

CHAPTER 1: WHAT'S WATER?

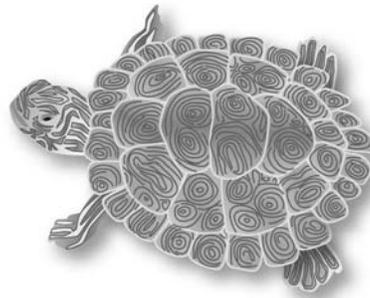
QUICK QUIZ

Directions: Circle True or False.

- | | | |
|------|-------|----------------------------------------------------------|
| True | False | 1. Water can dissolve stone. |
| True | False | 2. The quantity of water on Earth never changes. |
| True | False | 3. Without water, life would not exist on Earth. |
| True | False | 4. We could be drinking water that dinosaurs once drank. |

Directions: Circle the answer that best completes each sentence.

5. Water is composed of:
- 2 parts hydrogen and 1 part oxygen
 - 1 part hydrogen and 2 parts oxygen
 - 1 part hydrogen and 1 part oxygen
6. The amount of seawater on Earth is about:
- 59%
 - 70%
 - 97%
7. The amount of clean, fresh liquid water on Earth that we can use is:
- 3%
 - 30%
 - less than 1%



Directions: Match each word with its definition.

- | | |
|-------------------------|-------------------------------------------------------------|
| ___ 8. condensation | a. water soaking into the ground |
| ___ 9. evaporation | b. water turning into vapor and rising into the air |
| ___ 10. infiltration | c. water flowing into rivers, streams, lakes, and oceans |
| ___ 11. precipitation | d. water rising into the air from plants |
| ___ 12. surface run-off | e. water falling to the Earth as rain, snow, hail, or sleet |
| ___ 13. transpiration | f. water vapor cooling and turning into tiny droplets |

CHAPTER 2: WATER SUPPLY

QUICK QUIZ

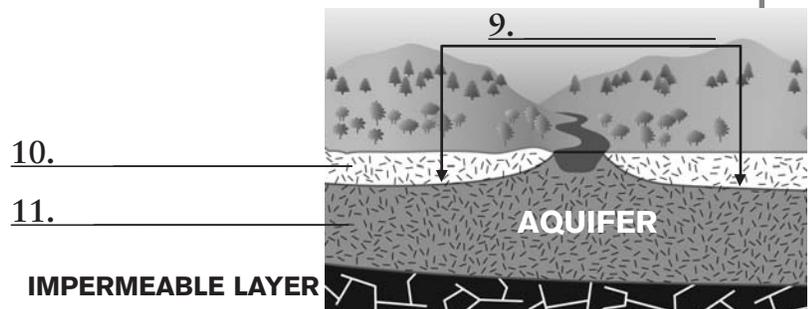
Directions: Circle the answer that best completes each sentence.

1. Surface water is:
 - a. water on top of the ground
 - b. water in aquifers
 - c. both a and b
2. Surface water is used:
 - a. to irrigate crops
 - b. for drinking water
 - c. both a and b
3. Underground water basins are called:
 - a. aquifers
 - b. wells
 - c. springs
4. Groundwater is found:
 - a. a few feet underground
 - b. hundreds or thousands of feet underground
 - c. both a and b
5. To recharge a groundwater basin means to:
 - a. take all the water out
 - b. put water into it
 - c. drill a well into it
6. Aquifers can be composed of:
 - a. gravel and sand
 - b. fractured and porous rock
 - c. both a and b

7. If more water is discharged from a groundwater basin than is recharged, then:
 - a. springs could cease flowing
 - b. land might sink, causing buildings and roads to crack or break
 - c. both a and b
8. An artesian spring occurs:
 - a. along the sides of valleys that have been eroded below the level of the water table
 - b. when groundwater is trapped between impermeable layers
 - c. when wells are drilled into the ground
9. In south central Texas, groundwater supplies about:
 - a. half of the supply of water
 - b. about 20% of the supply of water
 - c. about 80% of the supply of water

Directions: Label the diagram below with these terms:

zone of aeration
 zone of saturation
 water table



CHAPTER 3: THE EDWARDS AQUIFER

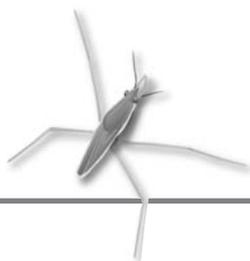
QUICK QUIZ

Directions: Circle True or False.

