

What Are The Different Types Of Geological Processes?

The rocks that we see around us have probably formed millions of years ago. Rocks cannot be created or destroyed. They just get transformed from one form to the other by natural processes such as weathering, erosion, deposition, etc. Rocks, mountains, valleys, plateaus, etc. all form the landscape of the earth.

The processes that change the landscape of the earth are known as **geological processes**. These processes might be slow or fast but are constantly happening.

The following are the different types of geological processes:

1. Erosion

Erosion is a process wherein the natural surfaces of the earth are worn away and transported to other places. The erosion can be caused by natural forces such as water, ice, or air.

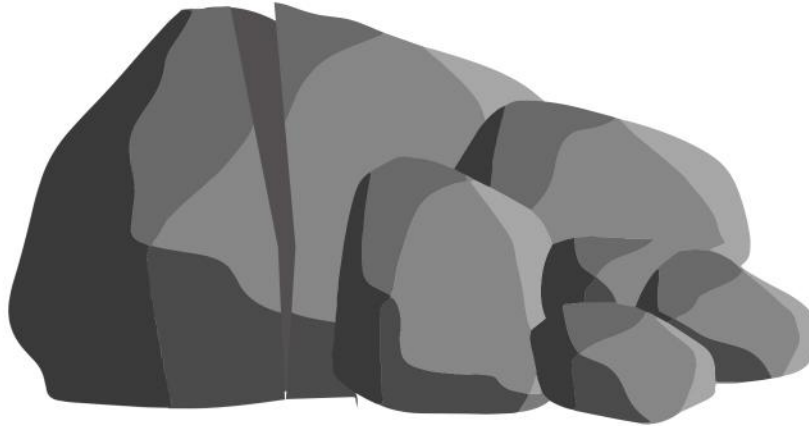


Examples:

- (a) Rivers carry sediment and deposit it in the ocean.
- (b) Glaciers move materials from mountains along with them as they move.
- (c) The wind moves dunes from one place to the other and creates new sand dunes.

2. Weathering

Weathering is a process wherein rocks get dissolved or disintegrated into smaller pieces due to mechanical, chemical, or organic weathering processes.



Examples:

a) As wind or water passes along the mountains, it carries the minerals from the mountains along with it and the minerals get worn out.

(b) Rust is also an example of weathering. It happens when iron reacts with oxygen and forms rust on the surface of the iron.

3. Plate tectonics

The theory of the plate tectonics states that the Earth's crust is broken down into different plates and all these plates interact with each other.

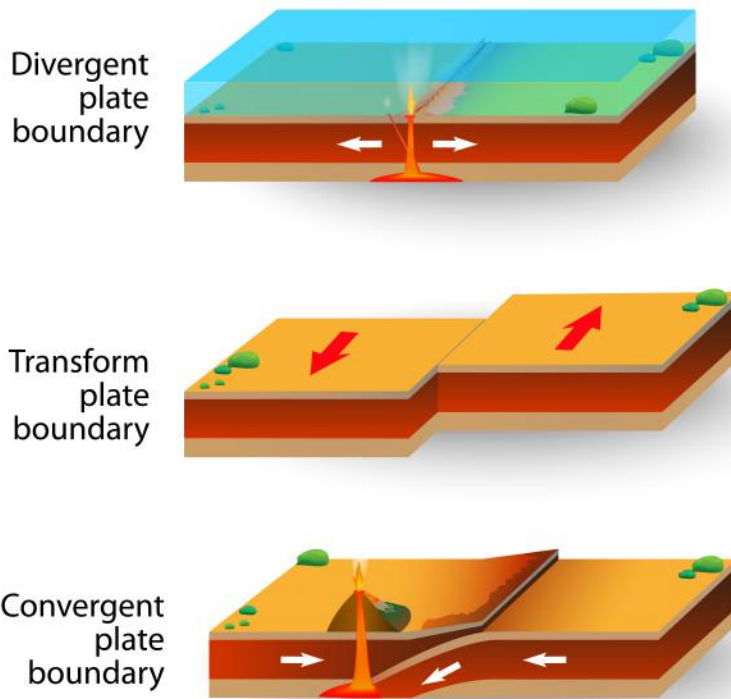
There are three types of plate boundaries:

- **Transform boundaries**

These are areas where two plates slide along each other. Due to the friction between these plates, earthquakes are common in these regions.

- **Convergent boundaries**

These are areas where two tectonic plates collide with each other. In the areas of convergent boundaries, volcanoes are common.



- **Divergent boundaries**

In these areas, the plates move apart from each other. Divergent boundaries on land might cause rift valleys, and the divergent plates in the oceans may cause mid-oceanic ridges.

4. Volcanism

Volcanism is a phenomenon associated with the discharge of hot water, steam, lava, molten rocks, etc. from the crust of the earth. They are common in areas with convergent and divergent boundaries.



Tick the correct answer from the options given below:

1. Rocks can be created and destroyed.

- True False
 Both of the above None of the above

2. What are the different processes that change the landscape of the earth known as?

- Erosion Weathering
 Geological processes Volcanism

3. What is the process in which the natural surfaces of the earth get worn away and transported to other places?

- Volcanism Erosion
 Weathering Geological processes

4. What is this an example of: "Rivers carrying sediments from mountains and depositing them in the ocean bed."

- Volcanism Erosion
 Weathering Geological processes

5. What is this an example of: "Ice glaciers moving the content of a mountain with them as they move."

- Erosion Weathering
 Geological processes Volcanism

6. What is the process wherein rocks break down in multiple small pieces?

Volcanism

Erosion

Weathering

Geological processes

7. What is rusting an example of?

Volcanism

Erosion

Weathering

Geological processes

8. Which theory suggests this phenomenon: "The earth's crust is broken down into different plates and all these plates interact with each other"

Theory of gravity

Newton's law of force

The theory of the plate tectonics

Theory of relativity

9. What happens in convergent boundaries?

Tectonic plates collide with each other by moving towards each

Tectonic plates pass along each other

Tectonic plates move away from each other

Valleys are formed

10. What happens in areas with divergent boundaries?

Tectonic plates collide with each other by moving towards each

Tectonic plates pass along each other

Tectonic plates move away from each other

Valleys are formed