

Rock Cycle

The **POSSIBLE** changes that can occur in rocks. There is no time frame or definite changes that have to occur. This diagram shows the paths a rock can follow for its changes.

THE ROCK CYCLE

BY JUSTINMC

HELLO. TODAY WE WILL LEARN ABOUT THE ROCK CYCLE.



ROCKS!

ROCK DEEP UNDER GROUND IS MELTED BY MAGMA AND TURNED INTO MAGMA



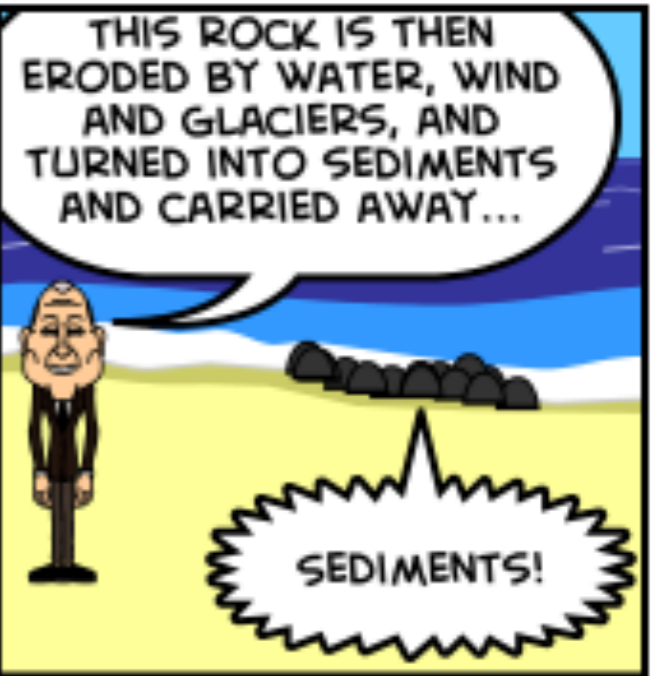
ROCK DEEP UNDER GROUND IS MELTED BY MAGMA AND TURNED INTO MAGMA

..THEN COOLS TOWARDS THE SURFACE TO FORM IGNEOUS ROCK....



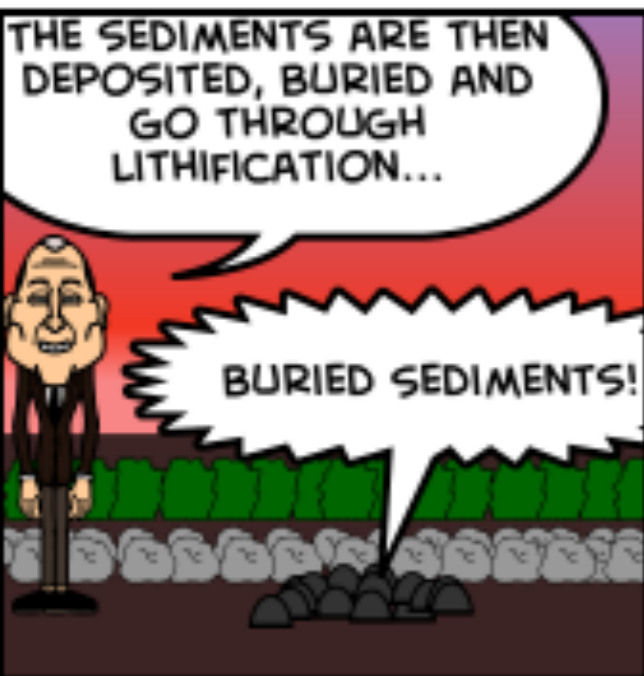
IGNEOUS!

THIS ROCK IS THEN ERODED BY WATER, WIND AND GLACIERS, AND TURNED INTO SEDIMENTS AND CARRIED AWAY...



SEDIMENTS!

THE SEDIMENTS ARE THEN DEPOSITED, BURIED AND GO THROUGH LITHIFICATION...



