SNBP International & Senior Secondary School, Chikhali, Pune. Affiliation No. 1130703 Academic session 2024-25 NOTES (Term -1)

Class: 5 Prepared By: Ms. Deepali Powar Prepared onSubject: Science Lesson-7: Rocks and minerals Shared on-

I. Key words:

- 1. interior
- 2. exterior
- 3. mineral
- 4. igneous
- 5. sedimentary
- 6. lava

- 7. pumice
- 8. obsidian
- 9. sandstone
- 10. conglomerate
- 11. shale
- 12. metamorphosis

II. Pre activity: Stick the pictures and write names of ancient monuments or buildings were made using stones.

III. Name the following.

Q.1. List the names if any two fossil fuel.

Ans- Coal and Petroleum

Q.2. list three metals.

Ans- Gold, Silver and Aluminium

Q.3.What is the different types of sedimentary rocks?

Ans- Sandstone, Conglomerate rock, Limestone, Shale, Dolomite

Q.4. Where is petroleum found in India?

Ans- Ankaleshwar in Gujarat, Digboi in Assam and Bombay High in Mumbai coast

Q.5.Which fossil fuel gives us paraffin wax? Ans- Petroleum

Q.6.What is the light colored igneous rock called?

Ans- Pumice

IV. Short answers questions.

Q. 1. What is lava? How is it different from magma?

Ans- Lava is the magma that reaches the surface of the Earth.Magma is the hot, liquid rock material that is under the surface of the Earth. Other rocks push the magma upwards. Some of it flows out through cracks in the ground and cools to form igneous rocks while the rest cools under the ground itself.

Q. 2. Describe how igneous rocks are formed.

Ans- Depending upon the content of the magma and the rate at which it cools, various types of igneous rocks are formed.

Q. 3. What are rocks made up of?

Ans- Rocks are made up of minerals.

Q. 4. Distinguish between igneous rocks and sedimentary rocks.

Ans-

Igneous rocks	Sedimentary rocks
1. These are formed due to cooling and	1. These rocks formed due to the continuous
solidification magma and lava.	deposition and compaction of weathered
	pieces of rocks transported to various places
	wind, rivers etc.
2. These are hard, homogenous and heavy	2. These are brittle, layered and light in
rocks.	weight.
3. They lack fossils.	3. They show the presence of fossils.
4. Ex- Basalt, Granite	4. Ex- sandstone ,limestone

Q. 5. Write any two ways in which metals can be used.

Ans- Metals can be used to make jewellery, machinery, furniture, wires, coins, vehicle bodies, aircrafts and utensils.

V. Long answers questions.

Q.1. Define metamorphic rocks and names three of them. What are they used for?

Ans- Metamorphic rocks are formed when other rocks are subjected to high pressure or heat under the surface of the Earth. The word metamorphic comes from the Latin word <u>metamorphosis</u>, which means 'change in form'. **Metamorphic rocks are of different types**.

•<u>Slate</u>: The metamorphic rock made from shale is called slate and is easily breakable into layers. Slates and blackboards are made from it.

• <u>Gneiss:</u> The metamorphic rock formed from granite is called Gneiss. This rock has light and dark bands on it.

• <u>Marble</u>: A widely used metamorphic rock is marble. It is mostly white but also comes in various colours. It is used to make statues and buildings because it shines on being polished.

Q.2. What is the two natural resources? What are they used for? Answer in detail.

Ans- The natural resources that supply us with energy are coal and petroleum, and they are found deep under the Earth's surface. All minerals except coal and petroleum come from non-living natural resources.

Uses of Coal

- Household fires are burnt using coal as fuel.
- Steam engines use coal to produce steam.
- Drugs, plastic, fertilisers and cosmetics are made from coal.

• Coal is used to obtain iron. • Power stations generate electricity by using coal as a fuel.

Uses of Petroleum

- Petrol, diesel, kerosene, etc. are all forms of petroleum that are used as fuel.
- The dry cleaning industry makes use of petroleum.
- The manufacturing of lubricating oil and medicines is done using petroleum

Q.3. Write a short note on sedimentary rocks.

Ans- 1.The deposition of particles of rocks, mud, pebbles, gravel, wood, sand, etc. on a surface by wind, flowing water and ice forms sedimentary rocks.

2. These rocks are formed in layers. The lower layers in these get pressurised and fuse tightly as more and more layers settle on the top.

3. The deposition of minerals enables all the layers to bind together forming a solid rock. **Examples** - sandstone, conglomerate rock, limestone, shale and dolomite.

Q.4. Define metallic mineral. Name any three metallic ores.

Ans- Metallic mineral are minerals which contain one or more metallic elements in their raw form. When we are able to extract minerals profitably from a rock, the rock is called the ore of that mineral. Metals are extracted from metallic ores. India is rich in iron ore. Hematite is iron ore. Bauxite is aluminium ore. Chalcocite is copper ore.

Q.5. Coal is a fossil fuel. Explain it.

Ans-Coal is a fossil fuel. The remains of dead plants form coal. The Earth was covered with thick swampy forests millions of years ago. When plants died, they fell into the swamps and began to decompose. As new vegetation died, it fell on top of the old one in the swamps, pressing them deeper into the Earth. Due to the pressure, these layers of decaying vegetation became peat, lignite and coal.

<u>Post-activity-</u> Draw flow chart of resources.

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