

Water Stewardship Session

Age/Grade Range

- Grade 8 to 10
- Modifications available for other grades

Group Size

- Large group activity (15-30 students)

Time

- Set-up: 5 minutes
- Activity Part I: 20 – 25 minutes.
- Activity Part II: 10 minutes.
- Activity Part III: 10 minutes.

Materials

- Bag with Storm Water supplies.
- An inflatable globe.
- Bag with a Drop in the Bucket supplies.

Set-Up

Inflate the Globe.

Activity Directions

Part I

1. Start by discussing the question: "Does our planet Earth contain more land or more water?"
2. Toss the inflatable globe around the circle to all students, encouraging them to catch it with both hands and all their fingers spread wide. Every time a student catches the globe, they will say out loud if the tip of their thumbs is touching land or water (optional: have students name the ocean and or continent their hands land on). Record the answers; you will need at least 30 answers.
3. Once the globe has gone around, look at the results and calculate the percentage of water versus land.



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Topics

- Water

Objective

- Understand the relationships between land and water.
- Understand that water is limited.
- Explore the amount of freshwater available for human use.



4. Wrap up the activity by explaining that water makes up about 71% of the Earth, and that all water is connected and circulates through the water cycle.

Part II

1. Tell students that they are going to pretend that the blue tarp they are standing on represents all of the water on Earth.
2. Ask students to name the kinds of water that exist in, on or around Earth. They should be able to name rivers, lakes, oceans, clouds or water vapour, ice caps, groundwater, water held in the soil, and water held in plants and animals. Provide hints so that they mention all types of water.
3. Have seven students represent each a billion people on the Earth, and other students can represent all of the plants and the animals on Earth.
4. Ask the youth: How much of the Earth's water is drinking water? Explain that oceans hold most of the Earth's water- 97%. Fold up the tarp multiple times to represent the saltwater that we can't use. All students should be standing on the tarp.
5. Continue by explaining that icecaps and glaciers contain 2% of the Earth's water. Fold up the tarp again. 0.6% is groundwater, 0.005% moisture in the soil, 0.001% moisture in the atmosphere. Lakes and rivers hold only 0.0091%! All students should be squeezing on a small area of the tarp, which represents freshwater.
6. Explain that not very much water is available to us, and other animals, for drinking. We all need water to survive, but the amount of water on Earth is finite. Emphasize the importance of sharing and protecting our freshwater resources.
7. As a group, brainstorm individual actions to protect/conserve water at home and school.

Modifications

- Part I: An alternative is to focus this activity on water. Prepare a slideshow and use a projector to display images of water in nature.
- Tell students that we are all going to be water and move like water through the environment. Have them stand up and practice movements that mimic flowing/liquid water, frozen water and water vapour up in the air before going through the photos.
- Start the slideshow as you narrate the story of water molecules flowing through the environment. Every time the slide changes, have students (and yourself) mimic the state of water.

