

The Rock Cycle



Rock Types

- We can classify rocks into three major families
- Each rock has a different appearance
- The three families are igneous, sedimentary and metamorphic

Igneous

- Formed when hot magma or lava cools and solidifies
- Magma is beneath the Earth's crust, lava is outside!



Igneous

- When magma cools, it makes an intrusive rock, when lava cools it makes an extrusive rock



Sedimentary

- Made from loose material including sand, rocks, minerals and possibly animal or plant material
- The sedimentary rocks form layers called strata



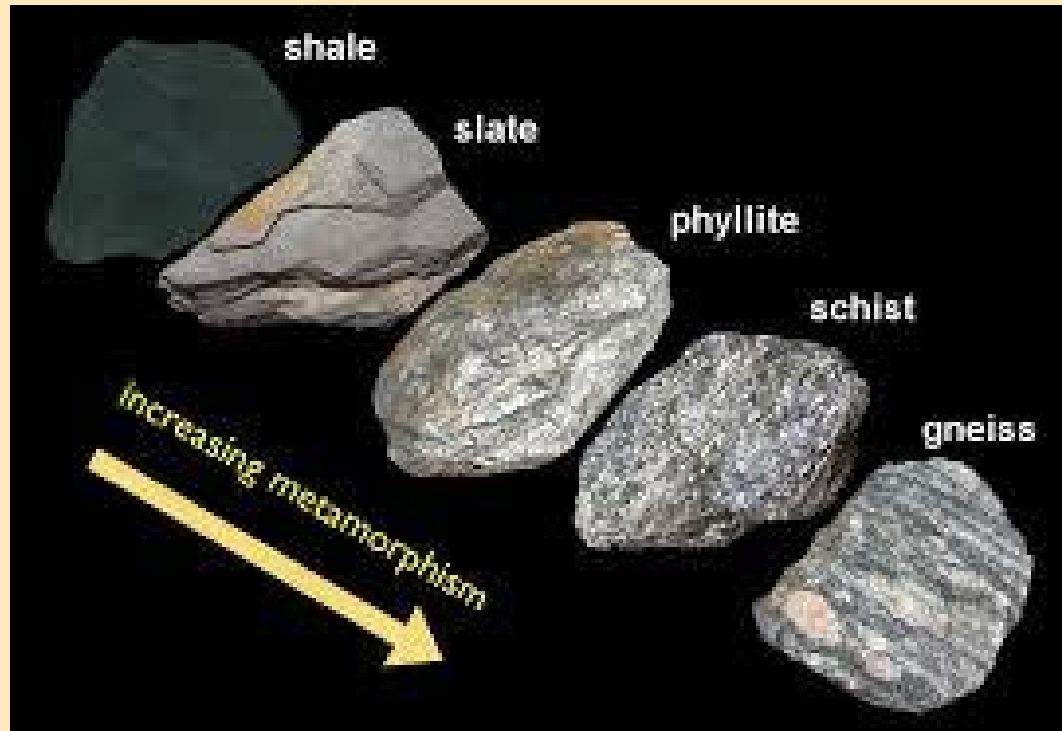
Stratification

- We can use the strata to give us clues as to what happened during each time period
- We can also date fossils found in the strata if we know how many years strata took to form!

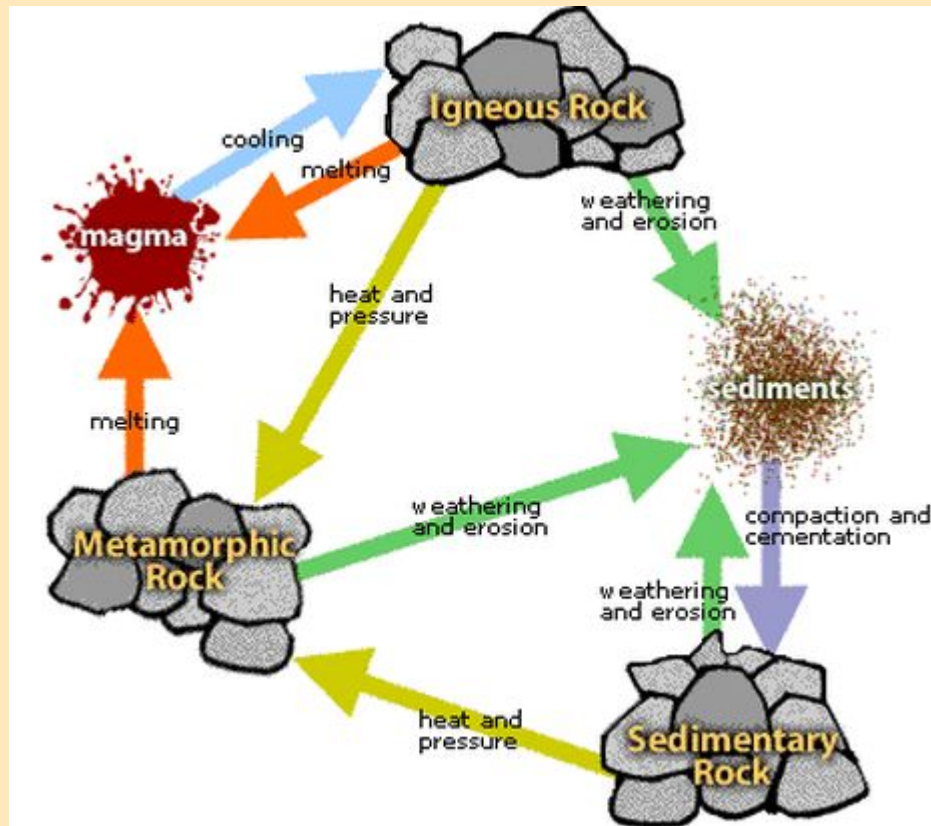


Metamorphic

- These form when high pressure and/or heat cause a rock to change
- The type of rock formed depends on the amount of pressure and time
- Ex. Shale - Slate - Schist



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Sediment and Soil


- When organic matter breaks down, it is known as **compost**
- Compost can mix with other dark parts of soil to form **humus**

Sediment and Soil

- Humus is rich in nutrients and can provide good soil structure, with lots of water for plants
- Fertile soil can supply nutrients for plants to grow, such as the soil near rivers

Soil Profile

- Soil can take thousands of years to form, and will often form in layers
- These layers makes up a **soil profile**
- The top layer of soil is called the **topsoil**
- Leaching is the removal of soil materials when dissolved in water



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