

Essential Question: Where is the Earth's water located?

Standard:

S6E3a. Explain that a large portion of the Earth's surface is water, consisting of oceans, rivers, lakes, underground water, and ice.

How Wet is our Planet?

Demonstration

or

Water on Earth

Demonstration

"Water, Water, Everywhere...."
You've heard the phrase, and for
water, it really is true.

Earth's water is (almost)
everywhere: above the Earth in the
air and clouds, on the Earth as
rivers, oceans, ice, inside the Earth
in the top few miles of the ground.
Water is even in living things.

Use your notes to record important information from the lesson

Location of Water on Earth Notes

Name _____ Date _____ Period _____

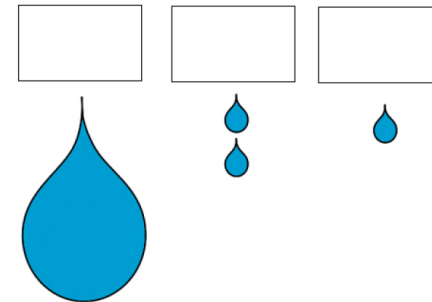
1. Identify some of the types of water found on Earth. _____

2. What percent of the Earth's surface is covered with water? _____
3. Detail the total volume of water found on Earth:
Approximately 97% _____
Approximately 2% _____
Approximately 1% _____
4. Put the following types of water in order from largest amount found on Earth to smallest:
glaciers/icecaps, groundwater, rivers/lakes, saltwater

5. Identify other sources of water found on Earth. _____
6. We use less than 1% of the water on Earth for _____

7. What will happen if we do not use our freshwater supply wisely? _____

8. Label the diagram below for Saltwater, Freshwater Frozen/Unavailable, Freshwater Available



9. Label the following images as representations of which of the following: Glaciers/Icecaps, Groundwater, Lakes/Rivers, Saltwater on Earth



Types of Water on Earth: Saltwater



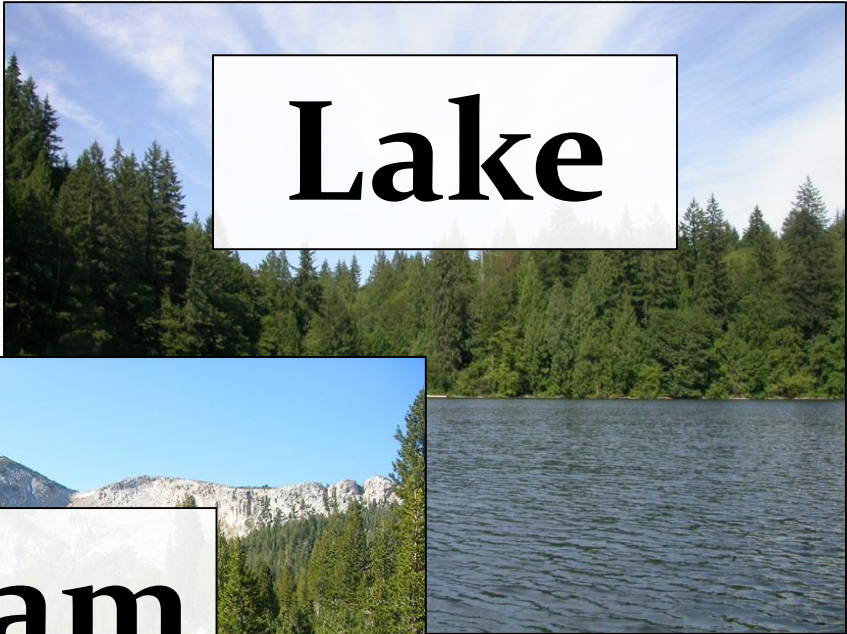
Types of Water on Earth: Glaciers & Ice Caps