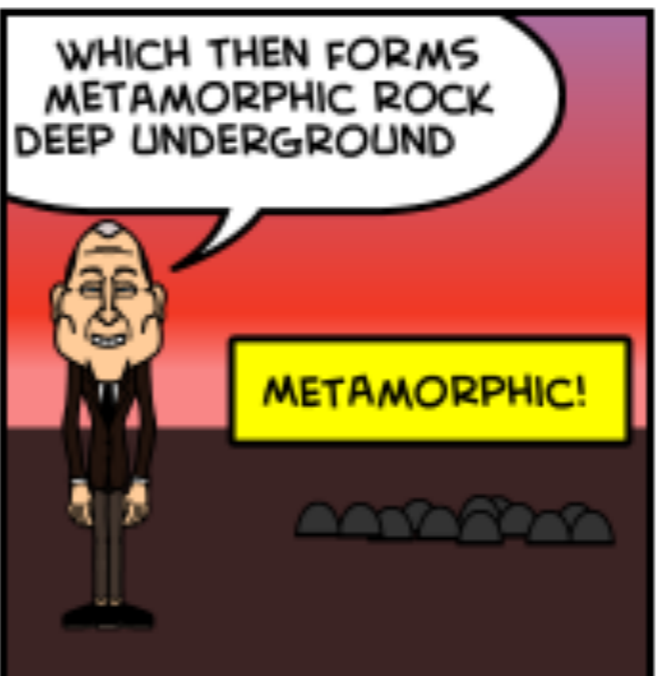
BURIED SEDIMENTS!

TO BECOME SEDIMENTARY ROCK. THEY ARE THEN SUBMITTED TO EXTREME HEAT AND PRESSURE...



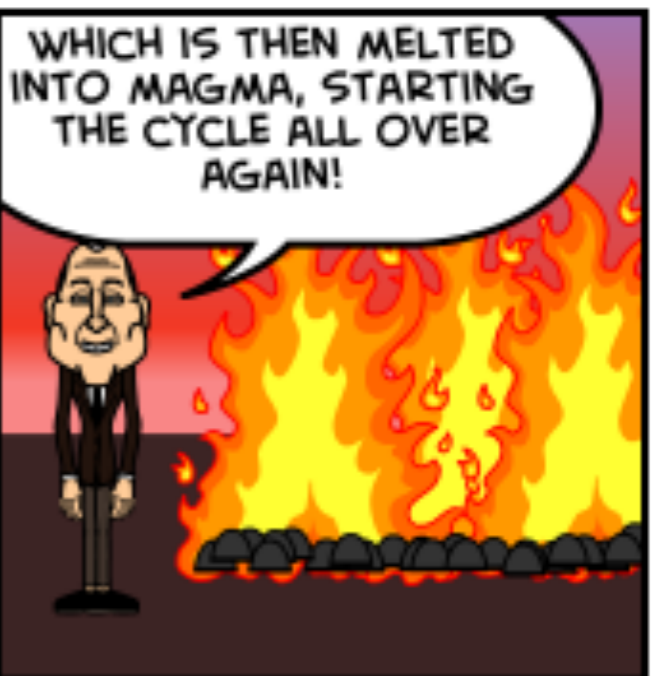
EXTREME HEAT AND PRESSURE!

