

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

### Study Guide: Water Chapter 1

1. Without \_\_\_\_\_ there would be no life on Earth.
2. Saltwater makes up \_\_\_\_\_% of the Earth's water.
3. Water with dissolved salts and minerals is called \_\_\_\_\_.
4. Water can exist as a \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ on Earth.
5. Excess nutrients (phosphorus, nitrogen) can cause \_\_\_\_\_, which causes excess plant growth.
6. \_\_\_\_\_% of the Earth is covered by land and \_\_\_\_\_% is covered by water.
7. \_\_\_\_\_ substances stop water from flowing through.
8. Most of the freshwater is found frozen in \_\_\_\_\_ or \_\_\_\_\_.
9. \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ are all parts of the water cycle.
10. When the temperature \_\_\_\_\_, water changes from the liquid state to the gaseous state. This process is called \_\_\_\_\_.
11. The top portion of an aquifer is called a(n) \_\_\_\_\_.
12. When water molecules stick to other water molecules it is called \_\_\_\_\_.
13. When the temperature \_\_\_\_\_, water changes from a gas to a liquid. This is called \_\_\_\_\_.
14. \_\_\_\_\_ substances allow water to flow through.
15. Water easily dissolves substances with ionic bonds. This is because water is \_\_\_\_\_, or a negative end and a positive end.
16. Bodies of water that form on the surface of the land are \_\_\_\_\_ or \_\_\_\_\_.
17. Water flows \_\_\_\_\_ because of gravity.
18. Aquifers provide \_\_\_\_\_ for humans.
19. Precipitation can be a \_\_\_\_\_ or \_\_\_\_\_ (state of matter).
20. A(n) \_\_\_\_\_ is an area of high land that water flows away from.
21. When water molecules stick to other types of molecules it is called \_\_\_\_\_.
22. The amount of \_\_\_\_\_ we have stays the same. It is recycled throughout the planet.
23. 2/3 of all the freshwater on Earth is \_\_\_\_\_ (state of matter)
24. Surface tension is caused by a strong attraction between \_\_\_\_\_ molecules.
25. A \_\_\_\_\_ is the top part of the ground that is saturated with water.
26. A decrease in temperature may cause water to change from a liquid to a \_\_\_\_\_.
27. The Earth is made up of \_\_\_\_\_% salt water and \_\_\_\_\_% fresh water
28. The process in which liquid water changes into water vapor is called \_\_\_\_\_
29. A \_\_\_\_\_ is a type of hot spring.
30. The three processes in the water cycle are \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
31. On Earth, water flows from divides into areas known as \_\_\_\_\_.
32. Water that collects and moves beneath Earth's surface is called \_\_\_\_\_.
33. As water seeps into the ground, it is stopped by a layer of \_\_\_\_\_.
34. The area located below the water table is called the \_\_\_\_\_.
35. A small portion of a glacier that has broken off and floated away is called a(n) \_\_\_\_\_.
36. The process in which water falls from clouds is called \_\_\_\_\_.
37. Granite is an example of a(n) permeable/impermeable material, whereas soil is an example of a(n) permeable/impermeable material. (circle one)
38. The continuous movement of water through the environment of Earth is the \_\_\_\_\_.
39. The point underground that divides saturated soil with unsaturated soil is the \_\_\_\_\_.
40. The part of the water cycle in which clouds form is called \_\_\_\_\_.
41. A hole that is dug into the ground to extract water from an aquifer is called a(n) \_\_\_\_\_.
42. An increase of nutrients in a lake or pond that causes algae to grow is called \_\_\_\_\_.
43. The process in which water vapor changes into little droplets of water is called \_\_\_\_\_.
44. A type of well in which water is forced up naturally due to pressure is called a(n) \_\_\_\_\_.
45. On Earth, water that flows off the side of the land and into a drainage basin is known as \_\_\_\_\_.
46. Water has a \_\_\_\_\_ specific heat, meaning it takes a lot of \_\_\_\_\_ to change its temperature.
47. Explain the process of lake turnover.

48. What 3 things are needed for an aquifer to form?

**Matching:**

|       |                   |    |   |
|-------|-------------------|----|---|
| _____ | 49. Polarity      | a  | Mass/Volume   |
| _____ | 50. Cohesion      | b  | When a molecule has (+) and (-) regions   |
| _____ | 51. Adhesion      | c. | How clear the water is (clarity of the water)                                   |
| _____ | 52. Density       | d  | The ability of water molecules to stick to each other                           |
| _____ | 53. Buoyancy      | e  | The ability of water to stick to other substances                               |
| _____ | 54. Turbidity     | f. | Forces that push up on an object in fluid                                       |
| _____ | 55. Specific Heat | g  | The amount of energy needed to raise the temperature of 1g of any substance 1°C |

56. In the table below, tell if each object would sink or float.

| Object | Density | Sink or Float? | Why? |
|--------|---------|----------------|------|
| Dime   | 1.8     |                |      |
| Eraser | 0.5     |                |      |
| Oil    | 0.9     |                |      |
| Rock   | 2.4     |                |      |
| Wood   | 0.7     |                |      |

57. Ice floats on water. What does this tell you about the density of ice compared to the density of water?

58. What is surface tension and why is it important?

59. Is water polar or non-polar? Why does this matter?

60. What is the density of water and why is it important to know?

61. What is the relationship between buoyancy and density?