

Subject: Science Ln no: 3 Rocks and Minerals

Checkpoints

What are the following called?

1. Molten rock inside the earth **magma**.
2. The rock that can float on water **pumice**.
3. The mineral present in sandstone **quartz**.
4. A metamorphic rock formed from shale **slate**.

A. Tick the correct answer

1. What is the hot molten rock that comes out on the surface of the earth called
A) **lava** B) magma C) sediment D) fossil
2. Which of these is an igneous rock
A) limestone B) **Granite** C) Gneiss D) Coal
3. Which of these rocks can float on water?
A) Granite B) **pumice** C) Limestone D) Marble
4. Which of these minerals is commonly present in sandstone
A) mica B) feldspar C) **Quartz** D) Calcite
5. Which of these products is not obtained from petroleum?
A) petrol B) Diesel C) Kerosene D) **Natural gas**

B. Fill in the blanks

1. Rocks are made-up of **minerals**.
2. When the magma cools slowly under the earth surface it forms **Granite**.
3. Dentists use powdered **pumice** for polishing teeth.
4. Limestone is the form of **sedimentary** rock.
5. Coal and petroleum are called **fossil** fuel

C. Complete the series

1. Pumice: Igneous : : Shale : **sedimentary**
2. Limestone : Marble :: Granite : **Gneiss**
3. Shale : Slate :: **Sandstone** : Quartzite

4. Iron : Haematite :: Aluminium : **Bauxite**

5. Gold : Metal :: Diamond : **Gemstone**

D. Write short answers

1. Name three types of igneous rocks.

Ans: The three types of igneous rocks are granite, basalt and pumice.

2. Name three types of sedimentary rocks.

Ans: The three types of sedimentary rocks are shale, sandstone, conglomerate.

3. What are gemstones

Ans: Gemstones are precious rock that are cut and polished to make jewellery.

Example: diamond, Ruby, etc

E. Answer these questions.

1. Explain the formation of metamorphic rocks. Give some examples of igneous and sedimentary rocks that change to metamorphic rocks.

Ans: Sometimes, heat and pressure may cause igneous and sedimentary rocks to change into different rocks. The new rocks are called metamorphic rocks. They look different from the parent rocks. Metamorphic rocks are also harder and stronger than the parent rocks. Limestone changes to marble, shale changes to slate, granite changes to gneiss and sandstone changes to quartzite.

2. How is petroleum formed? Name the different products that we obtain from refining petroleum.

Ans: Petroleum or crude oil is a thick black liquid found deep inside the earth, usually between layers of sedimentary rocks. Petroleum is formed from the remains of dead plants and animals in the sea. Millions of years ago, these remains got buried in layers in the sea bed. Over the years heat and pressure changed them to petroleum. Petroleum is refined to obtain a number of products such as petrol, diesel, petroleum gas, kerosene and lubricating oil.

3. Why should coal and petroleum be used carefully? How can we conserve these fuels?

Ans: It took millions of years for coal and petroleum to form inside the earth. The earth has a limited supply of these fuels. But we are using them at fast rate that they will soon get exhausted. Once these fuels are used up we may have to wait for millions of years to get more. Therefore, we must not only use these fuel wisely, but also reduce their use as much as possible. We can use other sources such as the sun and the wind, which are unlimited natural resources of energy.

F. Complete think and answer in your own words.