

Weathering and Soil Formation

Chapter 8: Weathering and Soil Formation · Topic 1

Key Concept

Physical weathering breaks rocks apart through processes like temperature changes, freezing water, or wind and water erosion.

Chemical weathering breaks down rocks through chemical reactions, like rainwater dissolving certain minerals over time.

Soil forms as weathered rock particles combine with decomposed organic matter (humus) from plants and animals.

Healthy soil formation takes a very long time and is essential for agriculture, since plants need soil to grow and get nutrients.

Quick Revision Notes

- Weathering breaks down rocks over time.
- Physical weathering: temperature changes, freezing water.
- Chemical weathering: chemical reactions like rain dissolving minerals.
- Soil forms from weathered rock and organic matter.
- Organic matter is called humus.
- Soil formation takes a very long time.
- Soil is essential for agriculture.
- Plants need soil for nutrients.

Practice Questions

- 1 Discuss an example of physical weathering.
- 2 Discuss an example of chemical weathering.
- 3 Explain how humus forms.
- 4 Research why soil formation takes so long.
- 5 Discuss why soil is important for farming.
- 6 Find a rock that shows signs of weathering.