WHICH THEN FORMS METAMORPHIC ROCK DEEP UNDERGROUND

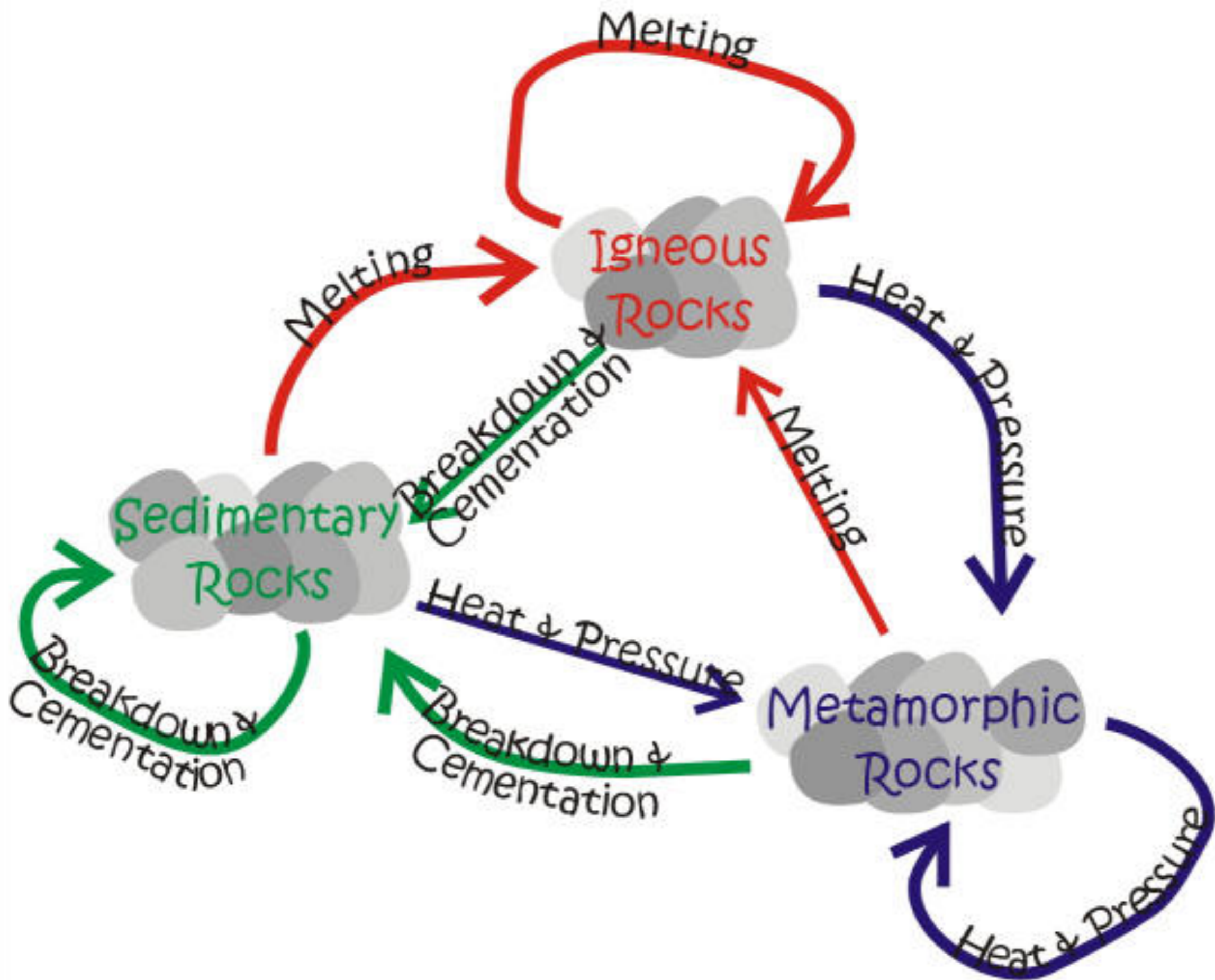


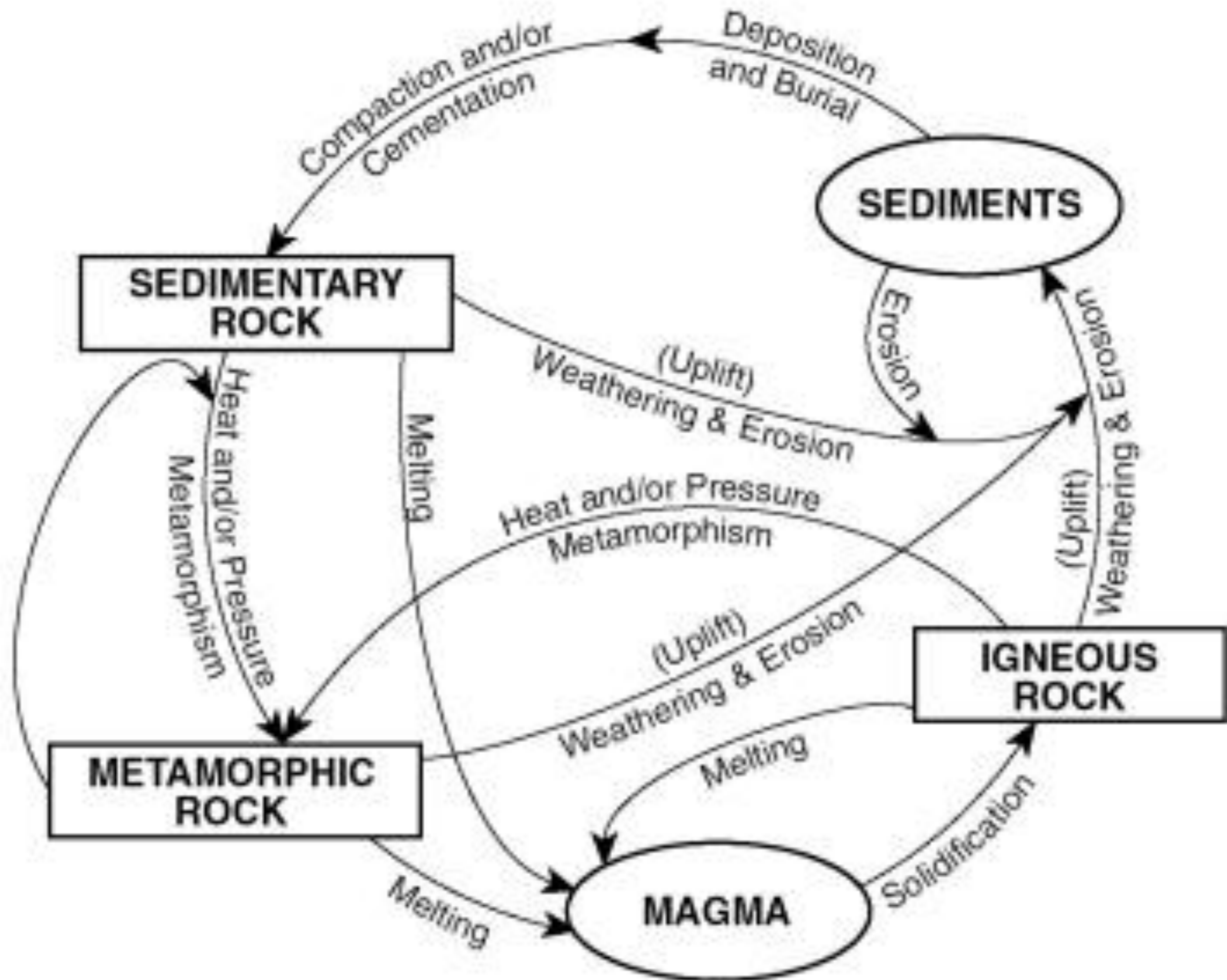
METAMORPHIC!

