"S.O.C.I.A.L S.T.U.D.I.E.S"

CLASS-VII

CHAPTER-2

~INSIDE THE EARTH~

A.Fill in the blanks :-

1._____are naturally occuring deposits in the Earth's crust consisting of one or more elements.

Ans- Minerals

2._____rock layers hold all reserves of coal,oil and natural gas.

Ans- Sedimentary

3. Silicon, aluminium and magnesium are the main elements that make up the _____.

Ans- Crust

4.Igneous rocks are formed by the cooling and solidification of_____.

Ans- Magma

5.Gems are found in_____rocks.

Ans- Metamorphic

B.Fill in the blanks with correct answers.

1.The inner most layer of the Earth is_____.

Ans- (d) Inner core

2.Rocks containing metals in large quantities are called_____.

Ans:- (b) ores

3.The_____is made up of iron and nickle.

Ans:- (d) Core

4. The fossils fuels are found in_____rocks.

Ans:- (b) Sedimentary

5._____is the hardest mineral.

Ans:- (a) Diamond

C. Write True or False :-

1.The mantle is in a semi solid state_____.

Ans. True.

2.Rocks have a definite chemical composition_____.

Ans. False.

3.Nickle is a fossil fuel_____.

Ans. False.

4.The Earth has uniform minerals_____.

Ans.False.

5.Gypsum is a chemically formed sedimentary rock_____.

Ans.True.

D.Answer these questions in brief.

1.What is lithosphere ?

Ans:- Lithosphere is the outermost layer of Earth consisting of crust and upper mantle portion of the earth. Lithosphere is responsible for the hard and rigid surface of the Earth on which humans exists. Lithosphere is not a continuous layer it is divided into the movable tectonic plates. This is 100 km deep layer.

2.Name the three types of rocks.

Ans:- The three types of rocks are :-

•Igneous rocks

•Sedimentary rocks

•Metamorphic rocks

3.Name the three main layers constituting the Earth's Interior.

Ans:- Earth can be divided into three main layers:- The Core, the mantle and the crust. Each of these layers can be further divided into two parts:

The inner and outer core, the upper and lower mantle and the continental and oceanic crust.

4.How are extrusive rocks formed ?

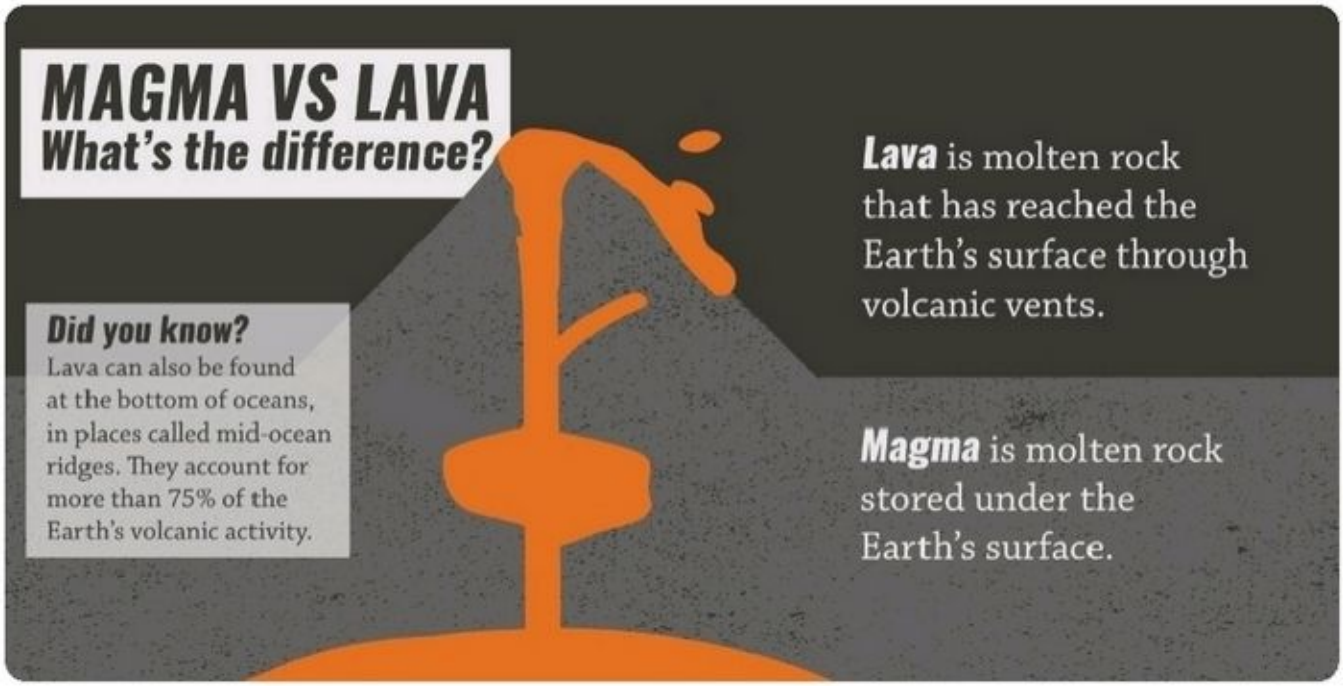
Ans:- When molten magma comes on the earth surface it rapidly cools down and becomes solid. Rocks formed in such a way on the crust are called Extrusive rocks.

