

Chapter 5 Weathering, Soil, and Mass Movements

Section 5.3 Mass Movements

(pages 143–147)

This section describes situations in which large amounts of soil are moved naturally.


Reading Strategy (page 143)

Previewing As you read the section, rewrite the green topic headings as *what* questions. Then write an answer to each question. For more information on this Reading Strategy, see the **Reading and Study Skills** in the **Skills and Reference Handbook** at the end of your textbook.

Question	Answer
a. What triggers mass movements?	b.
c.	d.

1.  The transfer of rock and soil downslope due to _____ is called mass movement.

Triggers of Mass Movements (pages 144–145)

2.  The factors that commonly trigger mass movements are saturation of surface materials with water, oversteepening of slopes, removal of vegetation, and _____.
3. Circle the letter of each sentence that is true about water triggering mass movements.
 - a. Heavy rains and rapid melting of snow can trigger mass movements by saturating surface materials with water.
 - b. When the pores in sediment become filled with water, the particles slide past one another more easily.
 - c. If there is enough water, sand grains will ooze downhill.
4. Is the following sentence true or false? If the steepness of a slope exceeds the stable angle, mass movements become more likely. _____

Chapter 5 Weathering, Soil, and Mass Movements

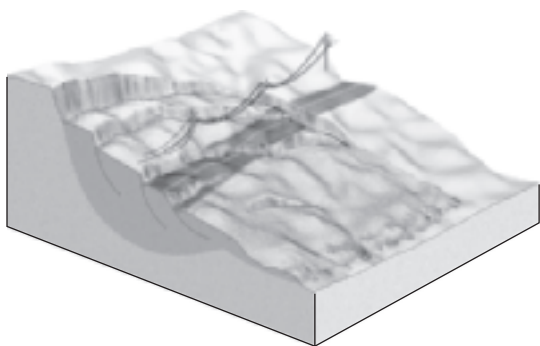
Types of Mass Movements (page 145–147)

Match each description with its term.

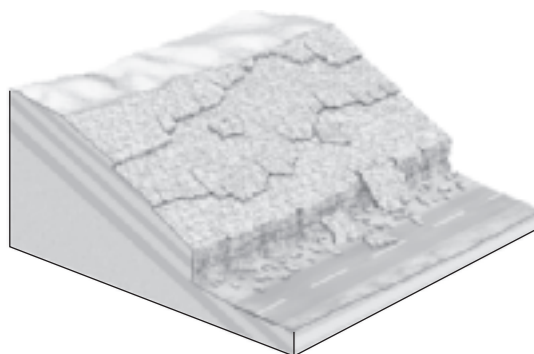
- | Description | Term |
|--|--------------|
| _____ 5. a quickly moving mass of material that contains large amounts of water | a. rockfall |
| _____ 6. when rock or rock fragments fall freely through the air | b. rockslide |
| _____ 7. slides that include bedrock that move suddenly along a flat, inclined surface | c. mudflow |

8. Identify each form of mass wasting shown below.
Choose from these terms.

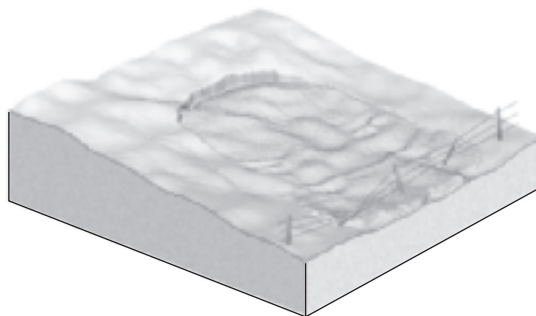
earthflow slump rockslide



A. _____



B. _____



C. _____

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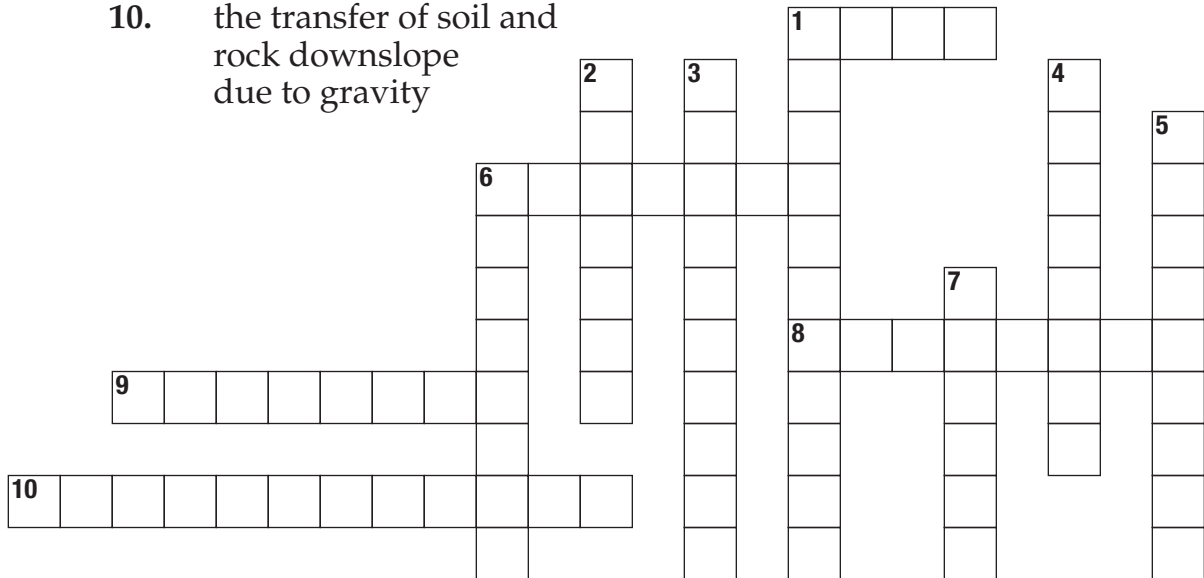
WordWise

Use the vocabulary terms from Chapter 5 and the clues below to complete the crossword puzzle.

earthflow	mudflow	rockfall
laterite	pedalfer	rockslide
mass movement	pedocal	soil
mechanical	regolith	soil horizon

Clues across:

1. the part of the regolith that supports the growth of plants
6. soil usually found in drier western United States in areas that have grasses and brush vegetation
8. a layer of rock and mineral fragments produced by weathering
9. occurs when rocks or rock fragments fall freely through the air
10. the transfer of soil and rock downslope due to gravity



Clues down:

1. zones of soil that have similar composition, texture, structure, and color
2. flows that move quickly
3. a type of weathering in which physical forces break rock into smaller pieces without changing its composition
4. soil that forms in hot, wet tropical areas
5. flows that move relatively slowly
6. soil that usually forms in temperate areas
7. slide that include segments of bedrock