

Dear Parents,

Here is the work for our Virtual Learning Day. Please help your student complete assignments.

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### Instructions for logging in to Canvas

1. Go to [hawthornacademy.org](http://hawthornacademy.org)
2. Hover over the Clever icon. It looks like this:
3. Click Clever
4. Select "Login with Google"
5. Click



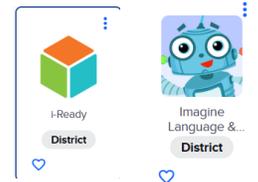
 Use another account

6. Enter your student's username:  
firstname.lastname (no spaces) followed by @hawthornstudent.org  
Example: *emily.smith@hawthornstudent.org*  
Password: hawthorn lunch number (no spaces)  
Example: hawthorn1234

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### Accessing i-Ready and Imagine Learning

1. Once logged in, locate and click the i-Ready icon.
2. This will take them to their lessons they need to work for 15 minutes
3. Once they finish that they will click on the Imagine Learning icon.
4. They will work on this for 20 minutes.



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### Assignments for the day

1. The assignments are attached here, scroll down to see the assignments for today..
  2. You can either print the assignments or have students do the work on a separate piece of paper. Either option can be turned in to their teacher when we return to school. You can also email a picture to the teacher.
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Thank you for your support in helping your student succeed on our virtual learning day!

# Distribution of Earth's Water

By Lynda R. Williams



Our planet Earth is a watery place. About 71% of the Earth's surface is covered with water. Surface water includes water found in rivers, lakes, streams, and oceans that are on the surface of the Earth. Water is also found in the atmosphere in the form of water vapor and under the ground in the form of groundwater.

## Saltwater

If you see the Earth from space, it looks blue. Of course, the blue color comes from all the water found on the Earth's surface. Water is a very important natural resource. All organisms require water to survive. However, most of the water on Earth is saline or saltwater. About 97% of Earth's water is saltwater. Most of this saltwater is found in oceans, but there are other bodies of saltwater such as saltwater lakes and lagoons. Saltwater is unfit for humans to drink.

Desalinization plants can change saltwater into drinkable freshwater, but they are costly and may damage the delicate ocean ecosystems.



## Freshwater

Only about 3% of Earth's water is freshwater. Most of the freshwater is stored in frozen glaciers and ice sheets. There are large expanses of ice sheets at the North and South Pole. There are also glaciers high up on mountain tops. This frozen water makes up 69% of the freshwater on Earth. Another 30% of our freshwater is found deep underground. We call this water groundwater. Only 1% of our freshwater is surface water found in, lakes, streams and rivers.

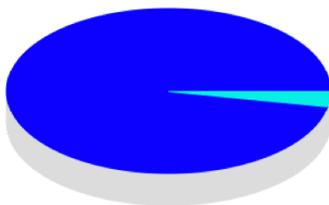
## Saltwater vs. Freshwater on Earth



97% Saltwater



3% Freshwater



# Glaciers

By Lynda R. Williams

Glaciers begin as snow. In some areas of the world, it is so cold that snow piles up and does not melt. As the snow accumulates, the snow becomes so heavy that it compresses and compacts into large thick ice masses.



Due to their mass and weight and gravity, glaciers change and move. Glaciers not only transport material as they move, but they also sculpt and carve away the land beneath them. A glacier's weight, combined with its gradual movement, can drastically reshape the landscape. It can take anywhere between 10,000 and 100,000 years for a glacier to carve out a U-shaped valley.

When the ice recedes, rocks can be left scattered in the valley that has been formed. One of the most striking examples of a glaciated valley can be seen in Yosemite National Park. Glaciers literally shaved away the mountainsides, creating deep valleys with tall vertical walls.



**Yosemite Valley**

An icefield is an upland area of ice that feeds two or more glaciers. Icefields form in conditions where the air is cool and snow and ice melt slowly.

