

# Year 3: Rocks

## TYPES OF ROCKS:



**SEDIMENTARY**

Sedimentary rocks are formed from pre-existing rocks or pieces of once-living organisms.

They are formed when small, weathered fragments of rocks or shell settle and stick together.

Sedimentary rocks often have distinctive layering or bedding.

### EXAMPLES:

Limestone and sandstone



**IGNEOUS**

Igneous rocks form when hot, molten rock, usually from a volcano, crystallizes and solidifies as it cools.

The melt originates deep with the Earth near active plate boundaries or hot spots, then rises toward the surface

There are two type: intrusive and extrusive

### EXAMPLES:

Granite and basalt.



**METAMORPHIC**

Metamorphic rocks started out as some other type of rock, but have been substantially changed from their original form.

Metamorphic rocks are formed when rocks in the Earth's crust get squashed and heated in processes such as when tectonic plates press against each other.

### EXAMPLES:

Marble and slate.

## FOSSILS:

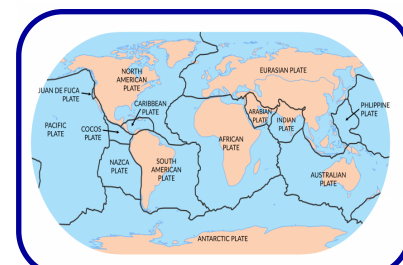


Fossils are formed when a plant or animal dies and is quickly covered with silt, or mud, so that it cannot be rotten by microbes or eaten by scavenging animals.

In time layers of sediment build, squashing the mud and turning it into stone around the dead plant or animal.

The materials in the body are replaced by minerals that flow in water through the rock, leaving a rock in the shape of the animal or plant that was once there.

## THE EARTH:



The Earth has a solid crust made up of tectonic plates with molten rock beneath.

Soil is made from tiny particles of rock, broken down by the action of weather (weathering)



## KEY VOCABULARY



**ABSORB:** soak up or take in



**CRUST:** the outermost solid shelf of a rocky planet, dwarf planet or natural satellite



**DECAYING:** gradually rotting away and being destroyed by a natural process



**EXTINCTION:** an animal or plant that no longer exists in the world or a place



**FOSSIL:** the remains or imprint of a prehistoric plant or animal in a rock



**GEOLOGIST:** a person who is an expert in the physical structure of earth and rocks



**GRAIN:** a tiny, hard piece of something e.g., sand, or soil



**IGNEOUS:** rocks that are formed by molten magma from volcanoes



**IMPRINT:** a mark or outline made by the pressure of one object on another



**MAGMA:** molten rock that is formed in very hot conditions inside the earth



**METAMORPHIC:** rocks that are formed when their original structure is changed by heat and pressure



**MINERAL:** formed naturally in rocks and in the earth



**MOLTEN ROCK:** rock that has been melted at a really high temperature.



**PALAEONTOLOGIST:** a person who studies the science of fossils



**PERMEABLE:** allowing water or gas to pass through or so



**POROUS:** has many holes which allow water or air to pass through



**PRESERVE:** to protect from decay



**ROCK:** a solid mass made up of minerals. Rocks form much of the earth's outer layer



**SCAVENGERS:** an animal that feeds on the decaying flesh of dead animals, dead plant material or refuse.



**SEDIMENT:** solid material that settles at the bottom of liquid



**SEDIMENTARY** rocks that are formed by sediment



**SOIL:** the substance where plants grow



**TECTONIC PLATES:** gigantic pieces of the Earth's crust and uppermost mantle



**VOLCANO:** a mountain from which hot molten rock, gas, steam and ash from inside the Earth sometimes bursts out



**WEATHERED:** changed or altered by the weather