be an experience you'll never forget!

Year 4 - Journeys and Adventures

English: Our first inspiring read will help us to overcome our fears. It is called **Black Dog**. Then we'll be reading about **Ernest Shackleton** and his adventures in the Antarctic. We'll be practising our writing skills to include using **subordinate clauses**.

Maths: Our first unit is **Place Value**. In year 4 we begin to work with 4 digit numbers and explore how numbers change when you count up in multiples of 1000. We also look at **multiplication** and revise the rules that occur when you multiply a number by 10 or 100.

Reading: children are learning to develop these skills:

V – identify the meaning of vocabulary

I – pick up on inferences

P – predict what may happen

E – explain what is happening

R – Retrieve information

S – summarise

Music: Mamma Mia!

Learning inspired by Abba. Learn the difference between **pulse** and **rhythm**. How to play a **glockenspiel** accurately and in time.

PE:
Tennis and
Throwing skills

Art: Improve their art technique using charcoal, paint, oil pastels and pen. Look at the work of Van Gogh.

RE: Judaism

We will learn about the special promises (covenants) Jewish people have with God and some of the ways they express their special relationship with

Science: During our first unit we will be learning all about **Rocks and soils**.

We will learn how to **group** and **compare** different rocks based on their appearance and physical properties.

How to describe how **fossils** are formed and how to recognise that **soils** are made from rocks and organic matter.

Topic - **History** and **Geography:**

Some facts about the **Eiffel tower** and **Louvre** museum.

Famous people through history - **Mary Anning**

A timeline of **Shackleton's** expedition and plot his journey on a map.

How to locate **Europe, France, the UK** and **Antarctica** on a map. Locate the 4 countries of the UK and label capital cities and Lyme Regis.

PHSE: Being me in my world

How my attitudes and actions make a difference to the class team, feeling included and excluded, how their actions affect themselves and others. How rewards and consequences motivate behaviour.

French: learn how to greet your teacher and a friend, learn how to say good bye, locate Paris on a map of France, be able to spell Paris

Science: Here is our learning for the term:

Key Vocabulary		Key Knowledge	
fossilisation	The process by which fossils are made.	<p>Soil is the uppermost layer of the Earth. It is a mixture of different things:</p> <ul style="list-style-type: none"> • minerals (the minerals in soil come from finely broken-down rock); • air; • water; • organic matter (including living and dead plants and animals). 	<p style="text-align: center;">Soil</p>
palaeontology	The study of fossils.		
erosion	When water, wind or ice wears away land.		
<p>Caves are formed when water permeates through the base rock and erodes some of the rock away. Over thousands of years these caves can become very large.</p>			

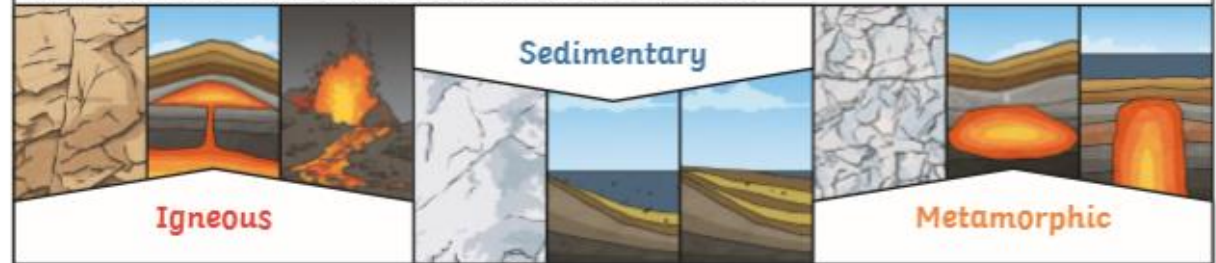
Fossilisation				
An animal dies. It gets covered with sediments which eventually become rock.	More layers of rock cover it. Only hard parts of the creature remain, e.g. bones, shells and teeth.	Over thousands of years, sediment might enter the mould to make a cast fossil . Bones may change to mineral but will stay the same shape.	Changes in sea level take place over a long period.	As erosion and weathering take place, eventually the fossil becomes exposed.


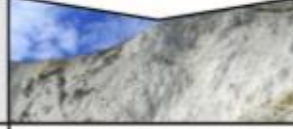









Key Vocabulary

igneous rock	Rock that has been formed from magma or lava .
sedimentary rock	Rock that has been formed by layers of sediment being pressed down hard and sticking together. You can see the layers of sediment in the rock.
metamorphic rock	Rock that started out as igneous or sedimentary rock but changed due to being exposed to extreme heat or pressure.
magma	Molten rock that remains underground.
lava	Molten rock that comes out of the ground is called lava .
sediment	Natural solid material that is moved and dropped off in a new place by water or wind, e.g. sand.
permeable	Allows liquids to pass through it.
impermeable	Does not allow liquids to pass through it.

Key Knowledge

There are three types of naturally occurring rock.



