Understanding Rocks: Formation, Types, and Examples

Geology · Answer Key · 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.