


Chapter 5 Weathering, Soil, and Mass Movements

Section 5.1 Weathering**(pages 126–132)***This section describes different types of weathering in rocks.***Reading Strategy (page 126)**

Building Vocabulary As you read the section, define each vocabulary term. 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.

Vocabulary Term	Definition
Mechanical weathering	a. process in which physical forces break rock into pieces without changing the rock's mineral composition
Frost wedging	b.
Talus	c.
Exfoliation	d.
Chemical weathering	e.

Mechanical Weathering (pages 126–129)

- Three types of mechanical weathering are frost wedging, unloading, and _____.
-  Is the following sentence true or false? In nature, three physical processes are especially important causes of mechanical weathering: chemical reactions, spheroidal weathering, and the presence of water.

- Circle the letter of each sentence that is true about mechanical weathering.
 - Each piece of broken rock has the same characteristics as the original rock.
 - In nature, three physical processes are especially important causes of mechanical weathering: frost wedging, unloading, and biological activity.
 - When a rock is broken apart, less surface area is exposed to chemical weathering.

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Chemical Weathering (pages 129–131)

4. Circle the letter of each sentence that is true about chemical weathering.
- a. Water is the most important agent in chemical weathering.
 - b. Chemical weathering converts granite to clay minerals and quartz grains.
 - c. Chemical weathering can change the shape of a rock and its chemical composition.



5. Use the term below to fill in the blank. The weathering process shown in the photograph is called _____.

spheroidal weathering exfoliation mechanical weathering

Rate of Weathering (pages 131–132)

6. Is the following sentence true or false? Factors that affect rate of weathering are surface area, rock characteristics, and climate.
- _____
7. Two characteristics that affect rate of weathering are number of cracks and _____.
8. How would an increase in the frequency of freezing and thawing affect the rate of weathering?
- a. decrease weathering
 - b. increase weathering
 - c. cause no change in weathering