Natural Rocks			Human-Made Rocks
Igneous	Sedimentary	Metamorphic	
Obsidian	Chalk	Marble	Brick
			
Granite	Sandstone	Quartzite	Concrete
			
Basalt	Limestone	Slate	Coade Stone
			

Some words you might use to discuss the properties of a rock:

hard, soft, **permeable**, **impermeable**, durable (meaning resistant to weathering), high density, low density. Density measures how 'bulky' the rock is (how tightly packed the molecules are).

To look at all the planning resources linked to the Rocks unit, [click here](#).

Rocks and Soils

SEDIMENTARY

These rocks form under the sea. Rocks are broken into small pieces by wind/water (**erosion**). They settle as mud, sand, minerals and even remains of living things. Over time, layers pile up and the pressure turns this **sediment** into rock.



limestone
chalk
sandstone

Igneous

Far underground, the temperature is so hot, rock melts into a liquid (molten rock).

When the liquid is underground it is called '**magma**' and it can cool to form an intrusive rock. When it spills out (volcano), the liquid is called '**lava**' and it cools to form extrusive rock.



lava

obsidian
granite
basalt

magma



METAMORPHIC

When sedimentary or igneous rock is near magma, it **heats** up and chemicals change in the rock. However, it does not heat up enough to melt it. As it cools it becomes metamorphic rock.



marble
quartzite
slate

MAN-MADE ROCKS (ANTHROPIC)

These rocks are made by humans. **CONCRETE** – a mixture of water, sand/rock/gravel and cement (chalk & clay)

BRICKS – Clay soil, sand or lime which have been air-dried or fire-hardened.

MOCK ROCK – Victorians made rock gardens and surfaces that looked like rock.



FOSSILS

A fossil is the remains or the impression left by a prehistoric plant or animal embedded in rock.

It takes place in sedimentary rock because the heat from lava and magma in igneous and metamorphic rock would be too high for fossils to survive.

1.) An animal, creature or plant dies and ends up at the bottom of the sea. It gets covered in a layer of rock.

2.) Over time, more layers of rock form on top and the only thing which would remain are the bones or the space where the bones used to be (mould fossils).

3.) Sometimes sediment enters the space where the bones used to be and takes the shape of the creature (cast fossil).

4.) Over a long period, the sea may recede / go back leaving the rock.

5.) Erosion and weathering of the rock means the fossil can now be seen!



What is soil made from?

AIR – Oxygen, carbon dioxide, nitrogen etc.

ORGANIC MATTER – Living and dead plants and animals.

WATER – Air and water fill the gaps between particles of soil.

MINERALS – Minerals come from broken down rock.

PROPERTIES OF ROCKS

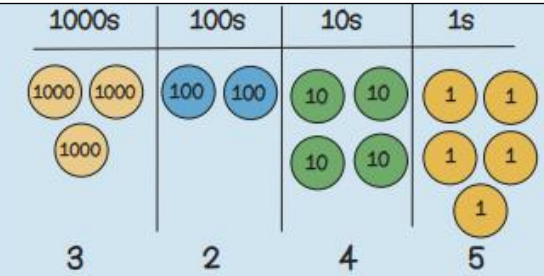
1.) **HARD / SOFT** – Some rocks need to be cut or split with tools because they are so hard (e.g. granite) but others are soft and can be moulded (e.g. clay).

2.) **PERMEABLE / IMPERMEABLE** – Permeable rocks allow water to pass through (e.g. pumice) but impermeable rocks do not let water pass through (e.g. marble)

3.) **DURABLE** – Rocks which are resistant to erosion last longer and are more durable. Buildings are often made with these (e.g. limestone)

4.) **DENSITY** – If the particles in the rock are tightly packed then it has a high density. These rocks would sink in water (e.g. basalt).

Maths: Here's how our Maths learning will look this term.



three thousand, two hundred and forty-five
3 thousands, 2 hundreds, 4 tens and 5 ones

In order from smallest to largest

2987, 5894, 6080
4261, 4406, 4540

Stop and look.
What do you notice?

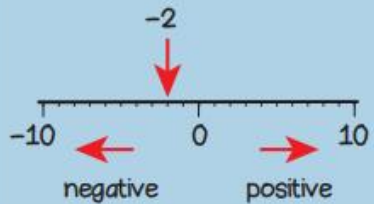
thousands digit
round
multiple
positive
negative

1000 less

1000 more

1000 less than 3245 is 2245

1000 more than 3245 is 4245



5 or more - round up
4 or less - round down

Round to the nearest ten

6538 → 6540



Round to the nearest hundred

6538 → 6500



Round to the nearest thousand

6538 → 7000



Year 4 Term 1



Equilateral Triangles
3 equal sides

Isosceles Triangles
2 equal sides

trapezium
parallelogram
rhombus
kite
adjacent
equilateral
scalene
isosceles

Scalene Triangles
all sides different

Quadrilaterals are shapes with
4 straight sides

parallelogram - opposite
sides parallel

rectangles - 4 right angles

rhombus - 4 equal sides

squares

Trapezium - exactly
one pair of parallel sides

Kites - 2 pairs of equal
adjacent sides