

## Rocks and Minerals Test Review

Use your notebook and textbooks to help you answer the following questions.

1. Define the following words:

- a. Rock - is a hard solid ~~mineral~~ <sup>material</sup> made up of minerals
- b. Mineral - naturally occurring, solid, inorganic pieces of matter that are made from the same or a combination of elements
- c. Elements - the smallest forms of matter that are naturally occurring in and around the earth
- d. Geologist - a scientist that studies rocks & minerals
- e. Magma - hot liquid rock below the surface of the Earth
- f. Sediment - particles that break off from mountains and large pieces of rock during erosion
- g. Fossil - the imprint of dead plant or animal matter in a rock
- h. Intrusive rock - a type of igneous rock that has formed by cooling under the Earth's surface.
- i. Foliated - the layered or banded look of some metamorphic rocks
- j. Erosion - when mountains or large rocks get worn down over time due to natural forces like water, wind, or ice

2. Name the 3 categories of rocks and give 3 examples of each one

**Igneous** - rock created when molten rock from under the Earth's surface cools & hardens. There are Intrusive and Extrusive Igneous rocks.

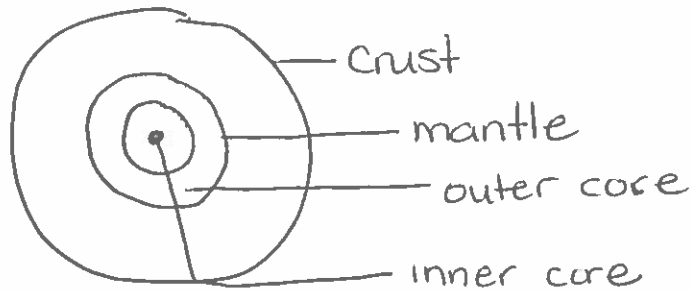
Ex. obsidian, pumice, rhyolite, basalt, granite, diorite, gabbro,  
**Sedimentary** - Found everywhere on the Earth's surface but only make up a small percentage. Best place to find them is near a body of water. Formed over time when rocks & mountains erode. Ex. sandstone, shale, limestone, coal, rock salt,

**Metamorphic**

- Formed by the transformation of igneous, sedimentary or metamorphic rock, when rocks are exposed to heat and pressure. This can occur by contact metamorphism & regional metamorphism.

Ex. marble, gneiss, slate, quartzite, hornfels

3. Draw and label the Earth and its four layers.

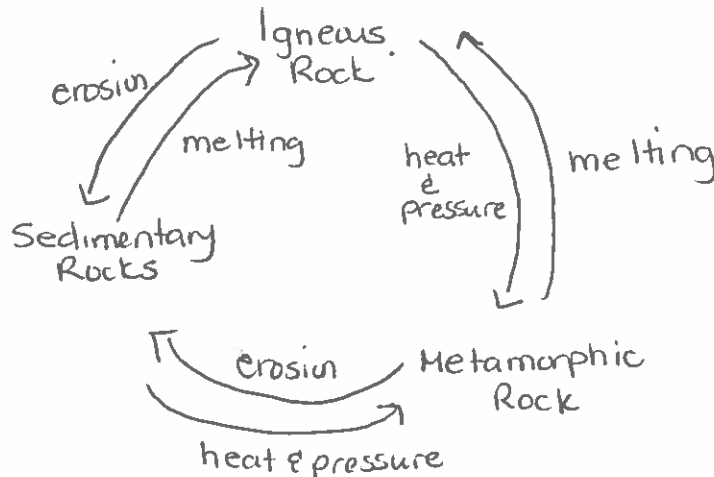


4. What is the difference between intrusive igneous rocks and extrusive igneous rocks?

**Intrusive Igneous Rocks** - When the cooling process happens underground; take thousands of years to cool before full solid; large crystals

**Extrusive Igneous Rock** - Magma cools & hardens above the earth's surface; due to volcano eruption; cool quickly small crystals.

5. Draw and label the rock cycle and explain how one rock type can turn into another.



6. Explain how rocks and minerals have been used in society throughout the ages - from stone age to modern times - give examples.

**Stone Age** - Rocks used for pottery, tools, weapons, caves to live in, rocks & boulders to sit around & build fire pits.

**Bronze Age** - Learned how to melt minerals & reshape them. Learned to mix metals to create alloys that resisted corrosion & deterioration. Learned to separate minerals.

**Iron Age** - Learned how to make tools out of metal. Construction speeded up. Buildings, roads & structures built easier & sites began to sprawl.

**Modern Times** - wide variety of things made from rocks & minerals from computers, cell phones, TVs, jewelry, to entire cities.