

Directions:

Read each of the following questions carefully.

1. A cold air mass has a temperature of 26 degrees F. A warm air mass has a temperature of 79 degrees F. What is the difference between the two temperatures?
 - A. 33 degrees F
 - B. 37 degrees F
 - C. 53 degrees F
 - D. 47 degrees F

2. The chart below gives the wind speed of several hurricanes. Which of the hurricanes had the LOWEST wind speed?

Hurricane	Wind Speed
Alice	101 miles per hour
Bert	109 miles per hour
Claude	112 miles per hour
Danny	104 miles per hour

- A. Alice
- B. Bert
- C. Claude
- D. Danny

3. During a hailstorm, a hailstone fell that weighed 364 grams. Another hailstone fell that weighed 417 grams. What is the weight of both hailstones together?
 - A. 881 grams
 - B. 871 grams
 - C. 771 grams
 - D. 781 grams

4. What happens during a drought?
 - A. It rains all the time.
 - B. Floods destroy houses.
 - C. Fertile land becomes dry.
 - D. Cold weather harms vegetation.

5. Air is made up mostly of the gases
 - A. oxygen and carbon dioxide
 - B. nitrogen and water vapor
 - C. nitrogen and oxygen
 - D. water vapor and carbon dioxide

6. Which is the best description of the climate of an area near a large body of water?
 - A. hot summers and cold winters
 - B. long cold winters with very little precipitation
 - C. cloudy, rainy, cooler summers and warmer winters
 - D. high temperature all year long

7. Water is in a gas state in
 - A. Air
 - B. ice
 - C. water vapor
 - D. puddles

8. Pieces that break off glaciers and float away are
 - A. ice cubes
 - B. melting very fast
 - C. frozen groundwater
 - D. icebergs

9. Condensed water droplets in the atmosphere form
 - A. rain
 - B. clouds
 - C. sleet
 - D. snow

10. Evaporation is caused by
 - A. heat energy
 - B. boredom
 - C. dryness
 - D. standing too close to a fire

11. Groundwater is stored in
 - A. soil
 - B. 5 gallon jugs
 - C. porous rocks
 - D. nonporous rocks

12. The LEAST amount of earth's water is found in
 - A. Oceans and seas
 - B. Soil, groundwater, lakes and rivers
 - C. Glaciers and ice caps
 - D. North of the equator

13. Precipitation that does not evaporate or soak into the soil is
 - A. Runoff
 - B. Flood
 - C. Rain
 - D. Wasted

14. Plants lose their water through their leaves in a process called
 - A. Condensation
 - B. Evaporation
 - C. Transpiration
 - D. Irrigation

15. When you look at a cloud, you see
- A. Water vapor
 - B. Water droplets or ice
 - C. Electricity
 - D. Many different gases
16. Winds cause oceans to have
- A. Tides
 - B. Pollution
 - C. Waves
 - D. Runoff
17. At a water treatment plant, water is
- A. cleaned with filters
 - B. used to make electricity
 - C. converted to steam
 - D. used for irrigation
18. A cloud that forms a layer with other flat, clouds is a
- A. Stratus cloud
 - B. Scattered cloud
 - C. Cirrus cloud
 - D. Cumulus cloud
19. A wispy, feathery cloud is a
- A. Stratus cloud
 - B. Cumulus cloud
 - C. Cirrus cloud
 - D. Thunderhead
20. A puffy cloud that appears to rise from a flat base is a
- A. Cotton cloud
 - B. Cumulus cloud
 - C. Cirrus cloud
 - D. Stratus cloud
21. A large region of air that has the same temperature and moisture is called a(n)
- A. Front
 - B. Storm
 - C. Air mass
 - D. Drought
22. The blanket of air that surrounds Earth is called the
- A. Current
 - B. Climate zone
 - C. Atmosphere
 - D. Stationary front

