



Science Understanding - Weathering, Erosion & Deposition

Middle Primary Advance Science

Read the passage. Answer the questions below.

Have you ever wondered how mountains, beaches, and valleys are formed?

The land around us is always changing because of three natural processes: weathering, erosion, and deposition.



Weathering happens when rocks break down into smaller pieces. This can occur because of wind, water, or changes in temperature. For example, in the Grampians in Victoria, rainwater slowly seeps into cracks in the rocks. When it freezes at night, the water expands and breaks the rocks apart. Over many years, this creates rough, crumbling cliffs and beautiful rock shapes.

Erosion is when rock and soil are carried away from one place to another by wind, water, or ice. In the Simpson Desert, the wind blows sand across the dry land, slowly wearing down sand dunes and moving them a little each year. Rivers also cause erosion. The Murray River, for example, cuts through soil and rock as it flows, carrying tiny bits of earth downstream. At the Twelve Apostles, powerful waves crash against the cliffs, eroding the base and causing some stacks to collapse over time.

Deposition happens when the wind or water slows down and drops the materials it was carrying. This is how new landforms can be created. Along the coast of Western Australia, waves and tides deposit sand along the shore, forming wide, golden beaches. The Mouth of the Murray River is another place where deposition builds up sand and mud, forming small islands and wetlands.

All these processes happen slowly over time, shaping Australia's amazing landscapes. From the red cliffs of the outback to our sandy beaches, weathering, erosion, and deposition work together to create the land we see today.

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Questions

1. What are the three natural processes that change the land around us?

2. What happens during weathering?

3. How does rainwater cause rocks to break apart in the Grampians?

4. What is erosion?

5. Give one example from the text of where erosion happens in Australia.

6. What is deposition?

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Questions

7. How are beaches formed along the coast of Western Australia?

8. What landforms are created at the Mouth of the Murray River through deposition?

9. How do weathering, erosion, and deposition work together to shape the land?

10. Why do these processes take a long time to change the landscape?

11. Weathering breaks rocks into smaller pieces using only wind. (True / False)

12. In the Grampians, freezing rainwater expands in rock cracks to break them apart.
(True / False)

13. Erosion at the Twelve Apostles happens because waves crash against the cliffs and wear them down. (True / False)

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Questions

1. What are the three natural processes that change the land around us?

The three natural processes are weathering, erosion, and deposition.

2. What happens during weathering?

Weathering happens when rocks break down into smaller pieces because of wind, water, or temperature changes.

3. How does rainwater cause rocks to break apart in the Grampians?

In the Grampians, rainwater seeps into rock cracks and freezes at night, causing the water to expand and break the rocks apart.

4. What is erosion?

Erosion is when rock and soil are carried away from one place to another by wind, water, or ice

5. Give one example from the text of where erosion happens in Australia.

One example is at the Twelve Apostles, where waves crash against cliffs, wearing them down over time.

6. What is deposition?

Deposition happens when the wind or water slows down and drops the materials it was carrying.

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Questions

7. How are beaches formed along the coast of Western Australia?

Along the Western Australian coast, waves and tides deposit sand that forms wide, golden beaches.

8. What landforms are created at the Mouth of the Murray River through deposition?

At the Mouth of the Murray River, deposition creates small islands and wetlands.

9. How do weathering, erosion, and deposition work together to shape the land?

These three processes work together by breaking down rocks (weathering), moving them (erosion), and dropping them elsewhere (deposition) to form new landforms.

10. Why do these processes take a long time to change the landscape?

The processes happen slowly over many years, which is why landscapes change gradually.

11. Weathering breaks rocks into smaller pieces using only wind. (True / False)

Weathering uses wind, water, or changes in temperature.

12. In the Grampians, freezing rainwater expands in rock cracks to break them apart.

(True / False)

13. Erosion at the Twelve Apostles happens because waves crash against the cliffs and wear them down. (True / False)