



- \_\_\_\_\_ 13. What is the purpose of adding alum to water during the water treatment process?
- to filter and remove large organisms and trash
  - to form flocs that bacteria and other impurities will cling to
  - to prevent bacterial growth
  - to remove unwanted gases
- \_\_\_\_\_ 14. How is fresh water used in industry?
- in manufacturing processes
  - in the disposal of waste products
  - to generate power
  - all of the above
- \_\_\_\_\_ 15. Many areas of the world that do not have adequate fresh water have become habitable because
- rainfall patterns have changed.
  - water management projects have diverted water to the areas.
  - icebergs have been towed in to provide fresh water.
  - people have practiced water conservation.
- \_\_\_\_\_ 16. A hole that is dug into the ground to obtain fresh water is called
- |                       |                 |
|-----------------------|-----------------|
| a. the recharge zone. | c. an aquifer.  |
| b. a well.            | d. a watershed. |
- \_\_\_\_\_ 17. Which of the following is one way that a person can conserve water?
- Take a bath instead of a shower.
  - Wash laundry in small, partial loads.
  - Use a low-flow shower head and take short showers.
  - Water the lawn daily and at mid-day.
- \_\_\_\_\_ 18. Which of the following is a source of point-pollution?
- unlined landfill
  - runoff from city streets
  - precipitation containing air pollution
  - runoff from farms
- \_\_\_\_\_ 19. Animal feces would be classified as which type of water pollutant?
- |                   |                        |
|-------------------|------------------------|
| a. pathogens      | c. inorganic chemicals |
| b. organic matter | d. heavy metals        |
- \_\_\_\_\_ 20. Polluted groundwater is difficult to clean up because
- groundwater is deep in the ground and dispersed through large areas of rock.
  - pollutants cling to the materials that make up the aquifer and contaminate the clean water.
  - the recycling process of groundwater can take hundreds or thousands of years.
  - All of the above

## CHAPTER 11 Review

### Reviewing Key Terms

Use each of the following terms in a separate sentence.

1. *aquifer*
2. *recharge zone*
3. *reservoir*
4. *wastewater*
5. *biomagnification*

For each pair of terms, explain how the meanings of the terms differ.

6. *surface water* and *groundwater*
7. *porosity* and *permeability*
8. *watershed* and *river system*
9. *point-source pollution* and *nonpoint-source pollution*
10. **Concept Map** Use the following terms to create a concept map: *Earth's surface, rivers, underground, fresh water, water table, 5 percent, and icecaps.*

### Reviewing Main Ideas

11. Which of the following processes is *not* a part of the water cycle?
  - a. evaporation
  - b. condensation
  - c. biomagnification
  - d. precipitation
12. Most of the fresh water on Earth is
  - a. located underground in aquifers.
  - b. frozen in the polar icecaps.
  - c. located in rivers, lakes, streams, and wetlands.
  - d. found in Earth's atmosphere.
13. Which of the following processes is *not* used in a conventional method of water treatment?
  - a. filtration
  - b. coagulation
  - c. aeration
  - d. percolation
14. Which of the following is *not* an example of point-source pollution?
  - a. oil that is escaping from a damaged tanker
  - b. heavy metals that are leaching out of an underground mine
  - c. water runoff from residential lawns
  - d. untreated sewage that is accidentally released from a wastewater treatment plant
15. Which of the following pollutants causes artificial eutrophication?
  - a. heavy metals from unlined landfills
  - b. inorganic plant nutrients from wastewater and fertilizer runoff
  - c. toxic chemicals from factories
  - d. radioactive waste from nuclear power plants
16. Pumping large amounts of water from an aquifer may cause the
  - a. water table to rise.
  - b. recharge zone to shrink.
  - c. wells in an area to run dry.
  - d. percolation of groundwater to stop.
17. Oil pollution in the ocean is mostly caused by
  - a. major oil spills, such as the 1989 *Exxon Valdez* oil spill.
  - b. the cumulative effect of small oil spills and leaks on land.
  - c. decomposed plastic materials.
  - d. intentional dumping of excess oil.
18. Thermal pollution has a harmful effect on aquatic environments because
  - a. water has been circulated around power-plant generators.
  - b. it increases the number of disease-causing organisms in aquatic environments.
  - c. it reduces the amount of dissolved oxygen in aquatic environments.
  - d. it decreases the nutrient levels in aquatic environments.