

Geology and Human Health

Geology · Practice Test · 20 Questions

1. Which mineral, commonly mined from the Earth, is essential for the structure of human bones and teeth?

- A) Quartz
- B) Calcite
- C) Feldspar
- D) Mica

2. Chronic exposure to high concentrations of which geological element in drinking water is known to cause arsenicosis and skin lesions?

- A) Arsenic
- B) Gold
- C) Sulfur
- D) Copper

3. What trace element, found naturally in certain geological formations, is added to water supplies to prevent dental caries?

- A) Fluorine
- B) Neon
- C) Argon
- D) Helium

4. Inhalation of fine particles of which mineral, historically mined for its heat-resistant properties, is linked to mesothelioma and lung fibrosis?

- A) Talc
- B) Asbestos
- C) Graphite
- D) Gypsum

5. The human body requires iron, which is predominantly sourced from geological ore deposits, for the production of what?

- A) Hemoglobin
- B) Insulin
- C) Collagen
- D) Keratin

6. Which mineral is a primary source of iodine, a trace element essential for the human thyroid gland to function properly?

- A) Halite
- B) Sylvite
- C) Caliche
- D) Galena

7. Prolonged contact with silica dust, common in quarrying and stone cutting, can lead to which chronic lung disease?

- A) Silicosis
- B) Asthma
- C) Emphysema
- D) Bronchitis

8. Which element, found in geological deposits of cinnabar, is a known neurotoxin that can accumulate in the human nervous system?

- A) Mercury
- B) Lead
- C) Cadmium
- D) Zinc

9. What metal, extracted from geological ores, is vital for the human immune system and DNA synthesis?

- A) Zinc
- B) Magnesium
- C) Calcium
- D) Sodium

10. The deficiency of which geological trace element can lead to the development of a goiter?

- A) Iodine
- B) Sulfur
- C) Potassium
- D) Iron

11. Radon is a radioactive gas that originates from the geological decay of what element found in soil and rocks?

- A) Uranium
- B) Silver
- C) Titanium
- D) Nickel

12. Excessive ingestion of which geological mineral, often found in salts, can lead to hypertension in humans?

- A) Sodium Chloride
- B) Calcium Sulfate
- C) Potassium Nitrate
- D) Magnesium Carbonate

13. What heavy metal, often found in geological lead deposits, is known to cause developmental delays in children?

- A) Lead
- B) Iron
- C) Copper
- D) Cobalt

14. Which geological mineral is used in the manufacturing of talcum powder, which must be carefully processed to remain free of asbestos fibers?

- A) Talc
- B) Mica
- C) Quartz
- D) Calcite

15. The human body utilizes magnesium, sourced from various geological minerals like dolomite, to regulate what?

- A) Muscle and nerve function
- B) Hair growth
- C) Vision sharpness
- D) Skin elasticity

16. Which geological element is a trace component in human tissues and is essential for the structure of vitamin B12?

- A) Cobalt
- B) Tin
- C) Bismuth
- D) Antimony

17. Exposure to high levels of selenium in the soil, which enters the food chain, can lead to a condition in humans called what?

- A) Selenosis
- B) Fluorosis
- C) Silicosis
- D) Anemia

18. Which mineral, often found in the Earth's crust, provides the phosphorus necessary for the formation of human ATP molecules?

- A) Apatite
- B) Bauxite
- C) Corundum
- D) Pyrite

19. Copper is a mineral mined from the Earth that acts as a cofactor for enzymes involved in the formation of what connective tissue protein?

- A) Collagen
- B) Myosin
- C) Actin
- D) Keratin

20. What geological substance is used in the medical field to treat various stomach ailments, particularly due to its absorbent properties?

- A) Kaolinite (Clay)
- B) Hematite
- C) Magnetite
- D) Galena