Name _____

Water Cycle Study Guide

You are responsible for understanding the following topics for your Water Cycle/States of Water Quiz

States of Water

- The three states of water are solid, liquid, and gas.
- The temperature determines or controls the state of water.
  - Water freezes at 0 degrees Celsius or 32 degrees Fahrenheit
  - Water boils at 100 degrees Celsius or 212 degrees Fahrenheit

Water Cycle: *The constant movement of water from Earth's surface to the atmosphere & back to Earth's surface.*

Energy from the sun is responsible for the water cycle.

Most of the water moving through the water cycle comes from the ocean.

*The Steps of the Water Cycle

1. Evaporation: *the process by which a liquid changes into a gas*

- The rays of the sun heat the water in oceans, rivers, lakes, soil, living & nonliving things; causing some of the water to evaporate & change from a liquid into a gas called **water vapor** *(tiny droplets of water; the gas form of water).*
- This water vapor mixes with other gases in the air & moves with the air. Air can carry water vapor high into the atmosphere.

2. Condensation: *the process by which a gas changes into a liquid*

When the water vapor reaches the high, cool air it cools & begins to condense, or change into a liquid again. These water drops form on dust particles, which **form clouds**. Clouds can float in the air because the water droplets & sometimes ice crystals that form them are tiny.

Condensation can also occur on cooler objects, like water bottles. The water vapor loses the heat when it touches the cold bottle and condenses.

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3. **Precipitation**: ***Water that falls back to earth as snow, rain, sleet, or hail.***

Clouds gather more & more water as they are moved by the wind. When the drops become too heavy, the water falls back to earth as a form of precipitation (snow, rain, sleet, or hail).

4. **Runoff**: Precipitation that runs over the ground & flows into creeks, rivers, lakes, & in time back into the ocean

When ocean water turns into water vapor, all of the salt stays in the ocean, but as the water returns to earth as precipitation, water picks up dissolved salts & rivers that run off into rivers. These rivers carry the water to the ocean. Over time, all the salts build up in the ocean; making the water salty.

You will need to be able to label the major parts of the water cycle.