Types of Water on Earth: Freshwater



River



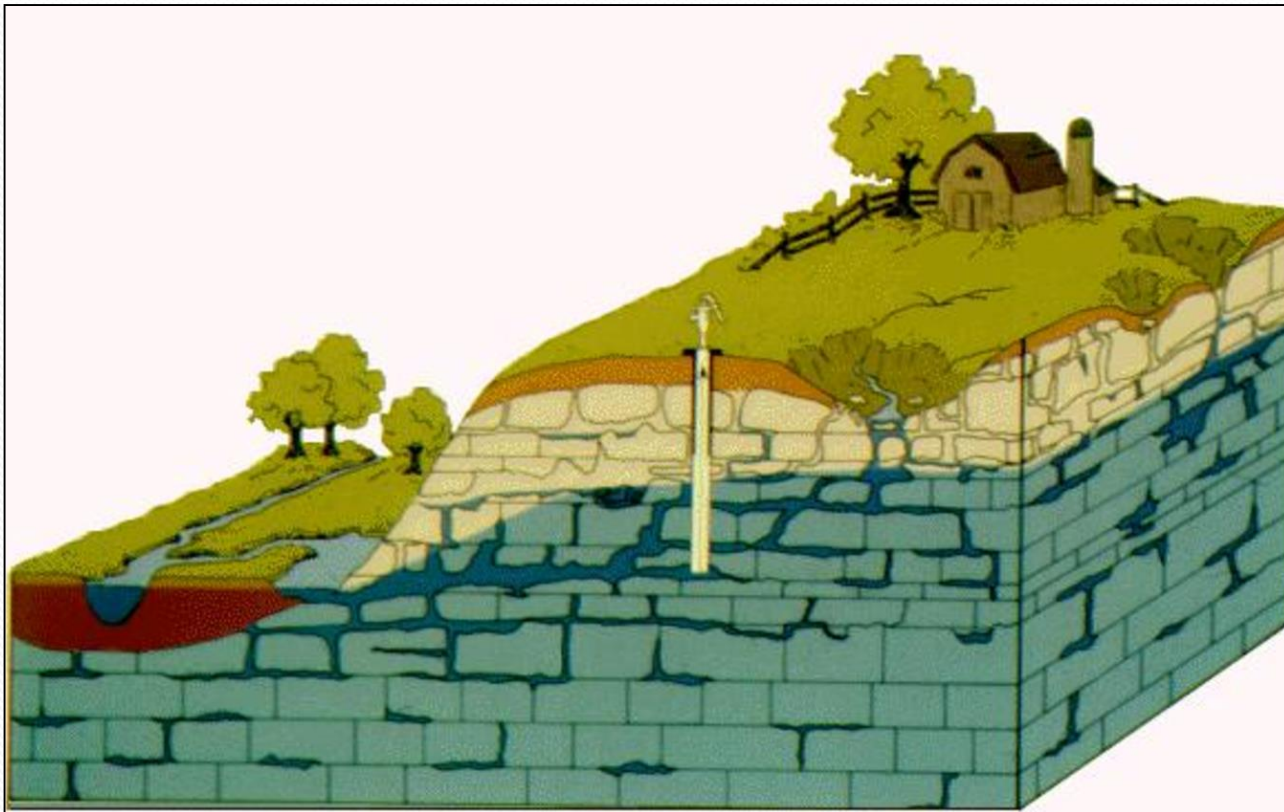
Lake



Stream

Types of Water on Earth: Groundwater

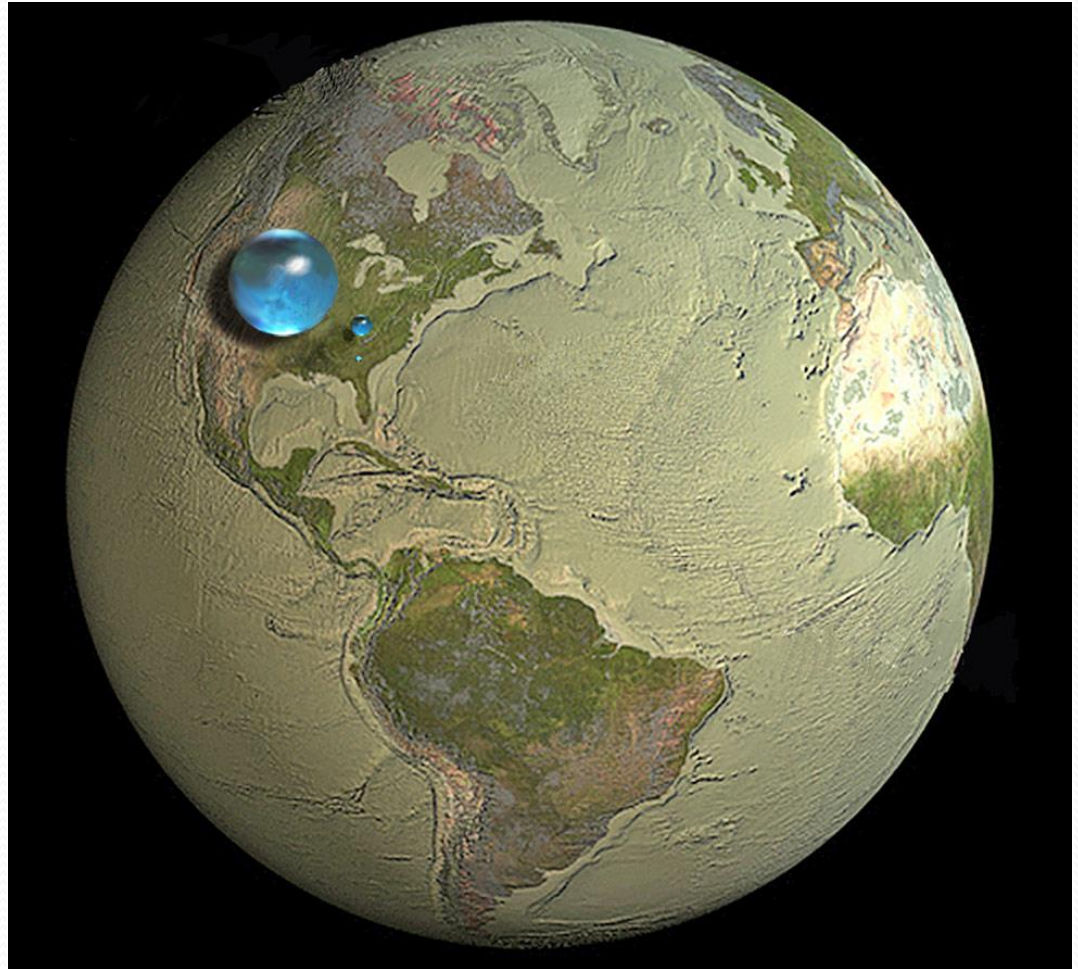
Groundwater occurs as a liquid resource that is dispersed through numerous holes, pores, fractures and cavities in bodies of rock or sediment



