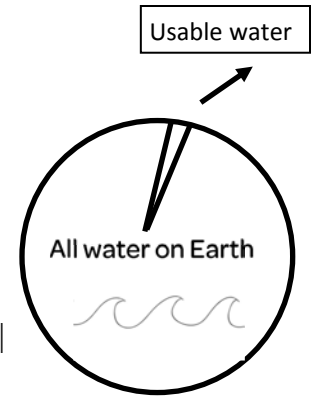




# GSGATL Atlanta Science Festival Activity– Drop In The Bucket

Adapted from Project Wet Water Education Training  
Levels: B, J, C, S, A

**75% of the earth is covered with water, but only 1% of that water is usable by humans.**



## Step One: Intro & Warm Up (30 minutes)

- Have the girls list off all the sources of water on our planet. If they do not get them all after sharing, use chart below to give them the correct answers. Show pictures and talk about local examples. In groups, let the girls place the sources of water from greatest (oceans) to smallest (rivers). Do not correct this just yet if they are not right.
- Define Potable water (usable/drinkable water) and lead the girls in a discussion about where they believe most of the potable water on earth is located.

## Step Two: Demonstration Fun (20 minutes)

- Now, explain that the 5 gallon bucket represents all the water on earth. Have the girls assemble the supplies. Use the chart below to physically demonstrate how small other sources are by separating them out. As the girls dish out the water, give the answers of largest to smallest water sources and discuss how it is a representation of reality.

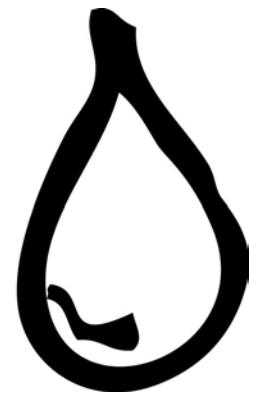
## Step Three: Conclusion

- Lead the girls in an engaging discussion. Some ideas of what to talk about are:
    - What led them to their guesses and how they were surprised post activity.
    - Main factors affecting water distribution on Earth (e.g., land forms, vegetation, and proximity to large bodies of water).
    - Ways we get potable water and new ideas for the future as population increases.
- Take Action– Look for ways to conserve water at home and in the community.  
Make a plan and implement it!**

- Supplies:**
- 5 gallon bucket
  - Dropper
  - Measuring tools (cups, teaspoons)
  - Water
  - Labeled containers/ cups

Breakdown example in a 5 gallon bucket of water:

Body of Water	Percent	Representation
Oceans	97.2%	All water left in bucket
Glaciers/ice caps	2%	1 cup
Groundwater	.62%	1/3 cup
Freshwater	.009%	1/8 teaspoon
Inland Seas	.008%	1/8 teaspoon
Atmosphere	.001%	1 drop
Rivers	.0001%	1 flick



## Badge/Patch Connections

- [GSGATL STEM Patch](#)
- [Ambassador Water Badge– Steps 1, 3, 4](#)
- [Brownie Wonders of Water Journey \(various steps\)](#)
- Others may be applicable as leaders see fit.

List two ways you can help conserve water here:

- 1.
- 2.



Interested in learning more about GS STEM programs?

Website: [stem.girlscoutsatl.org](http://stem.girlscoutsatl.org)

Email: [Ahughes@gsgatl.org](mailto:Ahughes@gsgatl.org)

