

## AES World's Water Demonstration – Step by Step

1. Show picture of Earth
2. Ask how much water there is on the surface of the Earth (about 71%)
3. For younger kids, explain: If the Earth's surface were broken into 10 equal parts, about 7 of those parts would have water on them. 3 parts would be land.
4. Explain: Though we have a lot of water here on Earth, we don't have very much freshwater, and that's the water we need to survive.
5. Show tank – explain this is 5 gallons of water, and it represents ALL of Earth's water – Oceans, lakes, rivers, streams, ponds, ice caps & glaciers
6. Fill the measuring cup with 2 cups of water.
7. Tell students this is the FRESH water we have here on Earth, so the rest of what's in the tank is SALT water, and we can't drink salt water or we would get sick.
8. Pour the sea animals into the tank to show that it is the ocean water.
9. Hold up the 2 cups of fresh water, and pour  $\frac{1}{2}$  cup of it into the other measuring cup, and set it down.
10. Hold up the remaining  $1\frac{1}{2}$  cups – explain that this is fresh water, but it is unavailable for our use, because it is caught in frozen glaciers and ice caps, and we can't use frozen water.
11. Pour it into the ice cube tray and set it aside.

12. Pick up the ½ cup of fresh water and explain that this represents fresh water in the form of surface water and ground water.
13. Pick up the dropper and fill it half full with the ½ cup of water.
14. Pour the dropper water into the little medicine cup, hold it up and explain that is the Earth's fresh surface water, which is made up of streams, lakes, rivers, wetlands and reservoirs. Set it aside.
15. Pick up the remaining water from the ½ cup, and pour it into the container of rocks. Explain that this is the Earth's groundwater.
16. Hold up the groundwater/rock container and explain that over 50% of the U.S. relies on groundwater for its drinking water.
17. Hold up the small medicine cup, and explain that the rest of the U.S. population relies on the surface water – the lakes, rivers, and reservoirs – for its drinking water.
18. Emphasize how little water humans and animals really have available out of all the water on the Earth.
19. Explain that this is the reason we have to conserve water and keep what we have available clean and healthy.
20. Ask if anyone has any tips for conserving water.