

# Water Cycle Study Guide

**What are the three states of water?** Solid, liquid and gas

**How does evaporation occur?** The sun's energy heats up water to 212 °F or 100 °C, it speeds up the particles and makes it change from a liquid to a gas called water vapor.

**How does condensation occur?**

Water vapor particles lose heat energy, slow down and condense or change from a gas to a liquid at the dew point.

**How does Precipitation occur?**

When clouds become too heavy precipitation falls to the Earth as rain, snow, sleet or hail. When it falls it can land in rivers, lakes or oceans. If it flows over land it is called run-off. Higher than 32 °F is rain, lower than 32 °F is snow, hail and sleet occurs when the layers in atmosphere are below 32°F.

**At what temperature in Fahrenheit and Celsius does water turn to a solid? A gas?**

Liquid to Solid- 32 °F or 0 °C

Liquid to Gas- 212 °F or 100°C

**How much of Earth's surface is covered in water? How much is fresh water? How much is salt water?**

About 70% to 75% of the Earth's surface is covered in water. 3% of that is fresh water and 97% is salt water.

**What is the heat energy source in the water cycle?**

The sun!

**Explain how the water cycle produces the Earth's fresh water.**

When water evaporates from oceans, river and lakes, only water particles are evaporated the salt and other impurities remain in the bodies of water. It then condenses and precipitates to Earth as fresh water.

## Notes

evaporation	condensation	precipitation	collection
*changing from liquid to gas	*changing from gas to liquid	*snow	*water is returned to lakes, oceans, and rivers
*molecules are far apart	*molecules come closer together	*hail	*rain falling into the lake
*a water puddle disappearing after the sun comes out	*water molecules on the side of a cold glass that has an iced drink in it	*rain	
*steam coming from a boiling pot	*clouds forming in the sky	*sleet	

The water cycle- when water is recycled as it changes state

