

Understanding Rocks: Formation, Types, and Examples

Geology · Practice Test · 22 Questions

1. What is the definition of igneous rock formation?

- A) When magma cools and solidifies.
- B) When fragments of other rocks are compressed.
- C) When existing rocks are transformed by heat and pressure.
- D) When organic materials decay and mineralize.

2. What is lava in relation to magma?

- A) Lava is magma that has reached the Earth's surface.
- B) Lava is solidified magma.
- C) Lava is molten rock found deep underground.
- D) Lava is a type of sedimentary rock.

3. The word 'igneous' is derived from which Latin word?

- A) Fire
- B) Stone
- C) Earth
- D) Molten

4. According to geologists, what is a rock composed of?

- A) Solid crystals of different minerals fused together.
- B) Loose grains of sand and sediment.
- C) Organic matter and fossilized remains.
- D) Pure, unadulterated elements.

5. What are the three basic types of rock?

- A) Igneous, sedimentary, and metamorphic.
- B) Volcanic, crystalline, and fossiliferous.
- C) Granite, sandstone, and marble.
- D) Intrusive, extrusive, and transitional.

6. Igneous rocks are often described as being what type of rock?

- A) Volcanic
- B) Sedimentary
- C) Metamorphic
- D) Fossiliferous

7. Which type of rock forms from molten material?

- A) Igneous rock
- B) Sedimentary rock
- C) Metamorphic rock
- D) All of the above

8. Granite is an example of which type of rock?

- A) Igneous rock
- B) Sedimentary rock
- C) Metamorphic rock
- D) None of the above

9. Where does granite typically form?

- A) Far underground from cooling magma.
- B) On the Earth's surface from lava flows.
- C) From compressed plant and animal remains.
- D) Through intense heat and pressure deep within the Earth.

10. What is the dark lava that forms the seafloor called?

- A) Basalt
- B) Granite
- C) Limestone
- D) Marble

11. Basalt is the most common type of what kind of rock?

- A) Volcanic rock
- B) Sedimentary rock
- C) Metamorphic rock
- D) Extrusive rock

12. Where can basalt be found, besides the seafloor?

- A) Volcanic lava flows
- B) Deep underground magma chambers
- C) Fossil beds
- D) Mountain peaks

13. Some granite in Australia is believed to be how old?

- A) More than four billion years old.
- B) Around one billion years old.
- C) Less than one million years old.
- D) Approximately ten thousand years old.

14. Sedimentary rocks are formed from what?

- A) Eroded fragments of other rocks or organic remains.
- B) Solidified magma or lava.
- C) Rocks transformed by heat and pressure.
- D) Crystals that precipitate from water.

15. Where do the fragments that form sedimentary rocks typically accumulate?

- A) Low-lying areas like lakes, oceans, and deserts.
- B) High mountain ranges.
- C) Volcanic craters.
- D) Deep ocean trenches.

16. What process compresses the accumulated fragments back into rock?

- A) The weight of overlying materials.
- B) Sudden cooling from volcanic activity.
- C) Intense seismic activity.
- D) Erosion by wind and water.

17. Sandstone is formed from what?

- A) Sand
- B) Mud
- C) Seashells
- D) Volcanic ash

18. Limestone can be formed from what?

- A) Seashells, diatoms, or bonelike minerals precipitating out of calcium-rich water.
- B) Compressed sand and mud.
- C) Cooled lava.
- D) Metamorphosed granite.

19. Where are fossils most frequently found?

- A) Sedimentary rock
- B) Igneous rock
- C) Metamorphic rock
- D) Lava flows

20. Sedimentary rocks are often found in layers called what?

- A) Strata
- B) Veins
- C) Dikes
- D) Sills

21. Metamorphic rocks are transformed from which other types of rocks?

- A) Sedimentary or igneous rocks.
- B) Only sedimentary rocks.
- C) Only igneous rocks.
- D) Only sedimentary and metamorphic rocks.

22. What are the agents that can transform rocks into metamorphic rocks?

- A) Pressure, heat, or the intrusion of fluids.
- B) Erosion and weathering.
- C) Cooling and solidification.
- D) Compaction and cementation.