

CHAPTER-5 | Minerals and Energy Resources

QUIZ
PART-01

1. What is the hardest known mineral?

- A. Talc B. Diamond
C. Quartz D. Mica (B)

Explanation: Diamond is the hardest known mineral with a well-defined internal crystal structure.

2. What is the softest known mineral?

- A. Talc
B. Mica
C. Fluorite
D. Gypsum (A)

Explanation: Talc is the softest mineral and is used in products like talcum powder.

3. What percentage of total nutrient intake in our diet is made up of minerals?

- A. 99.7%
B. 75%
C. 50%
D. 0.3% (D)

Explanation: Minerals make up only 0.3% of the total nutrient intake but are essential for utilizing the remaining 99.7%.

4. Which of the following minerals is used to reduce cavities in toothpaste?

- A. Mica
B. Fluorite
C. Rutile
D. Silica (B)

Explanation: Fluoride used in toothpaste to reduce cavities is derived from the mineral fluorite.

5. Which mineral gives sparkle to toothpaste?

- A. Mica
B. Silica
C. Titanium Oxide
D. Aluminium Oxide (A)

Explanation: The sparkle effect in toothpaste is produced using the mineral mica.

6. Toothpaste tubes and toothbrushes are made using plastics derived from which source?

- A. Coal
B. Natural Gas
C. Bauxite
D. Petroleum (D)

Explanation: Plastics used in toothpaste tubes and brushes are derived from petroleum.

7. Which of the following is classified as an energy mineral?

- A. Mica
B. Bauxite
C. Coal
D. Iron Ore (C)

Explanation: Coal is classified as an energy mineral due to its use as a fuel source.

8. What is the primary source of titanium oxide used in toothpaste?

- A. Bauxite and Copper
B. Rutile, Ilmenite, and Anatase
C. Silica and Limestone
D. Mica and Fluorite (B)

Explanation: Titanium oxide, found in most toothpaste, is derived from rutile, ilmenite, and anatase.

9. Which of these is a ferrous mineral?

- A. Copper B. Bauxite
C. Manganese D. Lead (C)

Explanation: Manganese is a ferrous mineral as it contains iron or is used with iron.

10. What determines the formation and properties of minerals?

- A. Mining location only
B. Amount of rainfall
C. Physical and chemical conditions
D. Size and weight of crystals (C)

Explanation: The formation and properties of minerals such as color, hardness, and density depend on physical and chemical conditions.