



Willy the Water Drop

9

✓ Lesson Objectives

Core Content Objectives

Students will:

- ✓ Explain that people have a special responsibility to conserve water
- ✓ Explain how animals, plants, and people need clean water to survive
- ✓ Identify wastewater as a source of water pollution
- ✓ Describe the steps in the water cycle
- ✓ Explain ways to conserve water

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ With prompting and support, describe the role of an author and illustrator in a nonfiction/informational text (RI.K.6)
- ✓ Orally compare and contrast fresh water, salt water, and wastewater (RI.K.9)
- ✓ While listening to “Willy the Water Drop,” orally predict what comes out of the wastewater pipe, based on text heard thus far, and then compare the actual outcome to the prediction
- ✓ Explain that “Willy the Water Drop” is realistic text because water drops really go on a journey, but it is fantasy because they don’t really have feelings or talk
- ✓ Evaluate and select read-alouds or poems on the basis of personal choice for rereading

Core Vocabulary

evaporate, v. To turn from a liquid into a gas

Example: The water drops on the leaves will evaporate into the air by late morning.

Variation(s): evaporates, evaporated, evaporating

pollutants, n. Harmful things that make the air, land, or water dirty

Example: Some water pollutants include waste from factories, sewers, and garbage.

Variation(s): pollutant

reservoirs, n. Places where water is collected and stored for use.


Example: Many cities have reservoirs to store water.

Variations: reservoir

supply, n. The amount of something that is available for use

Example: The supply of crayons is enough for the entire class.

Variation(s): supplies

<i>At a Glance</i>	Exercise	Materials	Minutes
<i>Introducing the Read-Aloud</i>	Essential Background Information or Terms		10
	Purpose for Listening		
<i>Presenting the Read-Aloud</i>	Willy the Water Drop	Earth Hat	10
<i>Discussing the Read-Aloud</i>	Comprehension Questions		10
	Word Work: Supply		5
 Complete Remainder of the Lesson Later in the Day			
<i>Extensions</i>	Domain-Related Trade Book	trade book	15
	Student Choice		



Willy the Water Drop

9_A

Introducing the Read-Aloud

10 minutes

Essential Background Information or Terms

Explain to students that in the next read-aloud they will hear about the journey of a water drop named Willy. Tell students that water drops don't really have names; Willy is a make-believe character; he cannot actually feel things. But his travels are similar to those that real water drops take. As Willy travels from place to place, he turns into different types of water. Explain that the three basic forms of water are fresh water, salt water, and wastewater.



◀ Show image 9A-1: Three-pane image of fresh, salt, and waste water

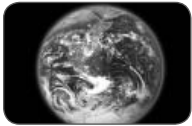
Tell students that fresh water is clean water that you can drink. Salt water is salty water from the ocean or sea. We cannot drink salt water. Wastewater is water that is no longer clean because it has been used by people to wash or flush away materials such as dirt and chemicals. Drinking wastewater can cause animals and humans to become very sick.

Explain that the presence of toxic wastewater is one reason why we need water treatment plants. A water treatment plant is a place that cleans dirty water. Tell students that they will hear about Willy's journey to different places, including a water treatment plant, where Willy will be cleaned and made ready to continue on his travels.

Purpose for Listening

Tell students to listen for the different places that Willy goes on his journey as a little drop of water.

Note: Remember to put on your Earth Hat to present the read-aloud, and remind students that in the read-aloud, Earth will be pretending to “talk” to them.



Willy the Water Drop

← Show image 9A-2: Earth photo showing lots of water

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.¹ 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.

1 Remember, there is more water than land on the surface of the earth.



← Show image 9A-3: Water drops on leaves

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.²

2 A drop is a small, rounded amount of water. *Drop* also means to fall.

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 fresh water like Willy. Fresh water 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!³

3 *One percent* means that for every one hundred drops of water, only one drop is fresh water.

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.



← Show image 9A-4: Littered river

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.⁴

4 Willy used to be fresh water, but do you see how easily he becomes dirty?



← **Show image 9A-5: Factory on a river**

- 5 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.

Later, Willy the Water Drop passed a big factory. People produce many different things in factories. Unfortunately, almost all factories produce wastewater.⁵ 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.

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.



← **Show image 9A-6: Wastewater pipe**⁶

- 6 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 fresh water **supply**.⁷

- 7 *Supply* means the amount of something available for use. The fresh water supply is the amount of fresh water available to all the creatures on Earth.

What's the water supply? That's pretty much the whole point of this story. Willy the Water Drop is part of the fresh water 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 fresh water supply. There's plenty for everyone as long as everyone is careful not to use too much or pollute it.



← **Show image 9A-7: Fish**

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!



← **Show image 9A-8: Water reservoir**

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.



← **Show image 9A-9: Water treatment plant**

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.



← **Show image 9A-10: Child washing hands**

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.



← **Show image 9A-11: Drain**⁸

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.

⁸ Where is Willy going now?



◀ **Show image 9A-12: Treated water coming out of a pipe**

Hopefully, Willy will go through another water treatment plant so they can clean off all the dirt and pollution before he is washed out of a big pipe like this and into another river.