- True False 1. Limestone is partially formed from the skeletons of sea creatures.
- True False 2. Limestone is dissolved by acidic water.
- True False 3. The drainage area is the smallest component of the Edwards Aquifer system.
- True False 4. The drainage area is known as the Balcones Fault Zone.
- True False 5. The recharge zone is also known as the Edwards Plateau.
- True False 6. In the artesian zone, water is held in tiny pores and in large caves.
- True False 7. The saline water line is where the aquifer meets the Gulf of Mexico.
- True False 8. Some species that live in the aquifer have no eyes.
- True False 9. All of the species that live in the aquifer are endangered or threatened.

Directions: Circle the answer that best completes each sentence.

10. The Edwards Aquifer began forming:
- 100 years ago
 - 1 million years ago
 - 100 million years ago
11. The Balcones Fault Zone was formed when:
- limestone dissolved
 - a shift in the Earth's crust caused central Texas to rise
 - water flowed into sinkholes
12. The Edwards Limestone:
- can hold large amounts of water
 - is too porous to hold water
 - is an impermeable rock
13. In the drainage area:
- water drains into the Edwards Aquifer
 - springs feed rivers and streams that lead to the recharge zone
 - water is held back by dams so that it can soak into the ground
14. In the recharge zone:
- some rivers and streams disappear into sinkholes
 - the land surface is mainly impermeable rock
 - streams flow downhill into the drainage area
15. In the artesian zone:
- water flows into the aquifer
 - water flows from east to west
 - water is trapped between impermeable layers



CHAPTER 4: WATER USE

QUICK QUIZ

Directions: Circle True or False.

- True False 1. Evidence has been found that people lived around San Marcos Springs about 13,000 years ago.
- True False 2. About 95% of the water discharged from the Edwards Aquifer is used for municipal purposes.
- True False 3. We each use on average about 100 gallons of water a day.
- True False 4. Most municipal water is used for public uses, such as watering parks and fighting fires.
- True False 5. Industrial water use includes water used in power plants to generate electricity.

Directions: Circle the answer that best completes each sentence.

6. The acequias were:
- springs used by early settlers
 - a system of water ditches
 - Spanish explorers that came to the Edwards Aquifer region in the 1500s
7. Water that flows from springs is used:
- to help keep ecosystems healthy
 - to provide recreation for residents and tourists
 - both a and b
8. Irrigation water use includes water for:
- crops and pastures
 - nurseries and golf courses
 - both a and b
9. Water used in rural homes is categorized as:
- municipal water use
 - springflow water use
 - domestic/livestock water use
10. The Edwards Aquifer provides water for about:
- 2 million people
 - 1 million people
 - 1/2 million people



CHAPTER 5: THE FUTURE

QUICK QUIZ

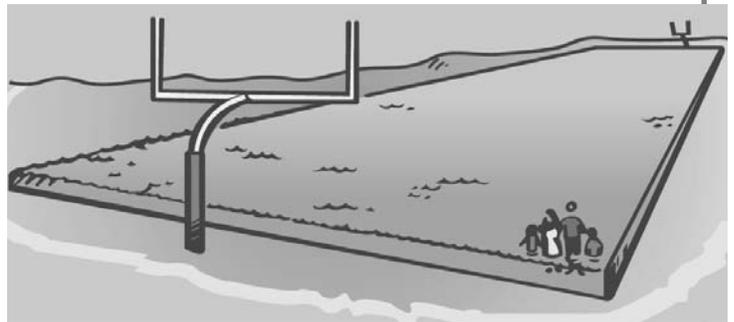
Directions: Circle True or False.

- True False 1. The Edwards Aquifer is an unlimited source of water.
- True False 2. Recharge of the Edwards Aquifer differs very little from year to year.
- True False 3. If water in the Edwards Aquifer falls below a certain level, our water use can be restricted.
- True False 4. The amount of water that can be withdrawn from the Edwards Aquifer is limited.
- True False 5. The quality of water in the Edwards Aquifer is above federal standards.

Directions: Circle the answer that best completes each sentence.

6. Very large quantities of water are measured in:
- acre-feet
 - gallons
 - water tables

7. Aquifer water levels are indicated by:
- artesian wells
 - observation wells
 - springflow



8. The population in the Edwards Aquifer region is:
- decreasing slightly
 - increasing
 - staying about the same
9. The Edwards Aquifer is susceptible to pollution because:
- of changes in land use
 - water levels are decreasing
 - no restrictions have been put in place

10. Nonpoint source pollution:
- comes from a variety of indefinite places
 - comes from an identifiable source
 - is not a problem for the Edwards Aquifer



CHAPTER 6: WATER MANAGEMENT



QUICK QUIZ

Directions: Circle True or False.

