

Skills Worksheet

Directed Reading A 10-2

Section: Rates of Weathering

1. What three factors determine the rate at which rock weathers?

DIFFERENTIAL WEATHERING

- _____ 2. The process by which softer, less weather-resistant rocks wear away and leave harder, more weather-resistant rocks behind is called
- a. mechanical weathering.
 - b. chemical weathering.
 - c. differential weathering.
 - d. acid precipitation.
- _____ 3. Scientists believe Devil's Tower once was part of a
- a. volcano.
 - b. larger piece of granite.
 - c. karst landscape.
 - d. ventifact.
- _____ 4. The landform called Devil's Tower is made up of the hard, weather-resistant rocks that remained after the softer rocks
- a. karsted.
 - b. oxidized.
 - c. tumbled in a riverbed.
 - d. wore away.

THE SHAPE OF ROCKS

- _____ 5. Weathering takes place
- a. at different rates, depending on weight.
 - b. on the outer surface of rocks.
 - c. on all rocks equally.
 - d. inside the rocks.
- _____ 6. Because of a large rock's large volume, it will
- a. weather unevenly.
 - b. weather relatively quickly.
 - c. not weather at all.
 - d. weather relatively slowly.

Directed Reading A *continued*

7. Small rocks weather more quickly than large rocks because they have more surface area as compared to their _____.

WEATHERING AND CLIMATE

8. The average weather condition in an area over a long period of time is called _____.

9. Chemical weathering such as oxidation occurs more quickly in a climate that is _____ and _____.

WEATHERING AND ELEVATION

_____ 10. Weathering occurs faster at high elevations because of

- a. an increase in wind but not ice or rain.
- b. an increase in ice and rain but not wind.
- c. a decrease in wind, ice, and rain.
- d. an increase in wind, ice, and rain.

11. How does gravity contribute to the weathering of steep mountain slopes?