# Freshwater Systems

By Lynda R. Williams

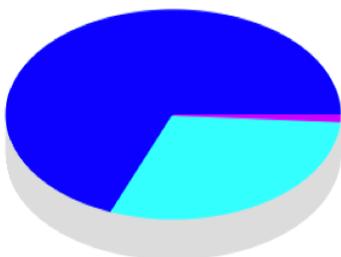
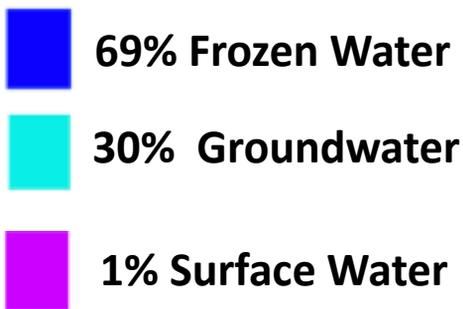
Only 1% of Earth's total water supply is readily available for use. This available water is found in freshwater systems which exists both above ground, as surface water, and below ground as groundwater. Surface water is just what it sounds like, water that is on the surface of the Earth in streams, rivers, lakes, and ponds.



The largest amount of fresh water is stored in glaciers, ice caps and ice sheets. The frozen water is not readily available for drinking or irrigation. We are dependent on groundwater for a good deal of our freshwater.



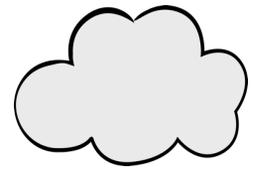
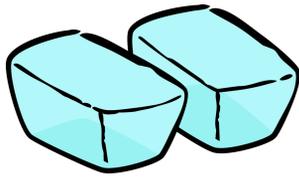
## Earth's Fresh Water Distribution



Groundwater is water that is stored deep underground in aquifers. This water is fresh and is the most plentiful source of usable water found on Earth. The water accumulates underground from rain and run off. It seeps through the soil and gathers when it reaches a layer of shale or rock called the aquitard. The Earth's layers serve as a natural filtration system as the water travels through them. We access groundwater using pumps and wells.

# Water on Earth

By Lynda R. Williams



Water can be found on Earth in all three states of matter. It can be found in the solid form of ice, such as glaciers and ice sheets and polar ice caps. It can be found in the liquid state in places like river water, groundwater, ocean water and lake water. Water can also be found in its gas state. When water is in the gas form, we call it water vapor.



During the evaporation part of the water cycle, the Sun heats up bodies of water such as oceans, lakes and rivers. Some of the water turns from liquid to water vapor. It rises into the atmosphere.

**Water is found on Earth in all three states of matter: solid, liquid and gas.**



Sometimes you can feel water vapor in the air. We call this humidity. Water vapor is also a big part of cloud formation and fog. Groundwater can also be heated deep under the earth by geothermal activity. Heating the water transforms it into water vapor. Sometimes we see this as geysers or steam coming up from openings in the ground.



# Thinking About The Reading



Name \_\_\_\_\_

1. Locate the text feature of the chart showing how much freshwater is on Earth compared to how much saltwater. Which type of water is more abundant on Earth? Why? Where is the majority of that water located?
2. Locate the text feature of the text box in yellow. What does it say in this box?
3. Sometimes you can feel water vapor in the air. What do we call it when you can feel moisture in the air?
4. What are the states of matter that you can find water in on the Earth? Give an example of each.
5. Identify what *state* each of these water forms is.

