Name _____ Class _____ Date _____

Skills Worksheet

Directed Reading

Section: The Water Cycle

1. What question has puzzled people for centuries?

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2. Once people were able to measure the amount of water that falls to Earth, what did they discover?

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_____

3. Once people had learned how much water falls to Earth, what more puzzling question remained?

_____

_____

MOVEMENT OF WATER ON EARTH

_____ 4. What is essential for humans and all other organisms?
   a. water vapor
   b. rivers
   c. water
   d. icecaps

_____ 5. How much of Earth's surface is covered with water?
   a. about a third
   b. about half
   c. more than two-thirds
   d. more than three-quarters

_____ 6. Where is Earth's surface water NOT found?
   a. in the lakes and oceans
   b. in groundwater
   c. in rivers and streams
   d. in the atmosphere

_____ 7. Groundwater is water that
   a. flows through the rock below Earth's surface.
   b. flows in streams and rivers on Earth's surface.
   c. falls to Earth as rain.
   d. has melted from snow and the polar icecaps.

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_____ 8. In addition to streams, rivers, lakes, oceans, polar icecaps, and groundwater, where else is water found on Earth?
a. trapped in volcanoes
b. sealed inside fossils
c. in the tissues of all living creatures
d. in mineral crystals

_____ 9. Water occurring as an invisible gas is called
a. water vapor.
b. water particulate.
c. water distillate.
d. water transpiration.

_____ 10. Where is water vapor found?
a. in underground streams
b. deep in the oceans
c. in the polar icecaps
d. in the atmosphere

_____ 11. Where can you find water vapor in the atmosphere?
a. in clouds and fog
b. in rivers and streams
c. in groundwater
d. in polar icecaps

_____ 12. What is always happening to Earth's water?
a. It is rapidly changing from a liquid to a gas.
b. It is slowly changing from a gas to a solid.
c. It is rapidly changing from a liquid to a solid.
d. It is constantly changing from one form to another.

_____ 13. An example of water changing from a solid to a liquid is
a. water vapor escaping from oceans into the atmosphere.
b. water vapor falling from the sky as rain.
c. glaciers melting to form streams.
d. puddles freezing into ice.

_____ 14. What is the continuous movement of water from the atmosphere to the land and oceans and back to the atmosphere?
a. the hydrogen cycle
b. the water cycle
c. evaporation
d. condensation

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_____ 15. By what process does liquid water change into water vapor?
a. evaporation
b. condensation
c. precipitation
d. respiration

_____ 16. About how much water evaporates into the atmosphere each year?
a. 5,000 km^3
b. 50,000 km^3
c. 500,000 km^3
d. 5,000,000 km^3

_____ 17. About 86% of the atmosphere's water vapor comes from
a. living organisms.
b. rivers, lakes, and streams.
c. clouds and fog.
d. the oceans.

_____ 18. What is the process by which plants release water into the atmosphere?
a. precipitation
b. transpiration
c. evaporation
d. condensation

_____ 19. Total loss of water from an area is equal to all the water
a. that runs off in rivers and streams and is absorbed by the ground.
b. lost by precipitation and transpiration.
c. lost by evaporation and transpiration.
d. that evaporates from the soil and from streams and lakes.

_____ 20. In what part of the water cycle does water change from a gas to a liquid?
a. evaporation
b. transpiration
c. precipitation
d. condensation

_____ 21. When air rises in the atmosphere, the water vapor it contains
a. expands and heats up.
b. freezes into ice.
c. cools and condenses.
d. compresses and heats up.

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_____ 22. When water vapor cools and condenses into tiny droplets in the atmosphere, what is formed?
a. snow
b. ice
c. clouds
d. sleet

_____ 23. What is any form of water that falls to Earth's surface from the clouds?
a. condensation
b. transpiration
c. evaporation
d. precipitation

_____ 24. Which of the following is NOT a form of precipitation?
a. rain
b. fog
c. sleet
d. snow

25. What percentage of all precipitation falls on Earth's oceans?

_____

26. What happens to the precipitation that falls on land?

_____

27. Describe what happens to all water that falls as precipitation.

_____

_____

_____

WATER BUDGET

_____ 28. What is the continuous cycle of evapotranspiration, condensation, and precipitation?
a. runoff
b. Earth's water budget
c. the water cycle
d. the hydrogen cycle

_____ 29. Using the language of a financial statement, the "income" of Earth's water budget is
a. precipitation.
b. evaporation.
c. condensation.
d. runoff.

