

Science: Rocks and Weathering

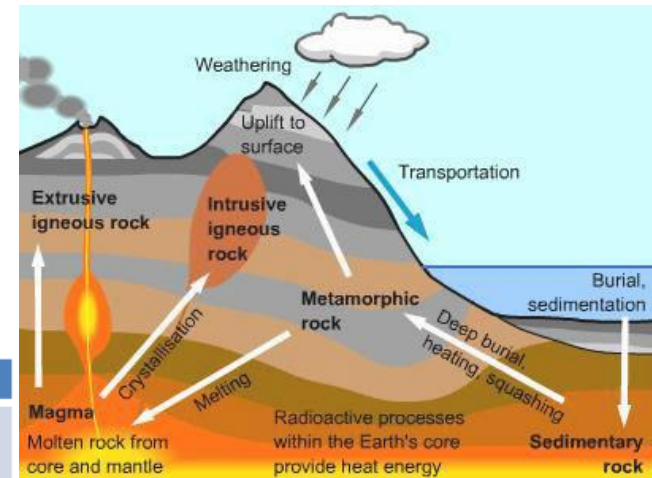
Year 8: TERM 2 Date : _____

Key definitions:

Physical weathering	The breakdown of rocks by things such as wind, rain, heat
Onion skin weathering	The breakdown of rocks into layers by repeated heating and cooling
Freeze-thaw	The breakdown of rocks which occurs when water freezes within cracks in the rock and expands.
Chemical weathering	The breakdown of rock by the action of chemicals e.g. the action of acid rain on chalk or limestone
Biological weathering	When seeds grow in the cracks in rocks and breaks the rock apart
Rock Cycle	The cycle of reforming rocks from one type to another.
Sedimentary rocks	Rocks formed when sediment such as sand gets squashed under its own weight. E.g sandstone, limestone.
Metamorphic rocks	Rocks which have changed as a result of heat and pressure. E.g. slate
Igneous rocks	Rock formed when lava or magma cools. E.g. granite, basalt

What is the rock cycle?

The **rock cycle** is the process by which rocks of one kind change into rocks of another kind. These rocks can change into the other kinds by physical processes: cooling, melting, heat, weathering/erosion, compacting (squeezing tightly together), cementing, and pressure. These processes can occur in different orders, and the cycle goes on forever



Types of Rock

Igneous Rocks

Rocks that have formed from hot magma cooling over time.

Examples
granite (intrusive) and basalt (extrusive)

Sedimentary Rocks

Rocks that have formed by the compression or pressure of small particles over time.

Examples
clay, shale, limestone, chalk

Metamorphic Rocks

Rocks that have changed over time through heat and pressure.

Examples
Marble (from limestone) and slate (from clay)

