

Let's Get Ready to **ROCK!**

Have you ever stopped and thought about rocks?

They are everywhere in nature, but how did they get there? Some people may think that rocks aren't very exciting, but they are actually a fascinating natural substance that in some instances can take millions of years to form.

A rock, or stone, is a solid that is made up of one or more minerals. Over time, these minerals have been fused together to create a solid lump.

There are three major types of rocks: metamorphic, igneous and sedimentary. The names describe how each rock is formed.

Igneous Rock



Igneous rocks are formed when magma rises from below the Earth's surface via volcanoes and becomes lava. When the lava cools down and becomes a solid, it creates an igneous rock. Igneous rocks can form either above ground or below the surface. If the lava cools down quickly above the surface, it creates igneous rocks such as tuff and basalt. If magma cools down slowly below the ground, we get igneous rocks such as granite.

Sedimentary Rock



Sedimentary rocks are formed over time from sediments, which are tiny pieces of pre-existing rocks. They may also form from the remains of plants and animals. Rocks are slowly broken down into tiny pieces by wind, water and snow. This process is called erosion. Water then washes these tiny pieces into rivers or streams. These pieces will settle at the bottom in soft, loose layers called sediment. Over millions of years, the sediment builds up, hardens, and eventually becomes solid rock. Some examples of sedimentary rocks are sandstone and shale.

Metamorphic Rock



Metamorphic rocks are igneous or sedimentary rocks that are changed over time by extreme heat or pressure. They are generally found inside the Earth's crust where there is enough heat and pressure to form the rocks. Metamorphic rock is also formed when water dissolves minerals in old rock or transfers new minerals into it. The heat of magma can also change old rock into metamorphic rock. Some examples of metamorphic rocks are marble, slate and soapstone.



So, the next time you're walking along and kicking a rock, think about how that particular rock may have been breaking down, forming and changing for millions of years!

Name: _____

Date: _____

Let's Get Ready to Rock!

1. What are the three different types of rocks?

1. _____

2. _____

3. _____

2. Which type of rock may also be made up of the remains of plants and animals?

3. How does magma become igneous rock?

4. Explain the process of erosion.

5. Some people think the study of rocks isn't very exciting. Do you agree or disagree? Explain your answer.

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1. What are the three different types of rocks?

1. metamorphic

2. igneous

3. sedimentary

2. Which type of rock may also be made up of the remains of plants and animals?

Sedimentary rock can also be made up of the remains of plants and animals.

3. How does magma become igneous rock?

Magma rises from below the Earth's surface and becomes lava. When the lava then cools down and becomes a solid, it creates an igneous rock.

4. Explain the process of erosion.

Erosion is when rocks are slowly broken down into tiny pieces by wind, water and snow.

5. Some people think the study of rocks isn't very exciting. Do you agree or disagree? Explain your answer.

Answers will vary.