

Name _____ Date _____

Rock It Out!



There are three basic types of rocks based on their formation. They are **igneous** rocks, **sedimentary** rocks, and **metamorphic** rocks.

Igneous Rocks

The word **igneous** is derived from the Latin word *ignis*, which means fire. So, igneous rocks are formed when the molten matter inside the Earth, called **magma**, comes out of the volcano and later cools down and solidifies.

There are two types of igneous rocks. When the magma cools down and solidifies inside the Earth's surface, they are known as **intrusive igneous rocks**. When the magma erupts above the Earth's surface and solidifies, **extrusive igneous rocks** are formed. Pumice and granite are some examples of igneous rocks.

Sedimentary Rocks

Sedimentary rocks, as the name suggests, are comprised of sediments. These sediments could be minerals, small pieces of plants, and other organic matter that have been compressed and deposited over a long time. These rocks can be generally

found on ocean and lake beds, and on rocky surfaces on the Earth's crust. **Sandstone** and **coal** are some of the sedimentary rocks.

Metamorphic Rocks

When the igneous and sedimentary rocks are exposed to high temperatures and pressures they undergo change. And this process of changing from one type of rock to another is called **metamorphism**. That takes a really long time, maybe thousands of years. However, this process does not melt the rocks but instead transforms them into denser more compact rocks. **Slate** and **marble** are some examples of the metamorphic rocks.

- 1) There are _____ basic types of rocks.
 - a) four
 - b) two
 - c) three

- 2) The types of rocks are based on:
 - a) what they look like
 - b) how they are formed
 - c) where they are found

- 3) The word **igneous** is derived from the Latin word root:
 - a) ignus
 - b) ignis
 - c) ignes

- 4) The word root that **igneous** is derived from means:
 - a) rock
 - b) form
 - c) fire

5) Molten matter inside the earth is called:

- a) magma
- b) magnite
- c) lava

6) Igneous rocks are formed when:

- a) magma comes out from volcanoes, cools, and solidifies
- b) magma stays in volcanoes and solidifies into rock
- c) magma in volcanoes cools down and turns into rock

7) When magma comes out of volcanoes then cools down and solidifies under the Earth's surface, it forms:

- a) extrusive igneous rock
- b) intrusive igneous rock
- c) obtrusive igneous rock

8) When magma erupts above the Earth's surface then cools down and solidifies, it forms:

- d) extrusive igneous rock
- e) intrusive igneous rock
- f) obtrusive igneous rock

9) Two examples of igneous rock are:

- a) slate and marble
- b) sandstone and coal
- c) pumice and granite

10) If you look inside a sedimentary rock you might find:

- a) minerals
- b) organic matter
- c) pieces of plants
- d) all of the above

11) Sedimentary rocks are usually found:

- a) on mountains, farms, and in deserts

- b) on ocean and lake beds and rocky surfaces
- c) under the ground and in caves

12) Sedimentary rocks are formed when matter is compressed and deposited for a:

- a) short time
- b) medium time
- c) long time

13) Two examples of sedimentary rock are:

- d) slate and marble
- e) sandstone and coal
- f) pumice and granite

14) The process of changing from one form to another is called:

- a) metamorphism
- b) metabolism
- c) metaphysics

15) When the igneous and sedimentary rocks are exposed to _____ they undergo change.

- a) magma erupting from volcanoes
- b) high temperatures and pressure
- c) compression and depositing

16) Metamorphism takes place:

- a) within about 45 minutes
- b) sometime within a century
- c) after thousands of years

17) Two examples of metamorphic rock are:

- g) slate and marble
- h) sandstone and coal
- i) pumice and granite