

# Introduction & Lesson 1 Availability & Distribution of Water on Earth

## **Slide 1, WASH & DRY**

Welcome to our WASH and DRY program! WASH & DRY stands for Water, Sanitation, and Hygiene and Disaster Recovery.

## **Slide 2, What will we learn?**

What will we learn in this program?

This program will address: where water is on Earth and in what amount, how important it is to be able to go around clean freshwater, identifying sources of freshwater in The Bahamas, land uses and water pollution, measuring water quality and contamination, and how to use the water around us. We will explore water availability, specifically in The Bahamas, and understanding the challenges that we face here.

## **Slide 3, Where in the World is Water?**

Today's lesson is Where in the world is water?; we will be talking about where water can be found on Earth, the forms it can be found in. Do you think the Earth has more land than water?

## **Slide 4, Earth's Surface**

So, the answer is WATER! The earth's surface is made up land, air and water. 71%, that's a pretty big percentage, of that surface is water with the other 29% percent being land. I guess that's why we call Earth "The Blue Planet".

## **Slide 5, Saltwater vs. Freshwater**

Is all the water on Earth fresh? No! In fact there is more saltwater than freshwater. Most of the water found on Earth is saltwater from the oceans. What is the difference between saltwater and freshwater? Freshwater is water that is not salty and has little or no taste, color, or odor. Salt water is water that contains dissolved salts, like the salt we use to season our food, and other minerals. Freshwater can be found in rivers, many lakes, underground in aquifers, and in the form of ice as glaciers. Here in The Bahamas, we do not have rivers, lakes and definitely not glaciers!

## **Slide 6, States of Matter**

H<sub>2</sub>O is the only substance that can be found in nature in all of its various states. Matter makes up everything. A state of matter is the distinct or special form in which something can be found. The three states of matter are: solid, liquid and Gas. H<sub>2</sub>O: as a solid is called ice, as a liquid it is called water and as a gas it is called water vapor.

**Slide 7, The Water Cycle**

The water cycle is the path that all water follows as it moves around Earth in different states. Liquid water is found in oceans, rivers, lakes—and even underground. Solid ice is found in glaciers, snow, and at the North and South Poles. Water vapor—a gas—is found in Earth's atmosphere.

Describe what is going on in the gif of the water cycle:

1. The sun is shining on the ocean heating up the Earth surface which leads to evaporation which is the process of water turning from a liquid into the gas water vapor.
2. Once water vapor is in the air it gathers around dust particles to form clouds.
3. When the clouds become full and are ready to burst they produce precipitation (rain, hail, sleet or snow)
4. This precipitation finds its way into various bodies of water like rivers and oceans.
5. The process begins again because it is a never ending cycle

**Slide 8, Thanks to our partners for making this possible!**

We are all very grateful to be a part of this amazing program brought to you through the collaboration of Friends of the Environment, Samaritan's Purse, Water Mission, Centre for Disaster Philanthropy, Water and Sewerage Corporation and The Goodness Tour.