

The Rock Cycle

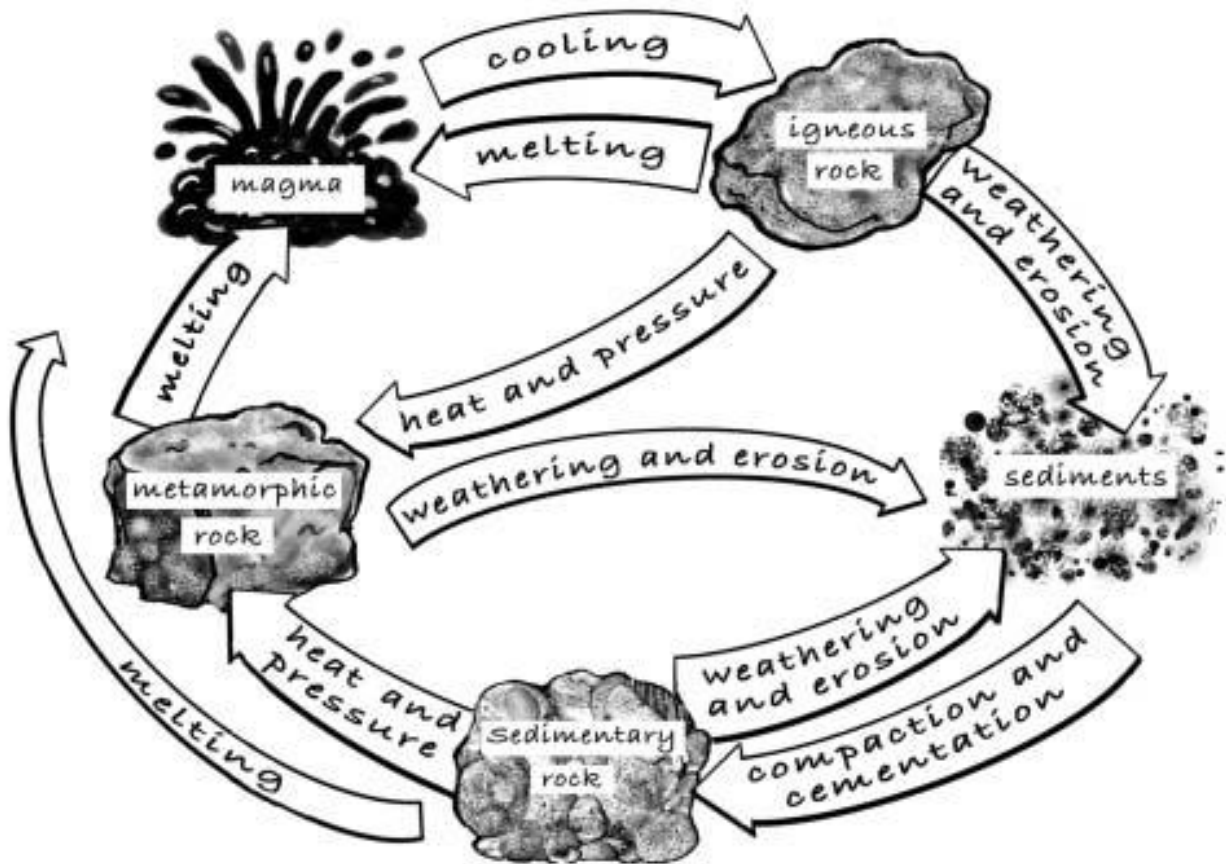
The geological process that forms rocks is cyclical. Each type of sedimentary, igneous or metamorphic rock can be changed into each other type of rock. This is known as the rock cycle. The following explanation starts with igneous rocks.

Igneous rocks start as magma. When magma (molten rock under the Earth's surface) and lava (molten rock on the Earth's surface) cools and hardens, it forms **igneous** rock. The igneous rock is broken down over time through the weathering process.

These particles of broken rock, or soil, are washed away by water and accumulate in lakes or oceans and harden into rock again, this time as sedimentary rock.

As the sedimentary rock is buried under more and more sediment, or comes into contact with magma, the pressure and heat can cause metamorphism to occur. This transforms the sedimentary rock into a metamorphic rock.

If metamorphic rock is buried more deeply, temperatures and pressures continue to rise. If the temperature becomes hot enough, the metamorphic rock melts and forms the molten rock called magma and so the cycle continues.



Purpose

To identify and describe some interactions within a system — the rock cycle.

Procedure

1. Read 'The rock cycle'.
2. Using as many of the rock cycle cards as you can, make a flowchart to explain how the rock cycle works.
3. Cut out the rock cycle cards and arrange them on an A3 sheet linking them together with the words and arrows cards.
4. Do not glue down the cards until you are sure of where you want to put them all.