Ice sheet \_\_\_\_\_

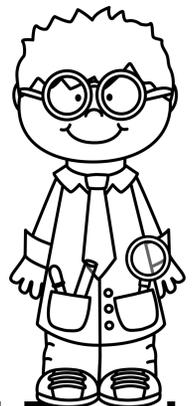
River \_\_\_\_\_

Lake \_\_\_\_\_

Clouds \_\_\_\_\_

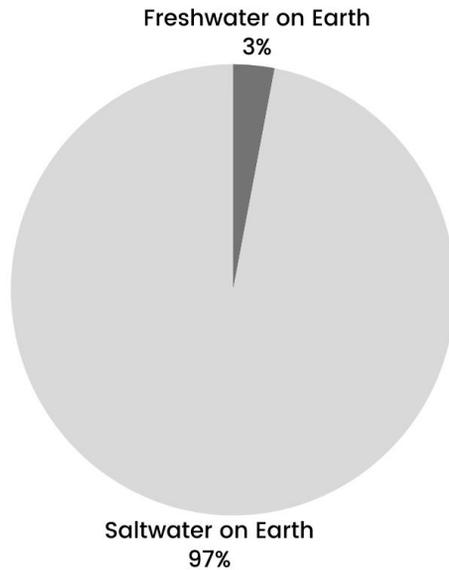
Fog \_\_\_\_\_

Glacier \_\_\_\_\_



# All Water On Earth

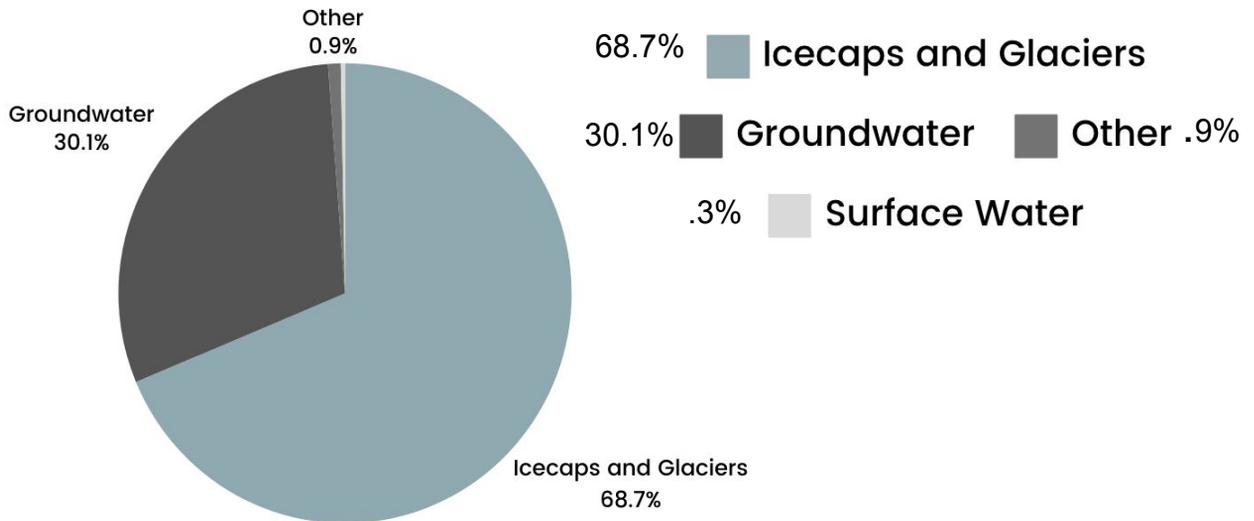
Name \_\_\_\_\_



1. Most of the water on Earth is \_\_\_\_\_.
2. The water that humans need to drink is \_\_\_\_\_.
3. What percentage of water on earth is freshwater?
4. Is there more water in the combined oceans of Earth, or in the combined lakes, rivers, and streams?
5. Would icecaps be freshwater or saltwater?
6. What three forms can water be found in on Earth?

# Freshwater on Earth

Name \_\_\_\_\_



1. Most of the freshwater on earth is in what form?
2. Is groundwater a greater source of freshwater than surface water?
3. Why are oceans not listed on this graph?
4. What might the .9% of other include?
5. Name one body of water that would be included in the surface water.
6. Why is it difficult to see the Surface Water on the graph?

	First Operation	Second Operation	Third Operation	Value
1. $8 \times 9 \div 6 - 4$	_____	_____	_____	_____
2. $6 + 21 \div 3 - 9$	_____	_____	_____	_____
3. $63 \div 9 + 12 - 2$	_____	_____	_____	_____
4. $9 + 18 \div 3 \times 5$	_____	_____	_____	_____
5. $6 + 5 \times 2 + 4$	_____	_____	_____	_____
6. $15 \times 2 + 5 \times 6$	_____	_____	_____	_____

**P**arenthesis    **E**xponents    **M**ultiplication or **D**ivision    **A**ddition or **S**ubtraction