The blue spheres represent the relative amounts of Earth's water in comparison to the size of the Earth.

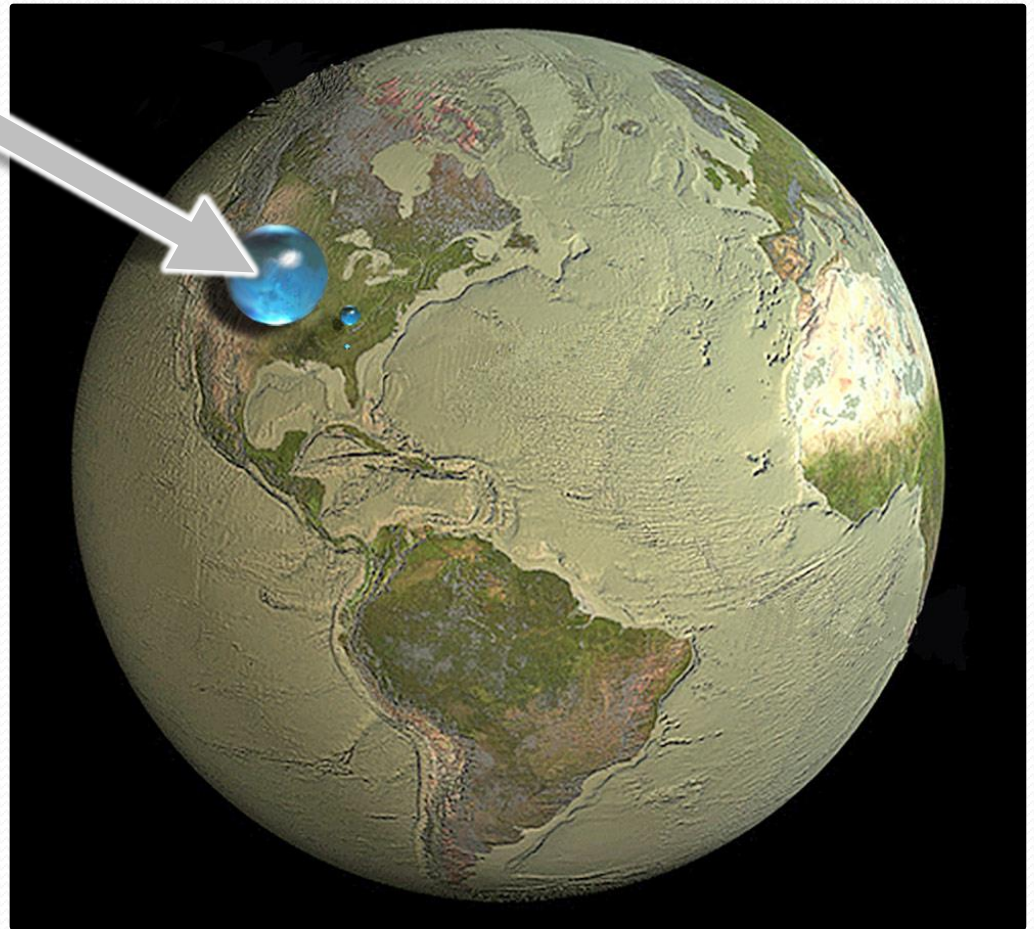
Are you surprised that these water spheres look so small? They are only small in relation to the size of the Earth.

Overall, it shows that in comparison to the volume of the globe the amount of water on the planet is very small.



