



EXPLORE IT!

All the Water in the World

Subject: Math, Science

Get a tangible grasp on how much of the water on our planet is available to us and why we can't use it all.

Materials List

1. Globe or Google Earth
2. 100 of any object
3. Three small cups, water, salt and ice

Grade: 2nd

Time: 30 minutes

Vocabulary: surface water, groundwater, aquifers, rivers, oceans, lakes, fresh water, salt water

NGSS: 42-ESS2-3: Obtain information to identify where water is found on Earth and that it can be solid or liquid.

Part 1: Globe Exploration

1. Look at the globe or map. Can you find where you live? What water can you see? What rivers, lakes and oceans can you find? All the water you can see on your globe is called "surface water" because you see it on the surface of the earth.
2. Did you know there is also water we can't see? We call it "groundwater" and it stays under the surface of the earth. It pools in aquifers and underground rivers.
3. Is the water in the rivers and lakes the same as water in the oceans? Why or why not? (Taste saltwater and fresh water to experience the difference.) Where can you find saltwater on the globe? Where can you find freshwater?
4. What kind of water do you think there is more of in the world? Fresh water or salt water? What about the water on the top of the earth and on the bottom in the arctic and Antarctic? Can we drink that? Frozen water is called ice and it can be found in glaciers, snow, hail and icebergs. Where can you find snow and ice on the globe?

See other side



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Part 2: Visualizing

1. Choose 100 items. Have some fun with it. Be creative with your choices. You can use pasta, coins, crayons or even little cups of water.*
2. Count out 97 of one item, like the Legos in the picture. Count out two of another item, like the orange balls in the picture. Then find one more item like the white ball.
3. The 100 items represent all the water in the world.
4. Do you know what each category stands for? How much drinking water is available?
 - 97% of our water is salt water
 - 2% of our water is frozen
 - 1% of our water is fresh
5. Now take your three cups. Fill one with water and one with ice. Fill the last one with water and add a little salt to it. Dip a finger in each cup and taste what's in them. Which ones are good for drinking?

* If you use water, use tiny cups like Dixie cups. Pour salt water into 97 cups, fill the remaining three cups with fresh water but freeze two of them. Once frozen, lay out all your prepared cups. Dip a finger in some of the cups and taste what's in them. How many are filled with something you'd like to drink?

Table Talk

1. If everyone drinks water, why don't we run out?
2. How can we care for our water so there's enough for everyone?

