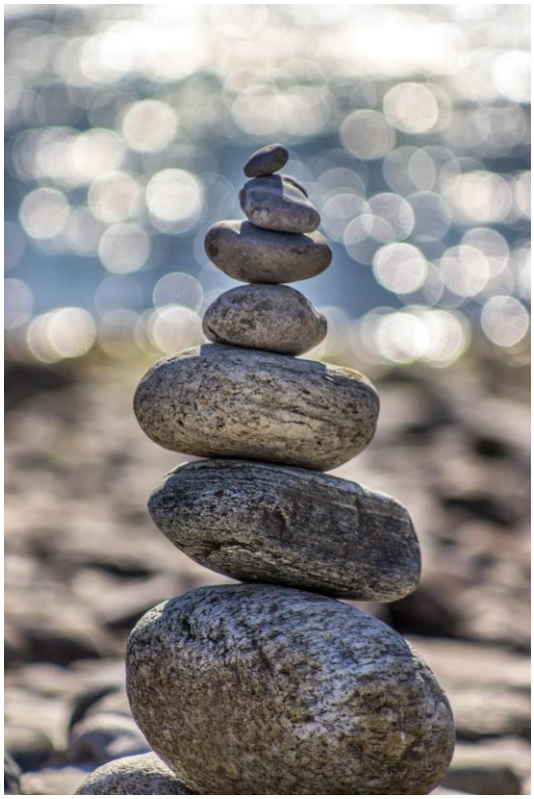
ASHEVILLE MUSEUM OF SCIENCE

Geology: The Rock Cycle

Geology tells us that there are three different types of rocks that are connected through the rock cycle. They are classified by how they form: **Igneous, Sedimentary,** and **Metamorphic**.



Let’s dig a little deeper into each type of rock!

Igneous Rock

-Forms from the cooling and solidification of magma
-Two types:
Intrusive, occurs when magma cools quickly
Extrusive, occurs when magma cools slowly
Examples:

- Basalt, found both on the moon and on the bottom of the ocean
- Obsidian, a glossy black volcanic rock that was used to make weapons and tools
- Pumice, formed from volcanic molten rock spray from volcanoes, lightweight and full of air pockets

Sedimentary Rock

Forms from the layering and cementation of sediment and particles
Examples:

- Shale, composed of thin layers, preserves fossils
- Limestone, contains skeletal fragments of marine organisms
- Conglomerate, a collection of pebbles that are cemented together

Metamorphic Rock

Forms when an igneous or sedimentary rock is transformed by extreme heat and pressure

Examples:

- Gneiss, contains light and dark bands, used to make stone buildings and flooring
- Marble, formed from limestone, used to make countertops
- Slate, easily split, made of clay, forms from shale

Check out this interactive rock cycle diagram to learn more about the relationship between the three types of rock:

https://www.learner.org/wp-content/interactive/rockcycle/rockdiagram/

Ready to test your knowledge? Take this fun quiz on the rock cycle from the Oxford University Museum of Natural History:

https://www.oum.ox.ac.uk/thezone/rocks/games/index.htm