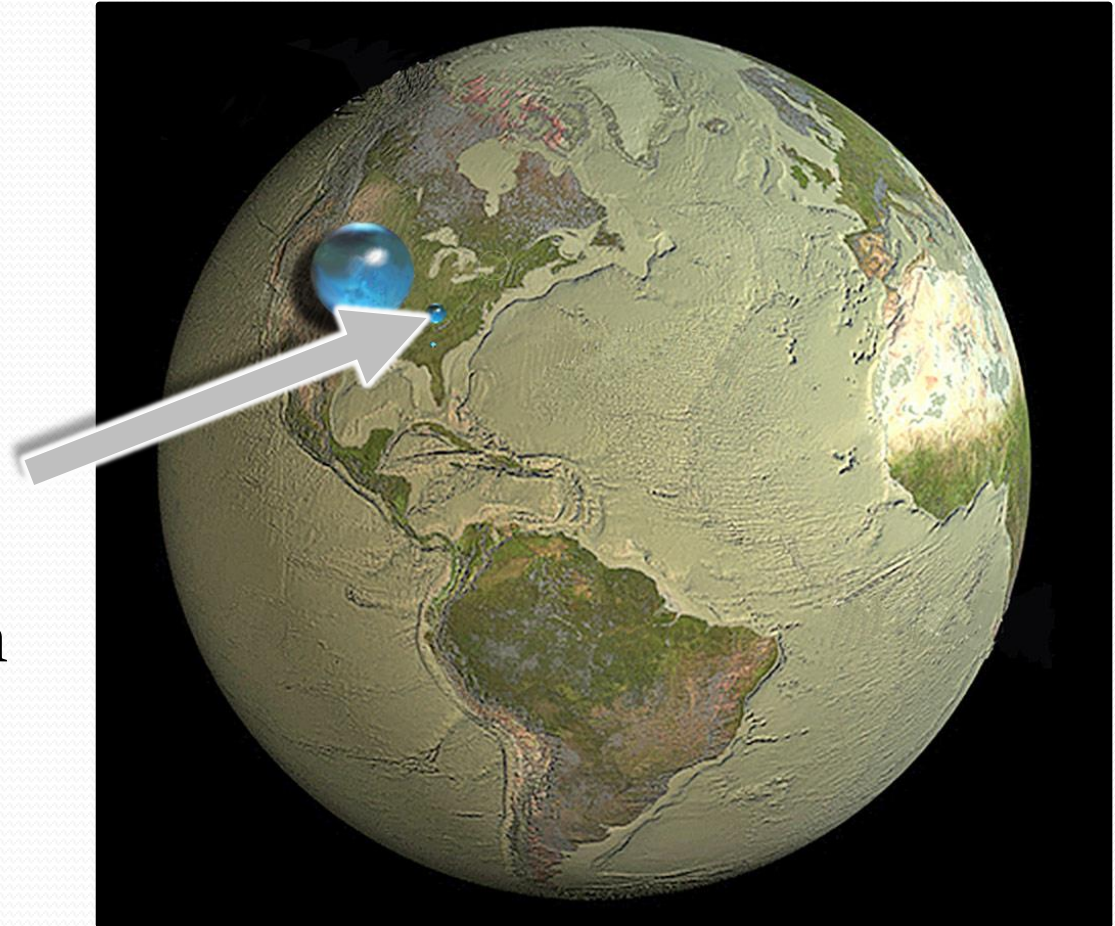
The largest sphere represents all of Earth's water.

The sphere includes all the water in the oceans, ice caps, lakes, and rivers, as well as groundwater, atmospheric water, and even the water in you, your dog, and your tomato plant.



How much of the total water is fresh water, which people and many other life forms need to survive?

