

**Chapter 5 Weathering, Soil, and Mass Movements**

**Section 5.1 Weathering**

*This section describes different types of weathering in rocks.*

**Reading Strategy**

**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.
Frost wedging	b.
Talus	c.
Exfoliation	d.
Chemical weathering	e.

**Mechanical Weathering**

1. List and describe three types of mechanical weathering.

---



---




---



---



---

2.  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. \_\_\_\_\_

3. Circle the letter of each sentence that is true about mechanical weathering.

- a. Each piece of broken rock has the same characteristics as the original rock.
- b. In nature, three physical processes are especially important causes of mechanical weathering: frost wedging, unloading, and biological activity.
- c. When a rock is broken apart, less surface area is exposed to chemical weathering.
- d. Mechanical weathering is the transformation of rock into new compounds.

## Chapter 5 Weathering, Soil, and Mass Movements

### Chemical Weathering

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.
  - d. Spheroidal weathering is a form of chemical weathering.
5. Describe the weathering process that the rocks in the photograph are undergoing.  
\_\_\_\_\_  
\_\_\_\_\_

6. The weathering process shown in the photograph is called \_\_\_\_\_.



### Rate of Weathering

7. Is the following sentence true or false? Factors that affect rate of weathering are surface area, rock characteristics, and climate.  
\_\_\_\_\_
8. Two characteristics that affect rate of weathering are \_\_\_\_\_ and \_\_\_\_\_.
9. What are three ways that the climatic factors of temperature and moisture affect rate of weathering?
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
10. What are two factors that cause differential weathering?  
\_\_\_\_\_  
\_\_\_\_\_