Rock Lecture

**Today we are going to be introduced to** one the most common things on earth-rocks. Rocks are one of the most basic foundations of our earth. Rocks can be as small as a grain of salt or as large as building. Rocks are made up of minerals. Rocks are constantly changing their shape, color and type. These constant changes are called the rock cycle. The rock cycle is a slow process that can happen over thousands or millions of years. The rock cycle doesn’t destroy or create rocks but redistributes them. All rocks go through a rock cycle but **there are only three types of rocks; igneous rock, metamorphic rock, and sedimentary rocks.** **We will talk** about each type in detail.

The **first** type of rock is **I-g-n-e-o-u-s** rock. Igneous rocks are the most common types of rocks on the earth’s surface. Igneous means from fire or heat. They are rocks that are formed from volcanoes. When volcanoes erupts, the eruption starts inside the earth, this eruption is liquid, the erupted liquid is called magma. Once the magma reaches the earth’s surface and cools it is called lava. If the magma (liquid inside the earth) cools in the earth then an igneous rock forms inside the earth and it is called an intrusive rock. If the lava (liquid outside the earth) is cooled on the earth’s surface then this type of igneous rock it is called an extrusive rock. **I-n-t-r-u-s-i-v-e** and **e-x-t-r-u-s-i-v-e** rocks form different types of igneous rocks. **Examples of igneous rocks are pumice and obsidian.**

The **second** type of rock is called **s-e-d-i-m-e-n-t-a-r-y** rock. Sedimentary rocks form when sediments are pressed together and cemented together. This usually occurs at the bottom of bodies of water or marshes. The sediments that form sedimentary rocks usually contain fossilized animals or plants, which then turn into carbon; this is where we get coal, oil, and natural gas. Sedimentary rocks cover over seventy-five percent of the earth’s surface but they are only five percent of all rocks. Some **examples of sedimentary rocks are sandstone and shale.**

 The **third** and final type of rock is called **m-e-t-a-m-o-r-p-h-i-c** rock. Metamorphic rocks are the least common types of rocks on earth. Metamorphic rocks are rocks that have changed from igneous or sedimentary rocks due to great heat and or pressure. **There are two types** of metamorphic rocks. They are foliated metamorphic rocks, which are made up of layers upon layers, which is also called banding. **The second** type of metamorphic rocks is non-foliated metamorphic rock. Non-foliated metamorphic rocks are not layered or banded. Some **examples of metamorphic rocks are marble, quartzite, and slate.**

Now that you know about the three types of rock, go out and see if you can identify the different kinds of rocks near your home, where you play, or even when you go on vacation**. In conclusion,** you will be responsible for knowing the three types of rocks, how they are formed and name at least one of each type. **Don’t forget,** since rocks are always changing an igneous rock today can be a sedimentary rock ten thousand years from now and a metaphoric rock fifty thousand years from now.

Rock Cycle

Rock Cycle

Igneous Rock

Sedimentary

Metamorphic

Continuous, slow process

Doesn’t destroy or create

Redistributes rocks

all rocks go through rock cycle

most common

From volcanoes

Inside the earth-intrusive

On earth’s surface-extrusive

X-Pumice, Obsidian

sediments pressed together

Fossilized animals or plants

75% earth’s surface

X-Sandstone, Shale

made from igneous or sedimentary rocks

Pressure and or heat

2 Types

Foliated-layers,

non foliated-no layers

Least common

X-Slate, Marble, Quartzite

**Introduction to Rock Quiz**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

True/False

 1. T F The rock cycle is continuous.

 2. T F There are 4 types of rocks.

 3. T F Some metamorphic rocks are made of layers

Multiple Choices

1. Sandstone is an example of …

a. Metamorphic rock b. Igneous rock c. Particle rock d. Sedimentary rock

1. Foliated and non-foliated rocks are…

a. Igneous rocks b. Sedimentary rocks c. Metamorphic rock d. 75% Mud

1. Pumice is an example of ……

a. Sedimentary rock b. Carbon rock c. Metamorphic rock d. Igneous rock

1. The rock cycle happens over…

a. One day b. Thousands and millions of years c. One-week d. Can’t happen

Fill in the blanks

1. Rocks are made of \_\_\_\_\_\_\_\_\_\_.
2. Shale is a \_\_\_\_\_\_\_\_\_rock.
3. Liquid that cools inside the earth when a volcano erupts is called\_\_\_\_\_\_\_.

Bibliography

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