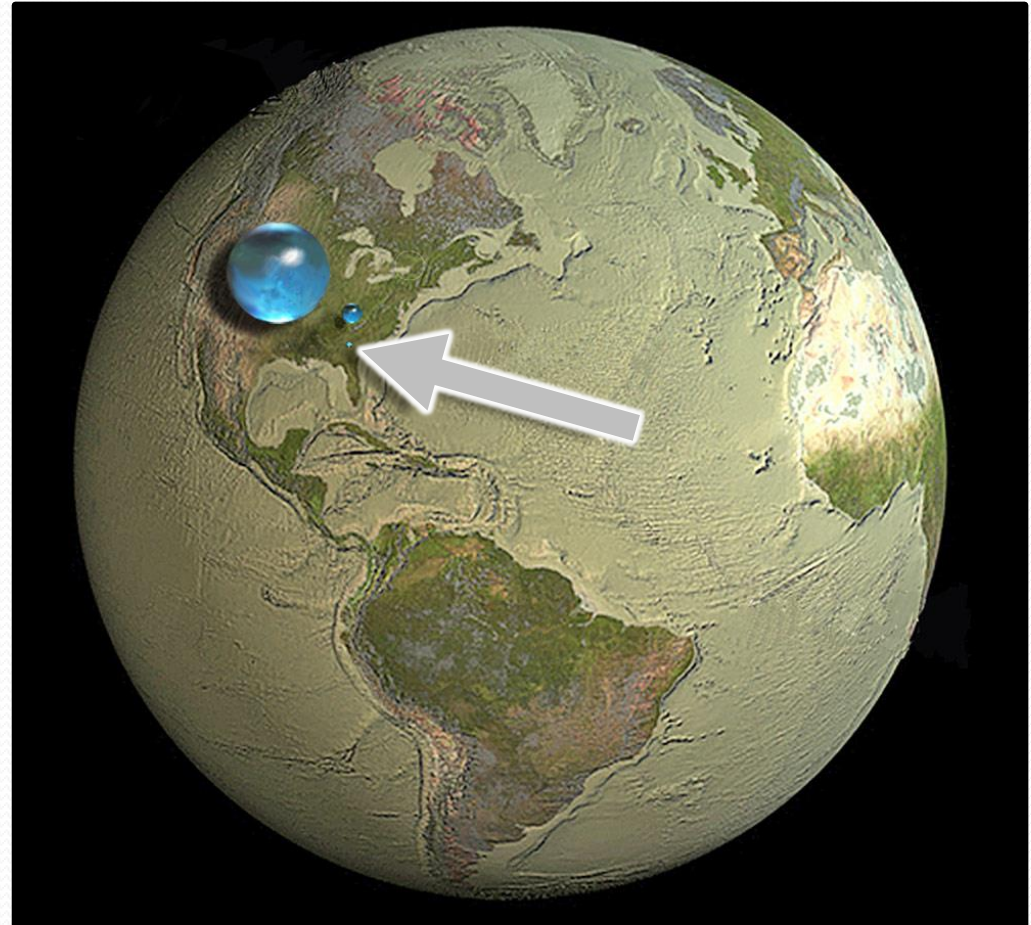
The blue sphere over Kentucky represents the world's liquid fresh water (groundwater, lakes, swamp water, and rivers).



Do you see the "tiny"
bubble over Atlanta,
Georgia?

That one represents
fresh water in all the
lakes and rivers on the
planet.

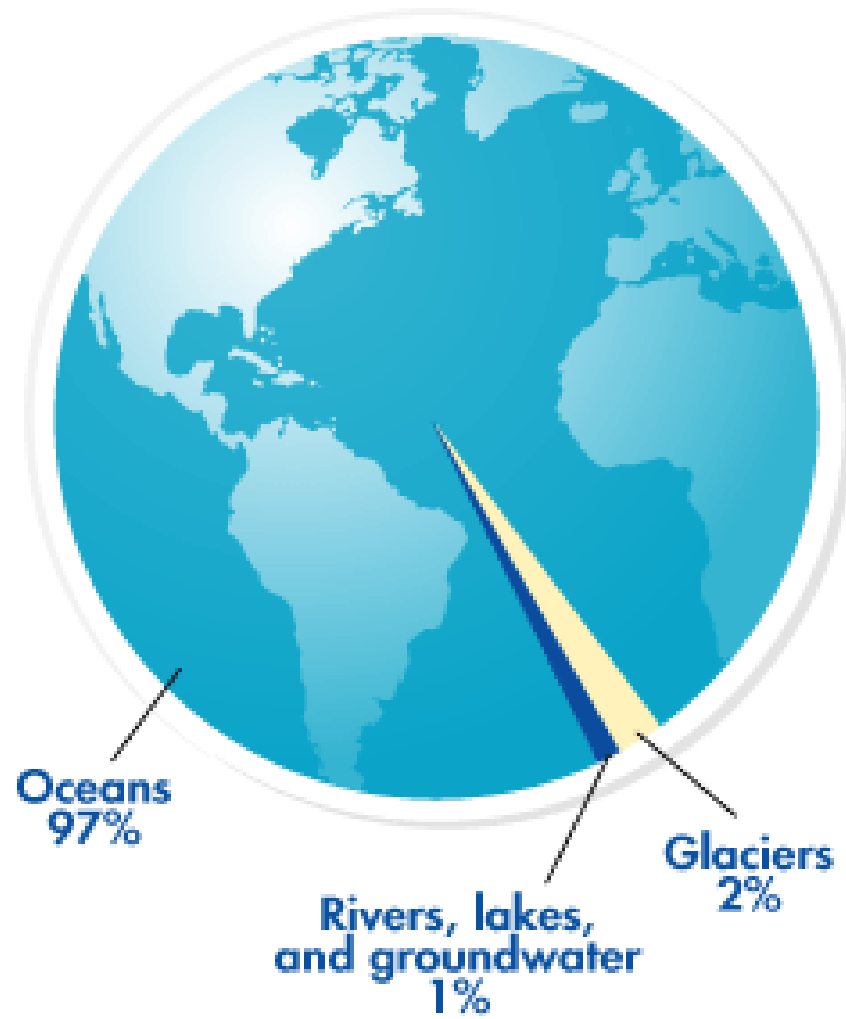
Most of the water
people and life on earth
need every day comes
from these surface-
water sources.

