

# NO-PREP SCHOOL THE WATER CYCLE



COPYRIGHT ©2018 by No-Prep School
No part of this text can be reproduced without a license
from the content creator.

YOU MAY NOT RESELL, LOAN, OR RENT THIS PRINTABLE. YOU ARE PURCHASING A SINGLE-USER LICENSE THAT CAN BE USED IN IN A SINGLE CLASSROOM OR HOMESCHOOL ONLY. You may print the document and show it as a presentation but you may not edit it in any way.

Please respect copyright law and purchase additional licenses or direct interested parties to the website where you made your purchase. All images are property of the content creator. Images not in the public domain were either created by the author, licenses were purchased for reuse at shutterstock.com, or have a Creative Commons license when noted.

Use of images and text contained in this product outside the license you purchased could result in a copyright violation.

#### LOOKING FOR MORE NO-PREP TEACHING RESOURCES?

GET OUR FREE RESOURCES DELIVERED TO YOU WEEKLY BY JOINING OUR NEWSLETTER HERE: http://eepurl.com/dCsCoX



(and get a complete Resource Pack FREE when you sign up!)

OR GO TO OUR WEBSITE TO GET IMMEDIATE FREE ACCESS
TO OUR ONLINE COURSES.

See all my TPT products <u>HERE</u>
If you found this resource helpful please rate and review.













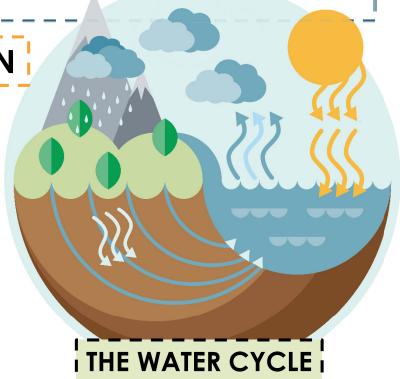


The water cycle describes the constant renewable production and flow of freshwater on the earth. Freshwater is water that can be used for drinking. Lakes, and rivers, and puddles in your backyard are made up of freshwater. Salt water is not suitable for drinking. The oceans and seas are made up of salt water.

A **cycle** is an event that repeats over and over. A cycle also describes things that travel in a **circle**.

### THOUGHT QUESTION

Can you think of another event in nature which repeats over and over again?



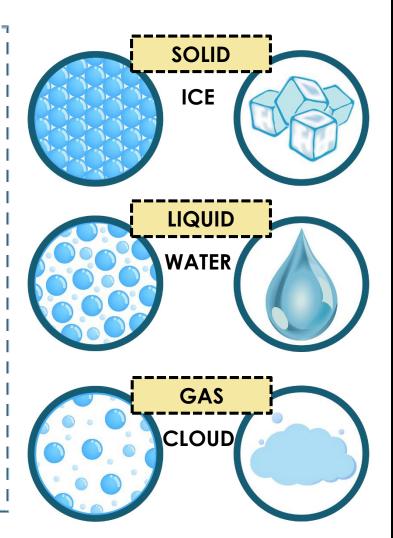




The first thing you must understand when you begin learning about the water cycle is that water comes in three different states of matter:

In the water cycle the **solid** state is **ice**, the **liquid** state is **water**, and the **gas** state is a **cloud**.

The water cycle is a series of **events** that repeats. It has no beginning and it has no end. It is **continuous**.



## PREDICTIONS

If a glass of water is left outside overnight in a snowstorm, predict the state of matter in the glass in the morning.

SOLID

LIQUID

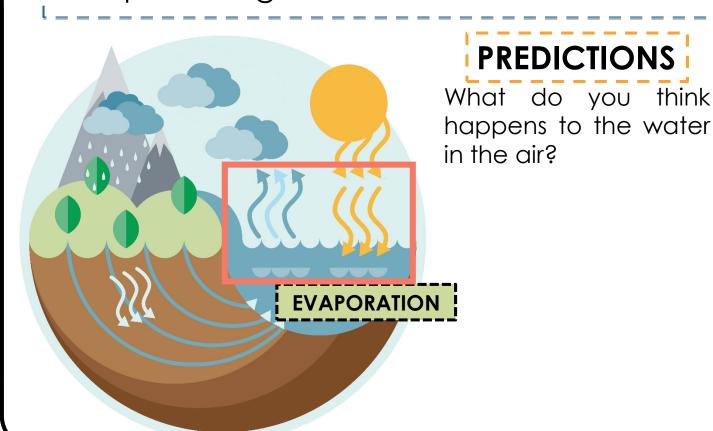
GAS





During the water cycle water changes its state of matter. It goes from liquid to gas and then back to liquid. If it is cold enough it will also go through the solid state as snow or hail.

