

Directed Reading

Section: Groundwater and Chemical Weathering

1. Water that is high in dissolved minerals such as calcium, magnesium, and iron is called _____.
2. Water that is relatively low in concentrations of dissolved minerals is called _____.
3. Water that is high in dissolved minerals tends to have a _____ taste, so many people do not like to drink it.
4. Household appliances and fixtures might be damaged by the buildup of _____ in hard water.

RESULTS OF WEATHERING BY GROUNDWATER

5. How does chemical weathering work to dissolve minerals in rock?

6. Define the word *cavern*.

7. How does a cavern form?

8. What is one example of a large limestone cavern in the United States?

Directed Reading *continued*

In the space provided, write the letter of the description that best matches the term or phrase.

- _____ 9. stalactite
 - _____ 10. stalagmite
 - _____ 11. column
- a. created when upward- and downward-forming calcite deposits meet
 - b. created when calcite builds up to form an upward-pointing cone
 - c. created when calcite drips form a cone-shaped deposit on a cavern ceiling

12. Define *sinkhole*.

13. A depression that forms when rock dissolves and overlying sediments settle into cracks in the rock is called a(n) _____ sinkhole.

14. Why do collapse sinkholes sometimes develop during dry periods?

15. Describe how natural bridges are formed.

KARST TOPOGRAPHY

16. Define *karst topography*.

17. What are the common features of karst topography?

Directed Reading *continued*

18. In which five regions of the United States can karst topography be found?

19. Karst topography usually forms in regions with _____
weather.

20. Formations made of _____ are usually found in karst
topography.

21. In karst regions, as the plentiful groundwater dissolves the limestone, cracks in
the rocks enlarge to form _____.

22. In dry regions, karst topography is the result of many
_____ forming close to each other.

23. Karst topography in dry regions is characterized by
_____ and _____.

24. Karst topography in dry regions may point to a climate that is becoming
_____.

