

Exploring Earth's Landforms: Mountains, Plateaus & Valleys

Your Name:

1. Which geological process is primarily responsible for the formation of fold mountains?

- ☐ A. Volcanic eruptions and lava flows
 - ☐ B. Erosion by rivers and glaciers
 - ☐ C. Collision of tectonic plates
 - ☐ D. Deposition of sediments over time
-

2. Block mountains are formed primarily due to volcanic activity.

- ☐ A. True
 - ☐ B. False
-

3. What type of mountain is formed when magma pushes up from beneath the earth but doesn't break through the surface, lifting the rock above?

4. Mountains are often referred to as 'water' because they store and release water via snowmelt and rainfall.

5. Match each mountain type with its formation process:

- | | | |
|-----------------------|----------------------|--|
| 1. Fold Mountains | <input type="text"/> | A. Built up from molten rock, ash, and gas erupting from a vent. |
| 2. Block Mountains | <input type="text"/> | B. Created when large blocks of land move up or down along faults. |
| 3. Volcanic Mountains | <input type="text"/> | C. Formed by tectonic plates pushing against each other, causing the land to buckle. |
| 4. Dome Mountains | <input type="text"/> | D. Formed when magma pushes up without breaking the surface, lifting the rock above. |
-

6. Which of the following is NOT a significant economic contribution of mountains?

- ☐ A. Generating geothermal energy
 - ☐ B. Supplying minerals and timber
 - ☐ C. Providing water resources
 - ☐ D. Supporting tourism and recreation
-

7. The tallest mountain in the solar system is Mount Everest.

- ☐ A. True
 - ☐ B. False
-

8. What is the name of the highest plateau in the world, often called the 'Roof of the World'?

9. A plateau is formed by lava spreading over large areas, building up layers of rock after volcanic eruptions cool.

10. Match the following plateau types with their defining characteristic:

- | | | |
|-----------------------------------|-------------|--|
| 1.
Volcanic
Plateau | <div></div> | A. Plateau located at the base of a mountain range. |
| 2.
Intercontinental
Plateau | <div></div> | B. Plateau carved by rivers, creating valleys and hills. |
| 3.
Piedmont
Plateau | <div></div> | C. Vast plateau spanning multiple countries or continents. |
| 4.
Dissected
Plateau | <div></div> | D. Plateau formed by layers of lava from volcanic eruptions. |
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11. Which geological process primarily forms U-shaped valleys?

- ☐ A. Wind erosion
 - ☐ B. Glacial movement
 - ☐ C. Tectonic activity
 - ☐ D. River erosion
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12. River valleys typically have a U-shape due to the uniform erosion by water.

- ☐ A. True
 - ☐ B. False
-

13. What type of valley is formed when tectonic plates move apart, creating cracks in the Earth's crust?

14. Valleys often have fertile soil due to the deposition of nutrient-rich sediments by, making them ideal for agriculture.

15. Match the names of each valley with their description:

- | | | |
|--------------------------|----------------------|---|
| 1. Rift
Valleys | <input type="text"/> | A. Valleys with steep walls and flat bottoms |
| 2.
River
Valleys | <input type="text"/> | B. Valleys carved by water flow shaping deep valleys |
| 3. Box
Valleys | <input type="text"/> | C. Valleys form due to tectonic plate movement creating cracks in the Earth's crust |
| 4.
Glacial
Valleys | <input type="text"/> | D. U-shaped valleys formed by giant rivers of ice as they grind valley walls. |
-

16. Which characteristic of plains makes them particularly suitable for agriculture?

- ☐ A. Rocky terrain for drainage
 - ☐ B. Flat terrain and fertile soil
 - ☐ C. Steep slopes for irrigation
 - ☐ D. High elevation and cool climate
-

17. Plains cover less than 10% of the Earth's terrestrial regions.

☐ A. True

☐ B. False

18. What type of plain is formed by glaciers that crush rocks and soil, spreading this material over large expanses?

19. plains are located along coastlines and are created from the accumulation of sediments brought by rivers.

