

Utilizing the Water Around Us

Slide 1, How do we use water?: How DO we use water? Today we are going to learn about all the ways that we use water in our everyday lives, and even how we might use water without even knowing it. We are also going to learn about how best we can use this water.

Slide 2, Where does our main source of freshwater come from in The Bahamas?: Let's remind ourselves - where do we get our main source of freshwater in The Bahamas?

Groundwater! That's right. Remember that our groundwater is very scarce and limited, and other processes such as reverse osmosis is very expensive. This makes our freshwater resources very precious.

Slide 3, Freshwater is PRECIOUS: After having learned all about freshwater in The Bahamas, do you think that it is precious?

Yes, it is! Freshwater is a very valuable resource, which means that we should appreciate it and be grateful always for our freshwater. Most of the water on Earth are found in our oceans (97%), and that water is saltwater. Less than 1% of water on Earth is freshwater!

Slide 4, YouTube Video: Did you realise how little freshwater is found around the whole world? Let's check it out in this video. <https://www.youtube.com/watch?v=4HSFKwho7MQ>

Slide 5, What makes water so useful?: As we can see from that video, freshwater is a very limited resource. But, there are so many ways it is useful to us! It's basic properties tells us about why it is such a great substance for many different things. The main properties are : 1. It is a universal solvent (which means a lot of things can dissolve in it easily), 2. It has a high surface tension. This basically means it is able to spread easily through areas (like in plant roots), 3. It can exist in 3 ways: gas (in the air),

liquid and solid! A lot of liquids don't have this ability to change these "states" so easily, and lastly 4. Water has a high specific heat, which means it can absorb really high temperatures before it reaches its boiling point.

Slide 6, What do WE use freshwater for?: Freshwater is used for many things around the globe, but how do we use it personally? Firstly, it is used for farming (agriculture) to water crops like lettuce, tomatoes, onions, peppers and more. It is also used for producing goods, which include your electricity, food services, electronics and even your clothes! In daily activities, we use water to wash our hands, shower, water plants, cook, do laundry, etc.

Can you think of some other ways we may use freshwater?

Slide 7, Direct & indirect water usage: There are two different types of water usage, direct and indirect. What does that mean? Basically, direct water usage is water that we use with our own two hands. Indirect water usage is water that is used without us seeing it, such as in food production, clothing production and industrial products (like electronics or machinery).

Slide 8, Why is water so important to us?: Water supports our ecosystems and our civilizations, like where we live. It also provides sanitation for us as we shower, wash our hands, clean our dishes and laundry, etc. It helps with generating power in industrial parks, meaning for certain products such as water and power plants, as well as making products such as food, clothing and more. Our bodies are composed mostly of water, and we need it in order for our organs, circulatory and respiratory systems to function properly.

Without water, we have no life! We need it to survive.

Slide 9, “Which is why...”: We need to conserve water! What does conserve mean? Conserve means to protect something in order for us to be able to use it for the future. We must be very careful of how much freshwater we are using. It has such a large role in our lives, and we cannot live without it! So we must be sure that we do our part to conserve it.

Slide 10, so, how can we do that?: At home, we can do our part to conserve water. This means we can practice things like taking shorter showers or turning off the faucet while we’re brushing our teeth. Saving energy (like electricity) also helps with saving water. The less electricity we use, the less demand of water needed for power plants, and the less amount of fossil fuels will be exposed in the atmosphere. This prevents acid rain that can potentially damage groundwater sources. There are many high efficiency appliances in today’s age, including washing machines, fridges, dryers and more. Throughout our day, we can also recycle water! For example, we can use water that we haven’t drank during the day to water plants, or maybe to put in the kettle to boil for the morning. Can you think of any other ways?

Slide 11, so, how can we do that?: When we’re not home, we can learn to make smart decisions in order to utilize our water. Like eating foods that are in season! When we eat fruits and vegetables that are in season, they require less irrigation (watering) and attention in order to harvest. This saves water on farmlands. Choose fruits that you know are in season, like mangoes in the summertime. Always having a reusable water bottle with you helps with waste! Remember, the less plastic packaging we use, the less demand on manufacturing plants. Last but not least, the main thing we can do is spread awareness! Tell a friend or family member about what you learned on how to best utilize the water around us. Information becomes even more valuable once it’s shared. Who will you tell?!