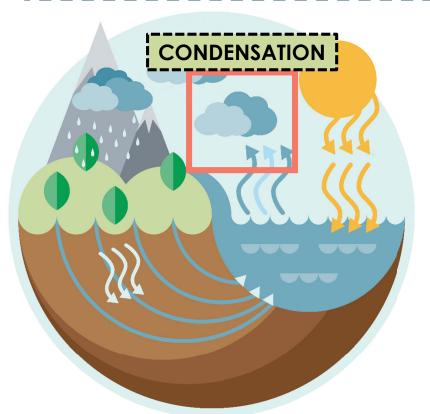
The oceans contain almost all of the water on earth and the sun is like the motor driving the cycle. The **sun** heats the ocean water causing it to evaporate into the air. **Evaporation** means to change into a vapor or a gas.







When water evaporates it turns into vapor. **Vapor** is the gas state. The water vapor rises into the atmosphere during evaporation. As it goes up, cooler air causes this water to **condense** into **clouds**. This process is called **condensation**.



### PREDICTIONS

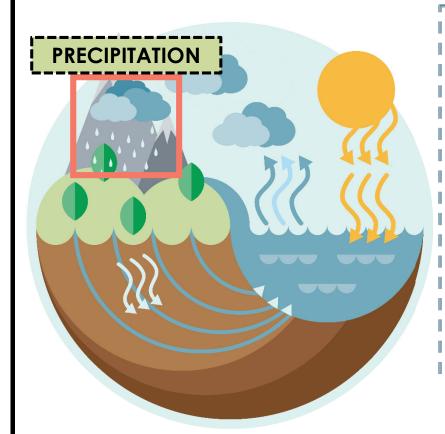
Why do you think some clouds are dark and some are light?

Air currents (wind) will move the clouds all over the globe. Clouds will smash into each other causing them to grow bigger. These clouds will hold a lot of condensed water vapor in them.





The clouds collect the water vapor until they are **saturated**. That means they cannot hold any more water vapor and it's time for the water to fall out of the gas **state** and reenter the **liquid** state. The scientific name for water falling from clouds is **precipitation**.



Water falls out of the clouds in the form of rain, snow, sleet, and hail. Most of this precipitation falls back into the oceans or onto land as water.

### **PREDICTIONS**

Can you look at the diagram and predict the next step in the water cycle?

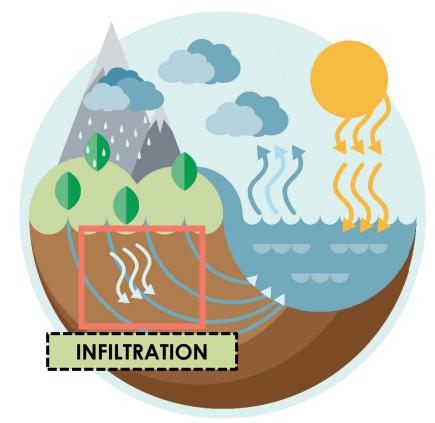




Rain water flows over the ground as surface runoff due to the force of gravity.

Surface runoff is when the ground get so full of rain water or snow melt that it must flow over the land. Infiltration is the seepage of water into the soil. Some water seeps deep into the ground and fills up the aquifers, which are underground storage beds of water.

Drinking water comes from surface runoff.



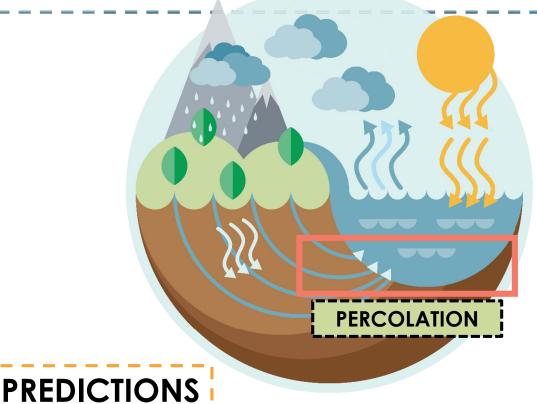
## **PREDICTIONS**

Can you guess what will happen if the ground becomes saturated like the clouds did?





Some infiltrated water stays close to the land surface and can seep upwards into lakes and oceans. This seepage is called **groundwater discharge** and the process of water moving through the soil and rocks is called percolation. **Percolation** is the seepage of water from underground to above ground. Groundwater flows up to a body of water and reenters the water cycle.



Can you guess what will happen next in the water cycle?





We have completed the cycle but the water cycle is never really complete. Water is a **renewable resource**. That means it replenishes itself.

However, some places can experience water shortages called **droughts**. This happens when water is used up faster than the cycle can replenish it. When this happens water is considered a **scarce resource**. That means there is a limited amount available and it should be **conserved**.

#### THOUGHT QUESTION

Think of some reasons why we have water shortages. Name at least two.





#### THE WATER CYCLE - 9

Write the correct water cycle number in the blank circle it belongs to on the picture.

- 1) [ INFILTRATION
- 2 PERCOLATION
- 3 EVAPORATION
- 4 PRECIPITATION

5 CONDENSATION