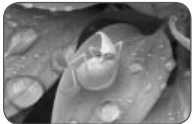


◀ **Show image 9A-13: Sunny ocean**

Once he's back in the river, Willy could flow to another reservoir. He could flow to the ocean. Maybe a bird will drink him! Or, maybe Willy will wind up in a sunny spot like this. The heat from the sun will make him **evaporate**, turning him into water vapor. Instead of being a water drop, he'll be part of the air for a while. He'll float up into the sky, and there he could become part of a cloud.

You heard it right! Clouds are actually fluffy bundles of tiny little water droplets up in the sky. The water in clouds was once part of a river or lake or stream on the surface of the earth.

Once he becomes part of the clouds again, Willy the Water Drop will float across the sky until, one morning . . .



◀ **Show image 9A-14: Water drops on a leaf**

It will rain, and there you'll find Willy, sitting on a leaf waiting to start his journey all over again. Perhaps he'll end up in a bathtub or swimming pool near you!

Comprehension Questions

10 minutes



1. *Literal* Which important natural resource did Good Old Earth tell you about in this read-aloud? (water)
- ← **Show image 9A-1: Three-pane image of fresh, salt, and waste water**
2. *Inferential* What is the difference between fresh water, salt water, and wastewater? (You can drink fresh water; salt water is salty; wastewater is dirty and could make you sick if you drink it.)
3. *Inferential* Where does wastewater come from? (factories and people's homes)
4. *Literal* Why are water treatment plants important? (They turn dirty water into clean water so we can use it again.)
5. *Inferential* Why is it important to have clean water drops like Willy? (We need clean water to drink, take baths in, and wash our clothes.)

6. *Literal* What are clouds made of? (water droplets)

[Please continue to model the *Think Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

I am going to ask a question. I will give you a minute to think about the question. Then I will ask you to turn to your neighbor and discuss the question. Finally, I will call on several of you to share what you discussed with your partner.

7. *Evaluative Think Pair Share:* Do you think what happens in this read-aloud could really happen? Or is it pretend, or fantasy? (It is pretend because water drops do not have feelings and names; however, the journey that a water drop can take is real.)
8. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these questions.]

Word Work: Supply

5 minutes

1. In the read-aloud you heard, “This pipe, and many others like it, can pollute the fresh water *supply*.”
2. Say the word *supply* with me.
3. *Supply* means the amount of something that is available to use.
4. Before the storm, we got a supply of food and water keep at home.
5. Tell about something that you have a supply of at home or at school. Try to use the word *supply* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase students’ responses: “We have a supply of _____ at home/school for . . .”]
6. What’s the word we’ve been talking about?

Use a *Making Choices* activity for follow-up. Directions: If any of the things I describe are examples of a supply of certain items or materials, say, “That is a supply.” If the things I say are not examples of a supply of items, say, “That is not a supply.”

1. Everyone brings in a box of tissues at the beginning of the school year. (That is a supply.)
2. My dad got me a big box of pencils to last me the whole school year. (That is a supply.)
3. We bring in our own snacks each day. (That is not a supply.)
4. We had hamburgers for dinner last night. (That is not a supply.)
5. The water in the reservoir is enough for the whole town. (That is a supply.)

Note: If you have a supply of items in your classroom, take this opportunity to show students your supply (e.g., paper, tissues, markers, etc.). If students each have their own supply of items, you may want to refer to that now, too.



Complete Remainder of the Lesson Later in the Day



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Extensions

15 minutes

Domain-Related Trade Book

Refer to the list of recommended trade books in the Introduction at the front of this Anthology, and choose a water-themed book to read aloud to the class, such as *Why Should I Save Water?*, by Jen Green and Mike Gordon.

Explain to students that the person who wrote the book is called the author. Tell students the name of the author of the book. Explain to students that the person who makes the pictures for the book is called an illustrator. Tell students the name of the illustrator. Show students where you can find this information on the cover of the book or the title page. As you read, use the same strategies that you have been using when reading the read-aloud selections in this Anthology—pause and ask occasional questions; rapidly clarify critical vocabulary within the context of the read-aloud; etc.

After you finish reading the trade book aloud, lead students in a discussion about the ways in which this book's water information relates to what you have learned about taking care of the earth in this domain. If you read *Why Should I Save Water?*, tell students, "Water is very important in our everyday lives. What are some ways in which you can conserve water at home?"

Student Choice

Ask students which read-aloud they have heard recently that they would like to hear again. If necessary, reread the titles: "Introducing the Earth," "Garbage," "Natural Resources," "Reduce, Reuse, Recycle," "Recycle! Recycle! Recycle!," "Composting," "Pollution," or "Air Pollution." Show key illustrations from previous read-alouds to help students make their choice. You may also want to choose one yourself.

Reread the text that is selected. Feel free to pause at different places in the read-aloud this time and talk about vocabulary and information that you did not discuss previously during the read-aloud. After the read-aloud, ask students if they noticed anything new or different during the second reading that they did not notice during the first reading. Also, ask them to try to express why they like this read-aloud. Remember to repeat and expand upon each response using richer and more complex language, including, if possible, any read-aloud vocabulary.