Rock Cycle Notes

Three Types of Rocks

- Sedimentary
- Igneous
- Metamorphic

Sedimentary Rocks

- Sediment is produced through the process of weathering. Large rocks are broken down very gradually and the smaller pieces are transported by wind, water, and ice.
- Under high temperature and pressure, the sediment becomes compacted ("smashed" together) and cemented (hardened) into sedimentary rock.
- Usually this happens as the sediment is buried more and more deeply under layers of new sediment.

Characteristics of Sedimentary Rocks

- Often contain layers
- Look for grains in the rock

Igneous Rocks

- Igneous rocks come from the cooling of melted rock material, called magma.
- Intrusive igneous rocks form when the magma cools slowly under the Earth's surface. Intrusive igneous rocks have large crystals.
- Extrusive igneous rocks form when the magma cools quickly on the Earth's surface. Extrusive igneous rocks have very small crystals.

Characteristics of Igneous Rocks

- Most igneous rocks are very hard
- Made of crystals
- Layering is not common in igneous rocks

Metamorphic Rocks

- Sedimentary and igneous rocks can become buried deep in the Earth's crust.
- Metamorphic rocks form when the buried rock is changed under high temperature and pressure.
- The rock does not melt. Instead, new minerals grow and the rock remains solid.

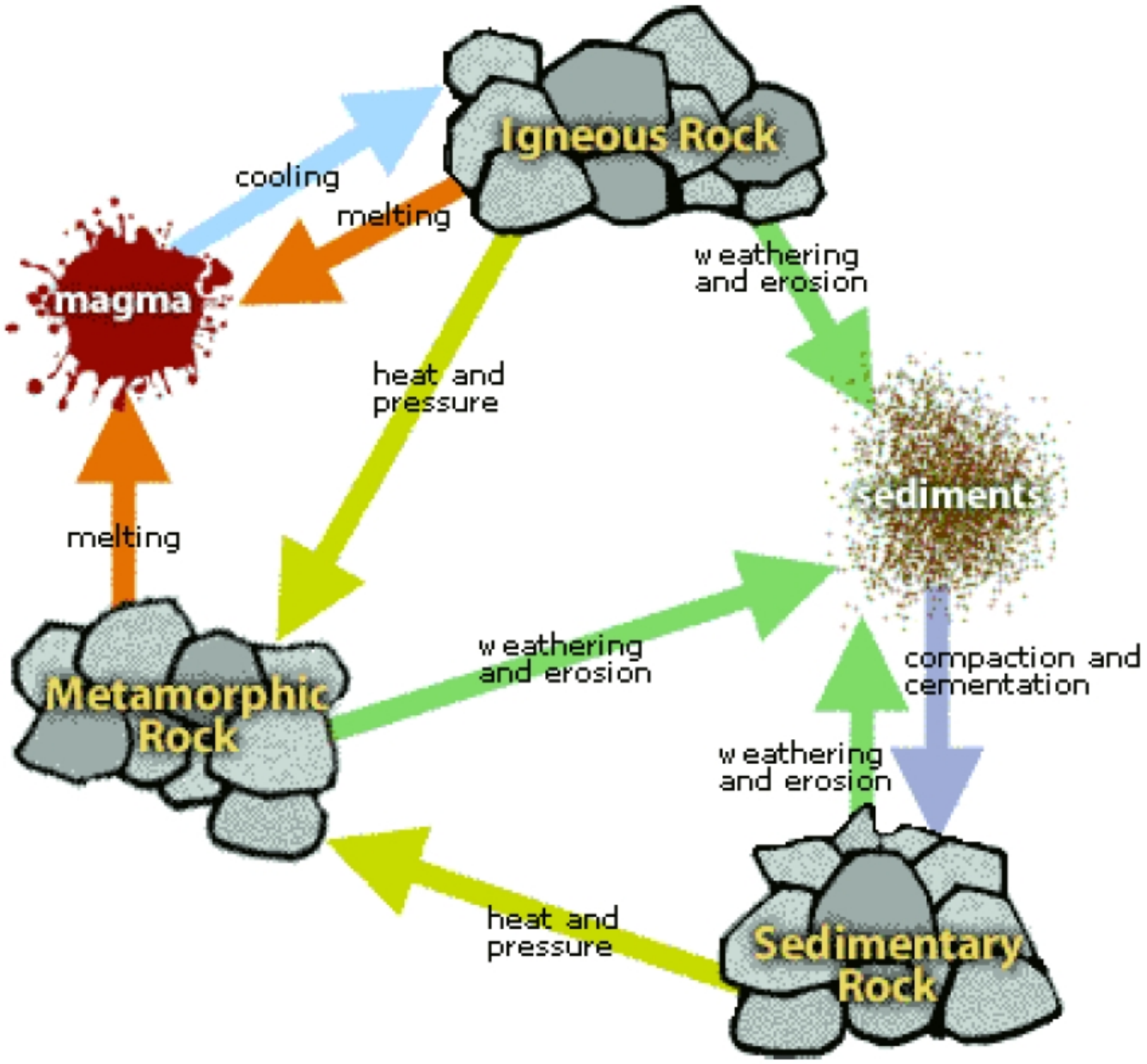
Characteristics of Metamorphic Rocks

- Layering is common
- Different layers are made up of different minerals
- Often made of plates and flaky layers

The Rock Cycle

- The rock cycle is the combination of all the processes that act to break down rocks, move sedimentary rocks from place to place, and make new rocks.
- The processes of the rock cycle are very gradual and happens over times that range from thousands to millions of years or longer.

The Rock Cycle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