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_____ 30. Using the language of a financial statement, the "expenses" of Earth's water budget are
a. precipitation and condensation.
b. clouds and fog.
c. condensation and freezing.
d. evapotranspiration and runoff.

_____ 31. In what way is the water budget of the whole Earth balanced?
a. The amount of evapotranspiration and runoff is less than the amount of precipitation.
b. The amount of precipitation is greater than the amount of condensation and freezing.
c. The amount of precipitation is equal to the amount of runoff and condensation.
d. The amount of precipitation is equal to the amount of evapotranspiration and runoff.

_____ 32. Which of the following factors affect the local water budget?
a. just the temperature and the amount of rainfall
b. temperature, vegetation, wind, and amount of rainfall
c. temperature, human habitation, season of the year, and amount of sunlight
d. vegetation, season of the year, amount of sunlight, and day of the week

_____ 33. What occurs when precipitation exceeds evapotranspiration and runoff in an area?
a. dry soil
b. irrigation
c. moist soil and possible flooding
d. vegetation

_____ 34. What is a possible local result when evapotranspiration and runoff are greater than precipitation in an area?
a. Soil will become moist, and flooding is possible.
b. Soil will stabilize, making irrigation unnecessary.
c. Soil can become moist and wash away.
d. Soil can become dry, and irrigation may be necessary.

_____ 35. How does vegetation affect the water budget in an area?
a. Vegetation reduces runoff but increases evapotranspiration.
b. Vegetation reduces runoff and evapotranspiration.
c. Vegetation increases runoff and decreases evapotranspiration.
d. Vegetation increases runoff and evapotranspiration.

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_____ 36. Which of the following factors increases the rate of evapotranspiration?
a. precipitation
b. steep slopes
c. wind
d. clouds

_____ 37. The factors that affect local water budgets worldwide vary
a. randomly.
b. geographically.
c. artificially.
d. geologically.

_____ 38. How does precipitation in a desert compare with precipitation in a tropical rain forest?
a. Precipitation in a desert is much greater.
b. Precipitation in a desert is much less.
c. Precipitation in a desert is about the same.
d. Precipitation in a desert is slightly less.

_____ 39. In most places on Earth, the local water budget also changes with
a. the phase of the moon.
b. the time of the day.
c. the days of the week.
d. the seasons.

_____ 40. How do cooler temperatures affect the rate of evapotranspiration?
a. They speed it up.
b. They slow it down.
c. They have no effect.
d. They first slow it down and then later speed it up.

_____ 41. What happens to the rate of evapotranspiration in warmer months?
a. It increases.
b. It decreases.
c. It does not change.
d. It first decreases and then increases.

_____ 42. When do streams transport more water?
a. in cooler months
b. in warmer months
c. in months with long days
d. in months with little rain

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_____ 43. On average, how much water does each person in the United States use each year?
a. 25,000 gal
b. 25,000 L
c. 95,000 gal
d. 95,000 L

_____ 44. Which of the following is NOT a common use of water by people in the United States?
a. bathing
b. cooling food
c. watering lawns
d. drinking

_____ 45. In addition to personal use by people, large amounts of water are also used by
a. agriculture and industry.
b. colleges and universities.
c. mining and manufacturing.
d. agriculture and water parks.

_____ 46. As the population of the United States increases, the demand for water
a. is unaffected.
b. also increases.
c. remains the same.
d. decreases.

_____ 47. What happens to about 90% of the water used by cities and industry in the United States?
a. It evaporates into the atmosphere.
b. It is consumed for human uses.
c. It is treated in water treatment plants and reused.
d. It is returned to rivers or oceans as wastewater.

_____ 48. What is a problem with some of the wastewater that people dispose of?
a. Some of it has been changed into ice.
b. Too much of it evaporates.
c. Some of it contains harmful materials.
d. Too much of it is allowed to flow away.

_____ 49. What can pollute rivers and harm plants and animals in the water?
a. toxic materials
b. ice
c. discolored materials
d. materials downstream

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50. Why is water conservation important to people?

51. What is water conservation?

52. How can individuals help save water resources?

53. What can governments do to help conserve water?

54. What are antipollution laws designed to prevent?

55. In addition to conservation, what is another way of protecting the water supply?

56. What is desalination?

57. What are the drawbacks of desalination?

58. What is the best way of ensuring supplies of fresh water?

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