5.How are metamorphic rocks formed ?

Ans:- Metamorphic rocks are formed from other rocks that are changed because of heat or pressure.Earth movements can cause rocks to be deeply buried or squeezed. As a result, the rocks are heated and put under great pressure . They do not melt, but the minerals they contain are changed chemically, forming metamorphic rocks.

6.How is lava different from magma ?

Ans:- Magma is composed of molten rock and is stored in the Earth's crust. Lava is magma that reaches the surface of our planet through a volcano vent.



E.Answer these questions in details.

1.Distinguish between:

i. Extrusive rocks and Intrusive rocks.

Intrusive Igneous Rocks	**Extrusive Igneous Rocks**
Intrusive igneous rocks are formed when the magma cools and solidify below the surface of the Earth.	Extrusive igneous rocks are formed by cooling the molten magma on the surface of the Earth. The molten magma comes on to the Earth's surface through cracks, fissures and volcanic eruption
Since these rocks cools down slowly, they have coarse texture with large crystals	Since these rocks solidify at a faster pace, they are smooth, crystalline and fine grained.

ii. Mineral and ore

Mineral vs Ore

Mineral	Ore
Naturally occurring substances of metals present in the earth's crust are called minerals.	Minerals which can used to obtain the metal profitably are called ores.
All minerals are not ores.	All ores are essentially minerals too.
Example: Clay is the mineral of Aluminium.	Examples: Bauxite and Cryolite are the main ores of Aluminium

2.Explain why the density of rocks increases with depth.

Ans:- The density of rocks increases with depth because the rocks at this level contain iron and iron is denser than the materials at the upper layers of the mantle. The temperature of the mantle also increases with depth.The change in the speed of the waves at this depth indicated a difference in the density of the rock.

3.Why are igneous rocks also known as primary rocks ?

Ans:- Igneous rocks are created from the molten magma or lava.All other rocks are derived from them.Because they form the basis of formation of other type of rocks,igneous rocks are known as the primary rocks.

4.Why are sedimentary rocks also known as secondary rocks?

Ans:-Sedimentary rocks are called secondary rocks because they are formed by the deposition and subsequent cementation of mineral or organic particles on the floor of oceans or other bodies of water at the Earth's surface.Sedimentary rocks are deposited in layers as strata.

5.How are rocks and minerals important to us ?

Ans:- Importance of Rocks and minerals are :-

- Rocks:-

Rocks are very useful to us. The uses of rocks can be anything from oil to houses to diamonds. Rocks can explain prehistoric animals and plants by fossils and scientists can tell the history of the Earth from them. Rocks can be used for making buildings and statues. The hardest rocks are used for making roads, houses,bridges and buildings. From the help of rocks we can get diamonds and crystals and other gems. Rocks can also be used for many other purposes.

- Minerals:-

Minerals are very useful to our body as they are important for metabolic processes. Minerals are chemical elements required for

various body functions. Some minerals which are useful to our body are Iron, cobalt, calcium, phosphorous, sulphur, potassium, sodium, magnesium e.t.c.

6.With the help of diagram explain the rock cycle.