- True False 1. Conservation means doing without.
- True False 2. Rainwater can be collected and used in homes and on farms.
- True False 3. Recycling water is inexpensive.
- True False 4. Desalination is not yet used in Texas.
- True False 5. The largest expense in desalination is for equipment maintenance.

Directions: Circle the answer that best completes each sentence.

6. The largest percentage of water used in homes is for:
- landscape watering
 - drinking and cooking
 - showering and bathing
7. At wastewater treatment plants, water is:
- disposed of
 - cleaned
 - desalinated
8. An advantage of using recycled water is that:
- it can be used for drinking water
 - the supply is not affected by droughts
 - both a and b
9. Desalination is promising in Texas because the state has:
- a large supply of brackish water
 - a near-limitless supply of seawater
 - both a and b

Directions: Match each technology with how it uses less water.

- | | |
|-----------------------------------|-----------------------------------------------------------------------------------------------------|
| ___ 10. no-touch sink faucet | a. mixes air with water to reduce water flow |
| ___ 11. recycling system | b. monitors plants and soil to determine the exact amount of water needed |
| ___ 12. drip irrigation | c. releases water only when hands are under the faucet |
| ___ 13. pumpback system | d. reuses water in car washes, factories, and other places |
| ___ 14. low-flow irrigation pipe | e. releases just the right amount of water under the ground at the right places |
| ___ 15. evapotranspiration system | f. puts water just at the base of individual plants |
| ___ 16. low-flow showerhead | g. captures runoff at the bottom of a field and returns it to the top of the field to be used again |

NAME _____ DATE _____

Directions: Circle True or False.

- | | | |
|------|-------|--------------------------------------------------------------------------------------------------|
| True | False | 1. Limestone in the Edwards Aquifer is slowly being dissolved by acidic water. |
| True | False | 2. The drainage area is the largest component of the Edwards Aquifer system. |
| True | False | 3. In the artesian zone, water is held in tiny pores and in large caves. |
| True | False | 4. All of the species that live in the Edwards Aquifer are endangered or threatened. |
| True | False | 5. The amount of water that can be withdrawn from the Edwards Aquifer is unlimited. |
| True | False | 6. The population in the Edwards Aquifer region is staying about the same. |
| True | False | 7. Most municipal water is used in homes. |
| True | False | 8. If water in the Edwards Aquifer falls below a certain level, our water use can be restricted. |
| True | False | 9. We can collect rainwater at our homes to increase our water supply. |
| True | False | 10. Technology can help us save water. |

Directions: Circle the answer that best completes each sentence.

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>11. Water is composed of:</p> <ul style="list-style-type: none"> a. 2 parts hydrogen and 1 part oxygen b. 1 part hydrogen and 2 parts oxygen c. 1 part hydrogen and 1 part oxygen | <p>13. When water evaporates, it:</p> <ul style="list-style-type: none"> a. soaks into the ground b. turns into vapor and rises into the air c. cools and turns into tiny droplets |
| <p>12. The amount of clean, fresh liquid water on Earth that we can use is:</p> <ul style="list-style-type: none"> a. 97 % b. 30% c. less than 1% | <p>14. Surface water is used:</p> <ul style="list-style-type: none"> a. to irrigate crops b. for drinking water c. both a and b |



15. Underground water basins are called:
 - a. aquifers
 - b. wells
 - c. springs

16. In south central Texas, groundwater provides about:
 - a. half of the supply of water
 - b. 20% of the supply of water
 - c. 80% of the supply of water

17. The Balcones Fault Zone was formed when:
 - a. minerals from seawater were deposited on the sea floor
 - b. the Earth's crust shifted causing central Texas to rise
 - c. explorers settled in Texas

18. An artesian spring occurs:
 - a. along the sides of valleys that have been eroded below the level of the water table
 - b. when groundwater is trapped between impermeable layers
 - c. when wells are drilled into the ground

19. In the recharge zone:
 - a. some rivers and streams disappear into sinkholes
 - b. the land surface is mainly impermeable rock
 - c. streams flow downhill into the drainage area

20. Irrigation water use includes water for:
 - a. crops and pastures
 - b. nurseries and golf courses
 - c. both a and b

21. Water is used in industry to:
 - a. generate electricity
 - b. cool machinery
 - c. both a and b

22. Point source pollution comes from:
 - a. a variety of indefinite places
 - b. an identifiable source
 - c. both a and b

23. An advantage of using recycled water is that:
 - a. it is inexpensive
 - b. the supply is not affected by droughts
 - c. both a and b

24. Desalination is promising in Texas because the state has:
 - a. a large supply of brackish water
 - b. a near-limitless supply of seawater
 - c. both a and b

25. Conservation can:
 - a. help us extend our water supply
 - b. be practiced every day
 - c. both a and b