

LESSON 9 - WILLY THE WATER DROP

WILLY THE WATER DROP

Water is one of the most important natural resources on Earth. No matter who you are, what you do, or where you live, you'll always need plenty of water. Luckily, I have a lot of water on my surface.

Remember, there is more water than land on the surface of the earth. But I'm here to tell you that you need to help take care of the water if you want to help make sure that Earth is always a happy, healthy place to live.



WILLY THE WATER DROP

Water is such an important natural resource that I decided to tell you a story about a special little drop of water that I named Willy. I found Willy a few weeks ago resting on this leaf with a bunch of other water drops. *A drop is a small, rounded amount of water.*



WILLY THE WATER DROP

Yes, Willy is just one little drop of water—not much compared to all the water there is on Earth. But you should know that every single drop of water is important, especially freshwater like Willy.

Freshwater is what you need when you're thirsty, or when you need to take a bath, or for any of the thousand other things you use water for. It's very precious, and less than one percent of the water on my surface is fresh! *One percent means that for every one hundred drops of water, only one drop is freshwater.*



WILLY THE WATER DROP

You might be surprised to learn that Willy the Water Drop is actually a very busy fellow. Like most water drops, he is always on the move. I decided to follow Willy and see what happened to him after he landed on this leaf.



WILLY THE WATER DROP

Willy wasn't on the leaf for long. A breeze came along and shook the leaf, sending Willy into this winding river. I wondered what would happen to Willy when he washed through all the litter in this river. Sure enough, he picked up a little dirt and grime along the way. *Willy used to be freshwater, but do you see how easily he becomes dirty?*



WILLY THE WATER DROP

Later, Willy the Water Drop passed a big factory. People produce many different things in factories. Unfortunately, almost all factories produce wastewater. *Wastewater is water that is no longer clean because it has been used by people to wash or flush materials such as dirt and chemicals.* Whatever they're making inside the factory—whether they're mixing paint, or making ink, or mopping the floors at the end of the day—people are using water. That dirty water needs to go somewhere when they're done with it.



WILLY THE WATER DROP

Wastewater is the dirty water that comes out of factories like this one. But it doesn't go to the landfill like the trash from your kitchen. Instead, it goes down the drain and sometimes ends up back in a river or other body of water.



WILLY THE WATER DROP

What do you think is coming out of this pipe?

Willy went past this wastewater pipe on the other side of the factory. Trust me, you don't even want to know what was coming out of this pipe. This pipe, and many others like it, can pollute the **freshwater supply**. *Supply means the amount of something available for use. The freshwater supply is the amount of freshwater available to all the creatures on Earth.*



WILLY THE WATER DROP

What's the water supply? That's pretty much the whole point of this story. Willy the Water Drop is part of the freshwater supply—or at least he was when he first started out on the leaf. You, and all the creatures and plants on Earth, depend on the freshwater supply. There's plenty for everyone as long as everyone is careful not to use too much or pollute it.



WILLY THE WATER DROP

One morning in the river, Willy passed through a trout's gills. Remember how you learned that polluted air is bad for your lungs? Well, polluted water is bad for a fish's gills, too. When this fish swam by, Willy the Water Drop passed right through its gills. Any pollutants, or dirty harmful things, that Willy picked up when he passed the litter or wastewater pipe could have been left inside this fish. That's not good for the fish!



WILLY THE WATER DROP

Many cities get their water from reservoirs. And this is exactly where Willy the Water Drop ended up after a week or so in the river. A reservoir is a place made by people to collect and store water. Reservoirs are created by building a dam, like the one in this picture, across a river. By damming the river, people are able to make a big lake.



WILLY THE WATER DROP

After Willy the Water Drop floated around in the reservoir for a few days, he went down a pipe and into this water treatment plant. This is like a big bathtub, only here they are actually cleaning water instead of using water to clean something else. After Willy sat in this treatment plant for a while, and the people were sure that he didn't have any more pollutants or other dirty stuff in him, he was ready to go through the pipes to someone's home.



WILLY THE WATER DROP

Once he left the treatment plant, Willy went into another pipe, and then another and another, until finally he ended up flowing out of someone's bathroom faucet. A boy was washing his hands before dinner. That's a good thing, because there were all sorts of germs on that boy's hands. This is why Willy likes being a water drop: he knows he's helping boys and girls grow up to be healthy and clean.



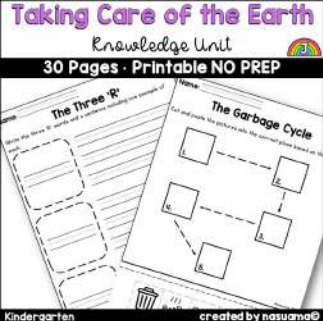
WILLY THE WATER DROP

Where is Willy going now?

Willy the Water Drop was happy to have helped the boy get ready for dinner, but then it was straight down the drain for Willy! He went down the sink drain and into the drainpipe.

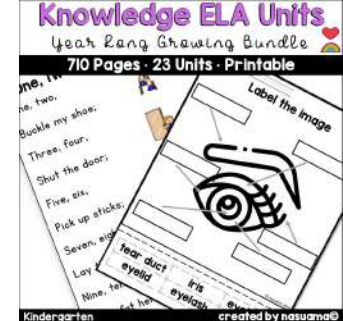
Do you think that was the end of Willy the Water Drop? Is that the last we'll ever see of him? Actually, the answer is no. Willy will be back again. Right now, he could be in a wastewater pipe, or floating around in a reservoir. However, there's really no telling exactly where he'll end up.





TAKING CARE OF THE EARTH

BUNDLE



Name: _____

The Water Cycle

Imagine you are a travelling water drop. Where would you be?

DO YOU NEED EXTRA ACTIVITIES?

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