Ans:-

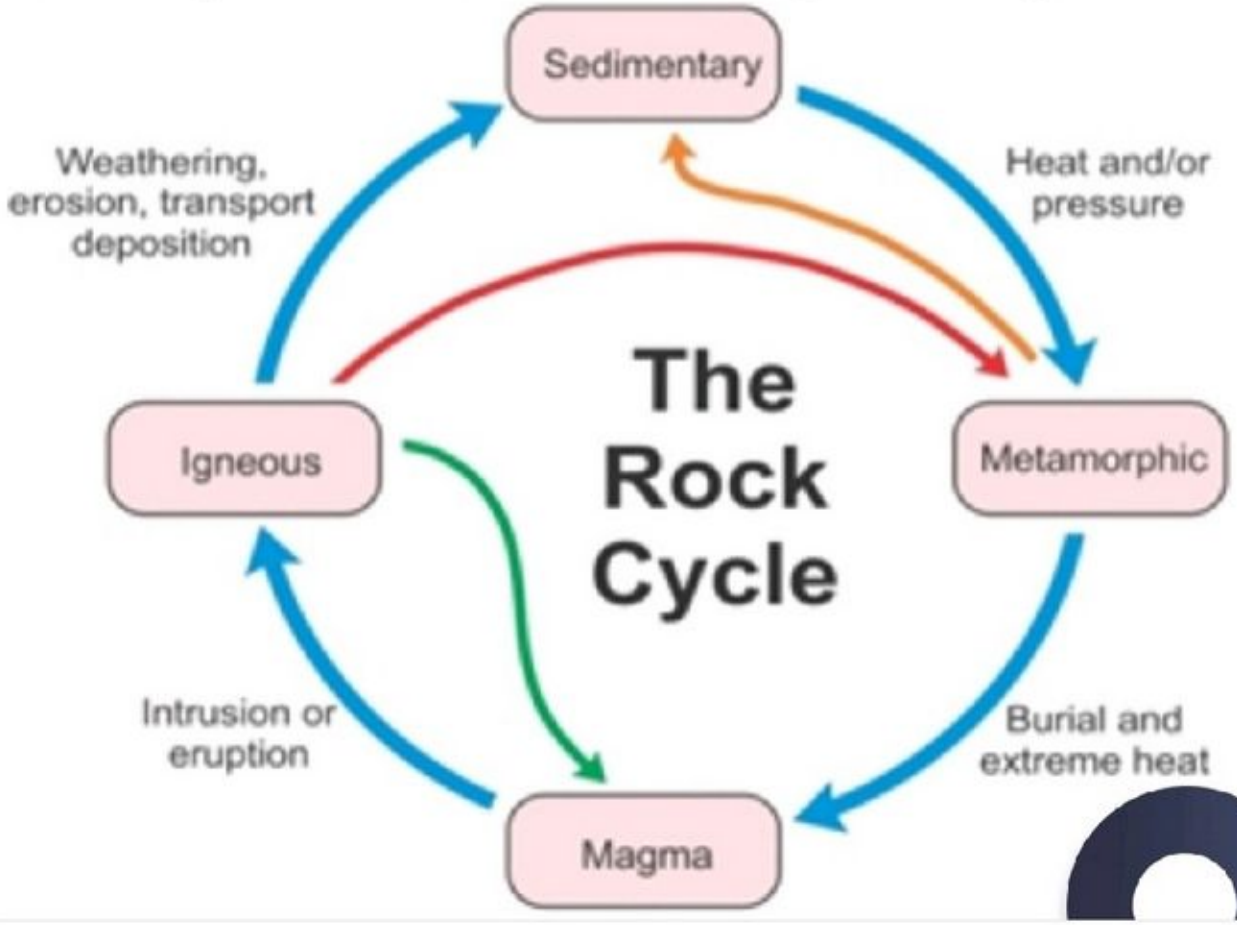
The process of transformation of rocks from one form to the other in a cyclic manner is known as the rock cycle. It includes the following processes:

Hot lava cools down to form igneous rocks.

Igneous rocks are then broken down into small particles which are transported and then deposited. This results in the formation of sedimentary rocks.

When igneous and sedimentary rocks are subjected to great heat and pressure, they change into metamorphic rocks.

Metamorphic rocks under heat and pressure breakdown and form hot lava.
This hot magma then again cools down and forms igneous rocks and the cycle is repeated.



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