WHICH IS THEN MELTED INTO MAGMA, STARTING THE CYCLE ALL OVER AGAIN!



WHICH IS THEN MELTED INTO MAGMA, STARTING THE CYCLE ALL OVER AGAIN!





Rock Cycle Vocabulary

- Igneous Rock: When molten magma/lava cools.
- Melting: Either existing rock is heated to the point melting or mantle material is already liquid.
- Solidification: The cooling process where a liquid turns to a solid. Molecules movement changes from changing positions to vibrating around a stationary point.



- Metamorphic Rock: When pre-existing rock is altered by heat and pressure.
- Metamorphism: Heat and pressure are placed on existing solid rock. The rock does NOT melt but is altered in shape, structure, and minerals present.
- There are different degrees of metamorphism from High to Low producing different types of metamorphic rocks.

Metamorphic Rocks



quartzite



slate



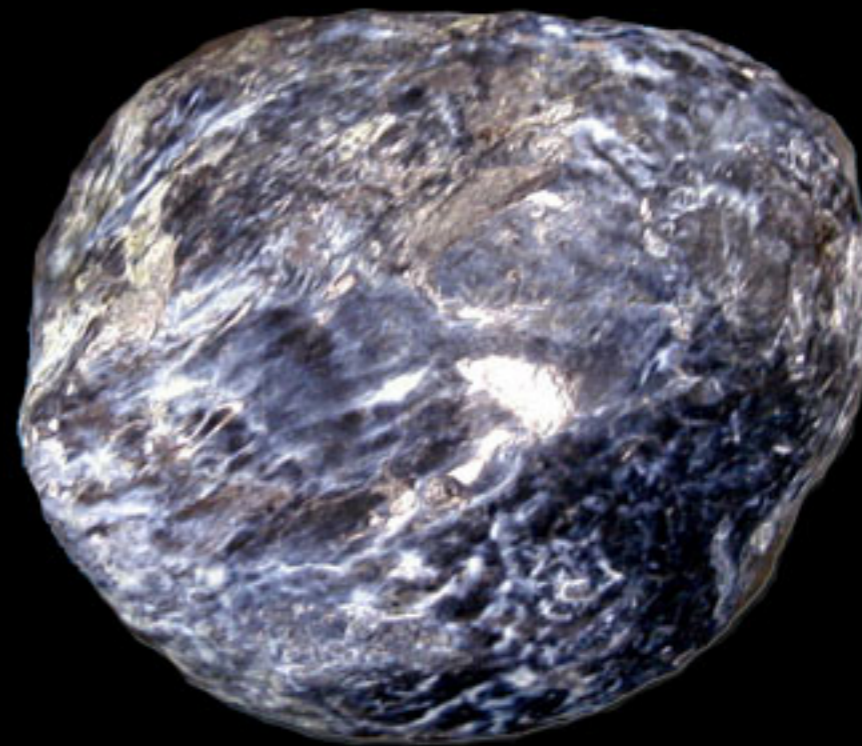
marble



gneiss



schist



serpentinite

- Sedimentary Rocks: When sediments are created, deposited, and cemented together.
- Weathering: Existing rock is broken down to smaller size or chemically changed.
- Erosion: Sediments are moved.
- Deposition: Sediment movement is stopped.
- Burial: Sediments covered by more sediment.
- Compaction & Cementation (Lithification):
The process of squeezing and binding sediment particles together.