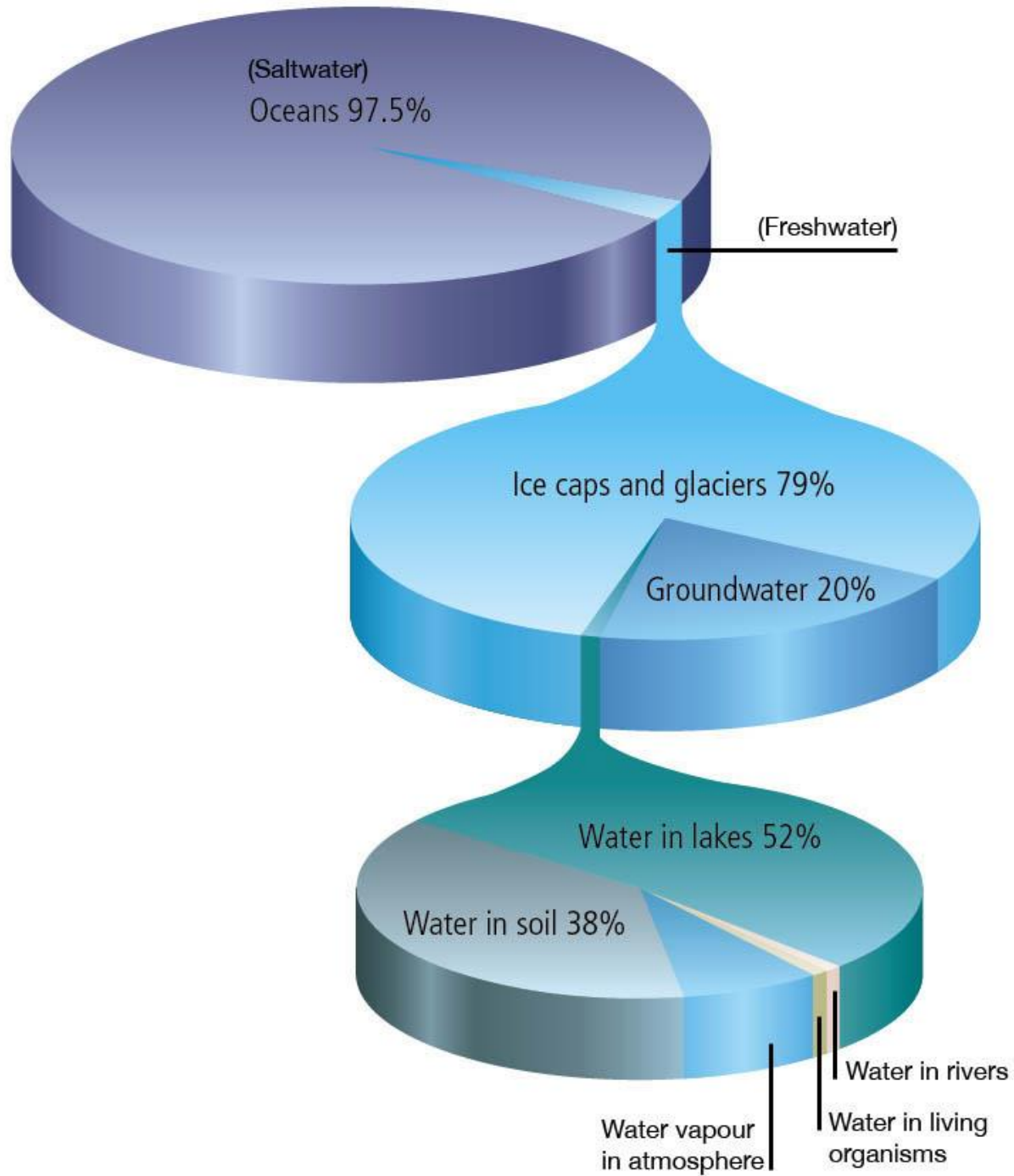


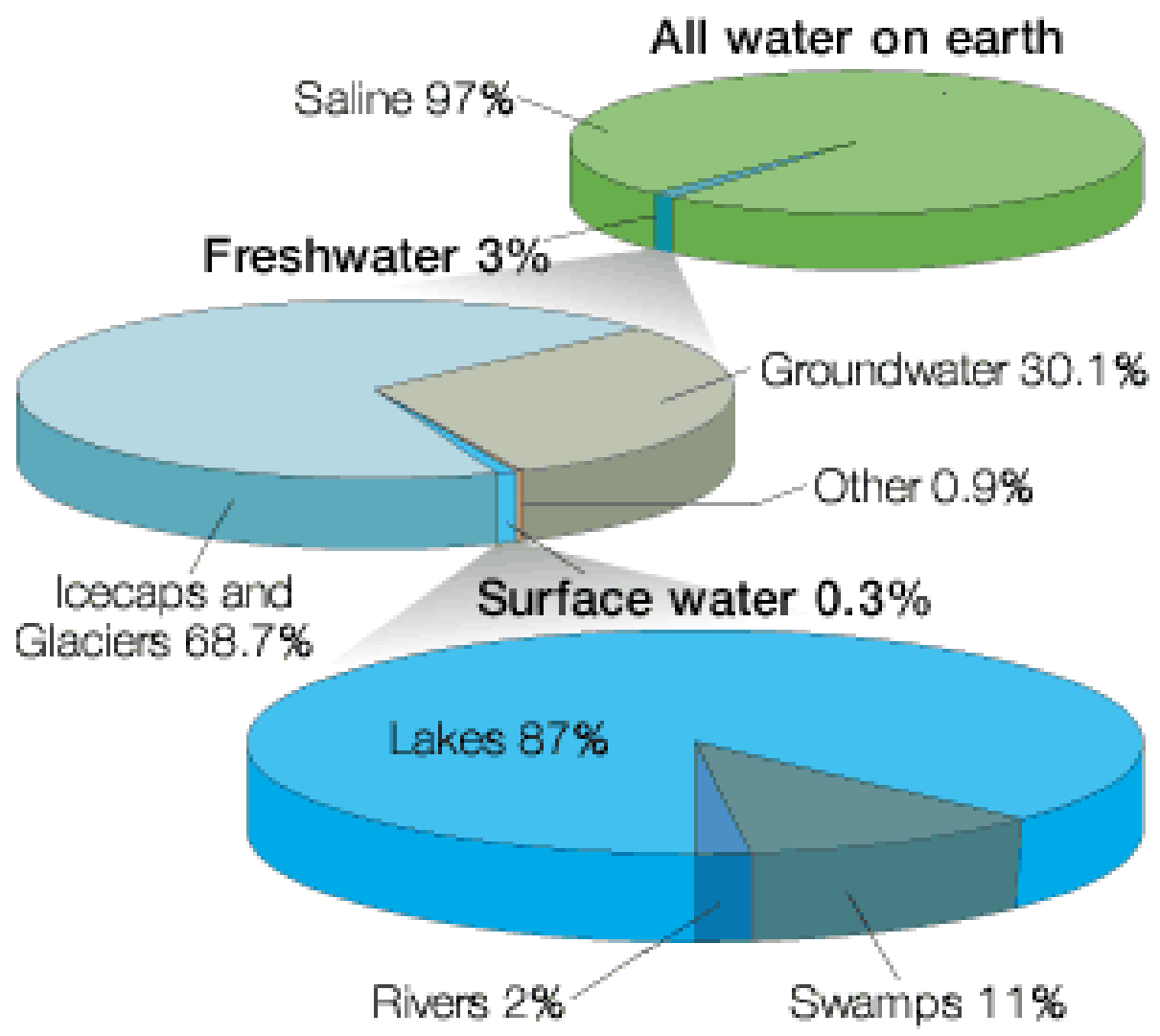
Water on the Earth

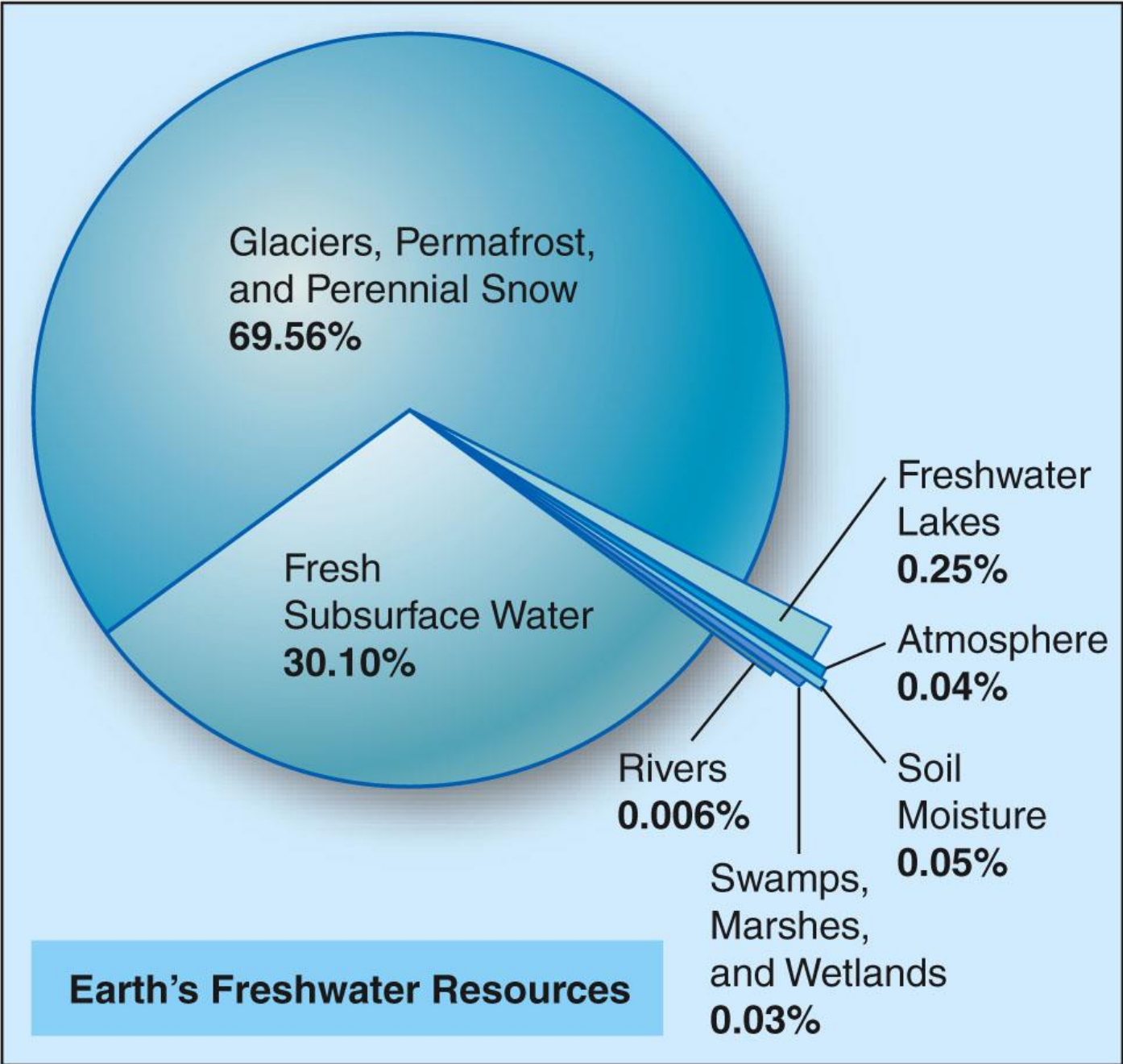
- About 71% of the earth's surface is covered with water.
- Of the total volume of water on Earth:
 - 97% is saltwater
 - 2% is freshwater frozen in ice caps and glaciers
 - 1% is fresh water in lakes and streams, groundwater, and water vapor in the atmosphere
- In general, most of the earth's water is located in the oceans as saltwater . Most of the freshwater on Earth is located in glaciers and ice caps. Lesser amounts are found in atmospheric moisture, rivers, lakes, streams, and groundwater.