20. Match each type of plain with its corresponding description:

- | | | |
|--------------------------|----------------------|---|
| 1.
Glacial
Plains | <input type="text"/> | A. Plains formed by glaciers
traversing and leveling the land. |
| 2.
Flood
Plains | <input type="text"/> | B. Plains found inland, characterized
by minimal undulation. |
| 3.
Interior
Plains | <input type="text"/> | C. Plains that develop around rivers
prone to frequent flooding. |
| 4.
Coastal
Plains | <input type="text"/> | D. Plains alongside coastlines,
formed by sediment accumulation. |
-

21. Which landform is known for acting as a barrier to wind and precipitation, influencing climate regions?

- ☐ A. Valleys
 - ☐ B. Plains
 - ☐ C. Plateaus
 - ☐ D. Mountains
-

22. Plateaus are typically poor sources of minerals and raw materials due to their elevation.

- ☐ A. True
 - ☐ B. False
-

23. Name a valley feature that historically hosted major civilizations due to their fertile soils and abundant water.

24. Plains are often called the 'breadbaskets of the world' due to their suitability for and high levels of productivity.

25. Match each the key role in earth geography with their corresponding landform:

1. Water Sources A. Plateaus

2. Agricultural Heartlands B. Plains

3. Mineral Wealth C. Valleys

4. Civilization Centers D. Mountains

26. The Grand Tetons are an example of which type of mountain range?

- ☐ A. Volcanic mountains
 - ☐ B. Fold mountains
 - ☐ C. Fault-block mountains
 - ☐ D. Dome mountains
-

27. Lacustrine plains are created by volcanic activity that levels the landscape over time.

- ☐ A. True
 - ☐ B. False
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28. What is the significance of the Tibetan Plateau, often referred to as the 'Roof of the World'?

29. During beach evolution, changes along shorelines occur over time due to factors like longshore and longshore

30. Match all the processes to their descriptions:

- | | | |
|-----------------------------|----------------------|--------------------------------------|
| 1.
Orogeny | <input type="text"/> | A. Shapes the planet topographies |
| 2.
Mountain
Formation | <input type="text"/> | B. Changes along shorelines overtime |
| 3. Plate
Tectonics | <input type="text"/> | C. Mountain Building |
| 4. Beach
Evolution | <input type="text"/> | D. Involves collision of plates |
-

31. How much of the planet's freshwater do mountains provide?

- ☐ A. 10-20%
 - ☐ B. 30-40%
 - ☐ C. 90-100%
 - ☐ D. 60-80%
-

32. Mountain ecosystems are generally resilient and unaffected by climate change.

- ☐ A. True
 - ☐ B. False
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33. What role do plateaus play in the regulation of climates, particularly exemplified by the Tibetan Plateau?

34. Valleys act as corridors, supporting diverse ecosystems as well as serving as the migration point for wildlife and connecting different habitats.

35. Match the civilization hubs with their geographic properties:

- | | | |
|-----------------|---|---|
| 1.
Plateaus | <div style="border: 1px solid black; width: 300px; height: 30px; display: inline-block;"></div> | A. Cultural and economic importance |
| 2.
Plains | <div style="border: 1px solid black; width: 300px; height: 30px; display: inline-block;"></div> | B. Civilizations started on near plains |
| 3.
Valleys | <div style="border: 1px solid black; width: 300px; height: 30px; display: inline-block;"></div> | C. Tourism and recreation |
| 4.
Mountains | <div style="border: 1px solid black; width: 300px; height: 30px; display: inline-block;"></div> | D. Valleys are economic and population hubs |
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36. Why have valleys, especially river valleys, historically hosted major civilizations?

- ☐ A. Barren soils
 - ☐ B. Fertile soils, abundant water, and sheltered environments
 - ☐ C. Extreme climates and challenging terrain
 - ☐ D. Lack of natural resources
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37. Plains are mostly unsuitable for human settlement due to their lack of natural resources and extreme weather conditions.

- ☐ A. True
- ☐ B. False
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38. What makes plateaus attractive for tourism and recreation activities?

39. Mountains are rich in, forests, and other resources, supporting mining, forestry, and hydroelectric power generation.

40. Match each resources to their corresponding description:

- | | | |
|---------------|----------------------|--|
| 1. | <input type="text"/> | A. Due to abundant water resources |
| Forest | | |
| 2. Raw | <input type="text"/> | B. Essential for industry |
| materials | | |
| 3. | <input type="text"/> | C. Rich in resources providing forests |
| Minerals | | |
| 4. | <input type="text"/> | D. Rich in minerals |
| Hydroelectric | | |
| Power | | |
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