23. When a warm air mass pushes into a cold air mass, it forms a
- A. Cold front
 - B. Snowstorm
 - C. Warm front
 - D. Cumulus cloud
24. Wendy wants to find out how much precipitation will occur during the next storm. Which tool should she use to collect these data?
- A. Rain gauge
 - B. Anemometer
 - C. Thermometer
 - D. Balance scale
25. Which of these occurs when Earth's crust slips at a fault line?
- A. Tornadoes
 - B. Earthquakes
 - C. Snowstorms
 - D. Water Erosion
26. Angie left her glass of water in the sunlight. When she came back, the water was warmer. Which of the following BEST describes why the water was warmer?
- A. Energy from the sun reflected off the water.
 - B. Energy from the sun evaporated some of the water.
 - C. Energy from the sun passed through the water.
 - D. Energy from the sun was absorbed by the water.
27. What two weather instruments measure amounts of water?
- A. Hygrometer and barometer
 - B. Rain gauge and hydrometer
 - C. Barometer and anemometer
 - D. Anemometer and rain gauge
28. What causes ocean tides?
- A. Magnetic field of earth
 - B. Friction between ocean currents
 - C. Gravitational attraction of the moon
 - D. Air resistance between wind and water
29. What positive effect do trees have on gases in the atmosphere?
- A. Fossil fuels are released by trees
 - B. Greenhouse gases are released by trees
 - C. Trees take in carbon dioxide and give off oxygen
 - D. Trees give off carbon dioxide and take in oxygen
30. Why is the Northern Hemisphere of Earth warmer in the summer than in winter?
- A. Less direct sunlight shines on the Northern Hemisphere.
 - B. Earth is moving more quickly in its orbit around the Sun.
 - C. More direct sunlight shines on the Northern Hemisphere.
 - D. The Sun gives off more heat in the summer than in the winter.

31. Which of the following produces the GREATEST amount of air pollution?
- A. Greenhouse effect
 - B. Cutting down trees
 - C. Littering highways
 - D. Burning Fossil Fuels
32. A thermometer measures
- A. Wind direction
 - B. Wind speed
 - C. Air temperature
 - D. Air pressure
33. A weather vane measures
- A. Wind direction
 - B. Wind speed
 - C. Air temperature
 - D. Air pressure
34. An anemometer measures
- A. Wind direction
 - B. Wind speed
 - C. Air temperature
 - D. Air pressure
35. A barometer measures
- A. Wind direction
 - B. Wind speed
 - C. Air temperature
 - D. Air pressure
36. Many scientist argue that global warming comes from a rise in
- A. Carbon dioxide in the air
 - B. Water pollution
 - C. Land pollution
 - D. Forest fires
37. A weather map can tell
- A. Locations of fronts
 - B. Cloud cover
 - C. Temperature
 - D. All the above
38. An area's climate can be best predicted by its
- A. Population
 - B. Soil conditions
 - C. Latitude
 - D. Size

39. How is ocean water different from river water?
- A. Ocean water has animals in it, but river water does not
 - B. Ocean water is salty, but river water is fresh
 - C. Ocean water is warm, but river water is cold
 - D. Ocean water has plants in it, but river water does not
40. What is a good way to save water?
- A. Leave the water running when brushing your teeth.
 - B. Take long baths
 - C. Fix leaky faucets
 - D. Run the dishwasher with only a few dishes in it
41. One afternoon, Reisa built a sand castle before the high tide mark. The next morning, she brought some of her friends to see it. What probably happened to the sand castle?
- A. It did not change
 - B. It washed away
 - C. It was covered with sea salt
 - D. It was farther from the ocean
42. About how much of the Earth's surface is covered by water?
- A. 20%
 - B. 50%
 - C. 70%
 - D. 97%
43. Which of the following is not a feature of the weather?
- A. The kind of clouds
 - B. The speed of wind
 - C. The position of the stars
 - D. The temperature of the air
44. Which process causes water vapor to form?
- A. Clouds cool and form precipitation
 - B. There is too much water in the atmosphere
 - C. Water on the ground or in the ocean heats up
 - D. Water runs over the land and picks up pollutants
45. The water cycle involves evaporation and condensation. Which of the following do evaporation and condensation cause together?
- A. Watersheds
 - B. Air pressure
 - C. High winds
 - D. Precipitation