

Changes to Earth's Surface

Summary

Earth is covered by a layer of rock called the crust, which has many shapes called landforms. Landforms change constantly. Some changes take a long time; other changes happen quickly. Physical weathering and chemical weathering can change landforms. Weathered materials can be moved by erosion and deposition. In erosion, pieces of Earth's surface are moved from one place to another; in deposition, pieces of weathered material are left, or deposited, in a different place. Gravity can pull materials down slopes quickly as in landslides and avalanches. Volcanoes and earthquakes cause quick changes to Earth's surface.

Before Reading

Activate Prior Knowledge

Provide background for students by previewing the book. Discuss the text features and preview the key vocabulary and concepts.

Vocabulary

deposition, earthquake, epicenter, erosion, fault, landform, landslide, volcano, weathering

Comprehension Skill: Compare and Contrast

Tell students that when they read about weathering, they should think about how physical and chemical weathering are alike and different.

During Reading

Think Critically

Have students answer the *What Did You Learn?* questions located on the inside back cover of their book.

1. What can cause a landslide? Heavy rains or earthquakes can loosen material on a hill. The force of gravity pulls loosened material downhill.

2. What makes magma rise inside a volcano? Gases make magma rise inside a volcano.

3. Why do earthquakes happen at faults? Faults are cracks in the Earth's crust where rock can shift suddenly when pressure builds up. The sudden shift is an earthquake.

After Reading

Writing in Science

Erosion and deposition are two forces that change landforms. Explain in your own words what each force does. Include details from the book to support your answer.

Organize Information

Graphic Organizer: Compare and Contrast
Have students complete the Compare and Contrast chart on the BLM for this Leveled Reader to tell how physical weathering and chemical weathering are alike and different.

Related Resources

Vocabulary Cards	Equipment Kit
Every Student Learns	LabZone
Activity Flipchart	Quick Study
Graphic Organizer Transparencies	
Quick Activity Transparency	
www.pearsonsuccessnet.com	

Write your answers.

1. Name some things that can cause physical weathering.
Water, ice, and temperature changes can bring about weathering.
2. What can cause an avalanche?
Fierce winds, earthquakes, and explosions can cause avalanches.
3. What are some ways to control erosion?
To help control erosion, people can grow plants on side of hills and farmers can plow hilly fields into terraces.
4. How are physical weathering and chemical weathering alike?
 How are they different? Use the graphic organizer to help you.

Possible answer:

Compare and Contrast