- Most of the freshwater on Earth is located in glaciers and ice caps.

Usable water in the world









Earth's Freshwater Resources

1%
Freshwater
Available



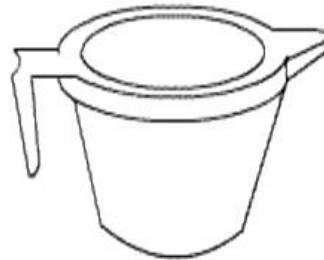
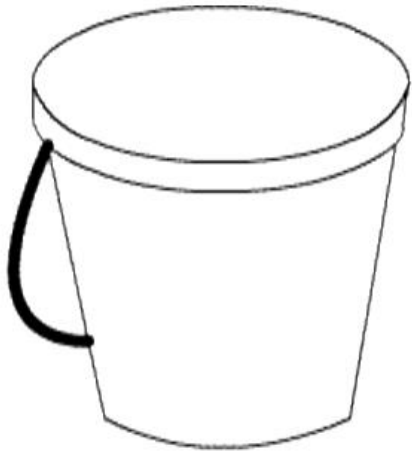
2%
Freshwater
Frozen/
Unavailable



Water on the Earth

- Water is not evenly distributed, and most of it is unsuitable for drinking.
- We use less than 1% of the water on Earth for drinking and personal hygiene. We also use this fresh water for agriculture, fisheries, transportation, heating and cooling, manufacturing, and many other purposes.
- Unless we use our freshwater supply wisely, rivers, lakes and groundwater can be depleted or polluted, becoming unusable or unsuitable for life.

**Label the following images as representations of which of the following:
Glaciers/Icecaps, Groundwater, Lakes/Rivers,
Saltwater on Earth**



Summarizing Strategy

Draw your own diagram illustrating the different amounts of water on the Earth's surface. Use the following: Saltwater, Glaciers/Icecaps, Groundwater, Lakes/Rivers, Other.

Your drawings do not have to be to scale. Make general comparisons similar but not the same as the one below.

