



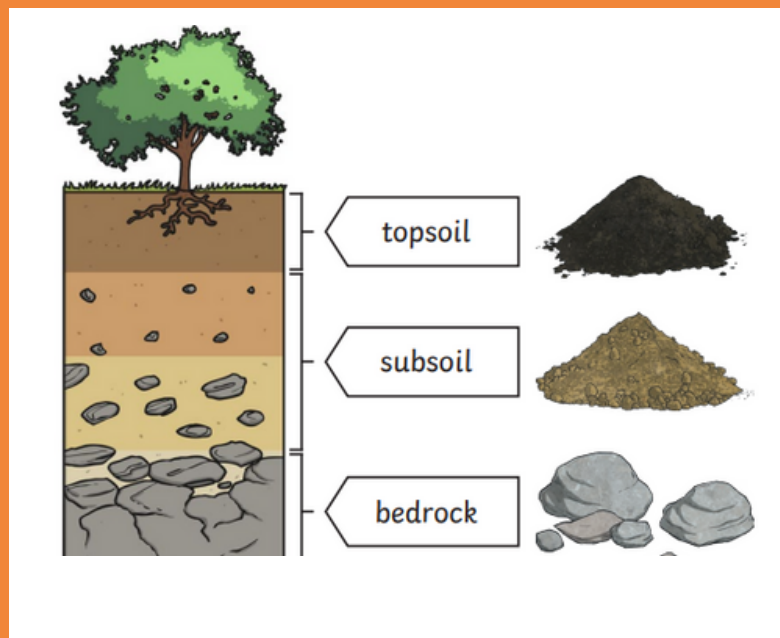
What do rocks tell us about the way the Earth is formed?

YEAR 3
SCIENCE

KNOWLEDGE MAT



LAYERS OF SOIL



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.

fossilisation = The process by which fossils are made.

palaeontology = The study of fossils

erosion = When water, wind or ice wears away land.

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.

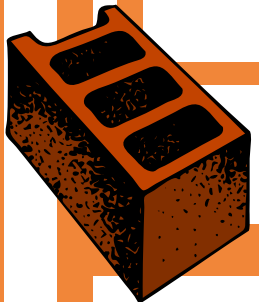
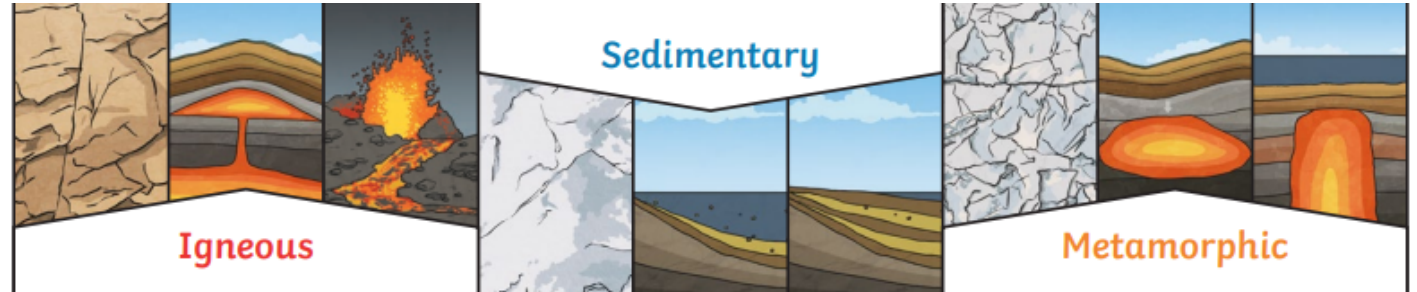
As erosion and weathering take place, eventually the fossil becomes exposed.



KEY KNOWLEDGE



There are three types of naturally occurring rock.



NATURAL ROCKS

MAN-MADE ROCKS

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).