

1. Which of the following is NOT a physical property commonly used to identify minerals?

- a) Color
- b) Hardness
- c) Taste
- d) Cleavage

Answer: c) Taste

Explanation: Taste is not a reliable physical property for identifying minerals due to safety concerns. Color, hardness, and cleavage are commonly used physical properties in mineral identification.

2. What is the Mohs scale used to measure?

- a) Density of minerals
- b) Refractive index of minerals
- c) Hardness of minerals
- d) Luster of minerals

Answer: c) Hardness of minerals

Explanation: The Mohs scale is a scale used to measure the hardness of minerals, ranging from 1 (softest) to 10 (hardest), based on the ability of one mineral to scratch another.

3. Which mineral exhibits the property of effervescence when it comes into contact with acid?

- a) Quartz
- b) Feldspar
- c) Calcite
- d) Gypsum

Answer: c) Calcite

Explanation: Calcite reacts with acid (such as hydrochloric acid) to produce effervescence, a bubbling or fizzing reaction, due to its carbonate composition.

4. What is the primary component of granite, a common rock in the Earth's crust?

- a) Quartz
- b) Feldspar
- c) Mica
- d) Calcite

Answer: b) Feldspar

Explanation: Granite is primarily composed of feldspar, quartz, and mica. Feldspar is the most abundant mineral in granite.

5. Which mineral commonly forms in hexagonal prisms and is often used in electronics due to its piezoelectric properties?

- a) Quartz
- b) Topaz
- c) Tourmaline
- d) Halite

Answer: c) Tourmaline

Explanation: Tourmaline exhibits piezoelectricity, the ability to generate an electric charge in response to mechanical stress. It often forms in hexagonal prisms.

6. What is the most common mineral group found in Earth's crust?

- a) Silicates

- b) Carbonates
- c) Sulfides
- d) Oxides

Answer: a) Silicates

Explanation: Silicate minerals are the most abundant group in Earth's crust, comprising over 90% of its volume. They are characterized by the presence of silicon and oxygen atoms.

7. Which mineral is commonly used as an abrasive in products such as sandpaper and toothpaste?

- a) Quartz
- b) Corundum
- c) Garnet
- d) Talc

Answer: a) Quartz

Explanation: Quartz is a hard mineral commonly used as an abrasive due to its durability. It is found in products like sandpaper and toothpaste.

8. Which of the following is a primary ore mineral of iron?

- a) Galena
- b) Hematite
- c) Sphalerite
- d) Malachite

Answer: b) Hematite

Explanation: Hematite is a primary ore mineral of iron, commonly found in sedimentary rocks

and used in the production of iron and steel.

9. What is the main component of the mineral group known as “mica”?

- a) Silica
- b) Aluminum oxide
- c) Iron sulfide
- d) Potassium feldspar

Answer: b) Aluminum oxide

Explanation: Mica is primarily composed of aluminum oxide, along with potassium, magnesium, and iron. It is known for its excellent cleavage and is often used in electrical insulation.

10. Which crystal system does the mineral pyrite belong to?

- a) Cubic
- b) Orthorhombic
- c) Monoclinic
- d) Triclinic

Answer: a) Cubic

Explanation: Pyrite belongs to the cubic crystal system, characterized by three equal axes at right angles to each other.