

This booklet belongs to:

Water ⁴ OTTER

Less is More

Water Conservaton Student Booklet

The Water4Otter mission continues!

Take this booklet home with you, complete the activities inside and share them with your friends and family.





Otis Needs Your Help!

Water4Otter is a secret organization of water saving experts founded by Otis, a North American River Otter. He and the rest of the team – including Bob the Bobcat and Farah the Fox – need your help to save water in North Texas. In this toolkit, you will need to work together with Otis, Farah and Bob to learn about where our water comes from, how we all share water in our watershed, the different ways we can save water and, of course, how we can all protect our water. If you're ready to get started on your mission, take a look at the Words to Know. Then, you'll see your first task on the next page. Thank you for helping, and good luck!

Words to Know

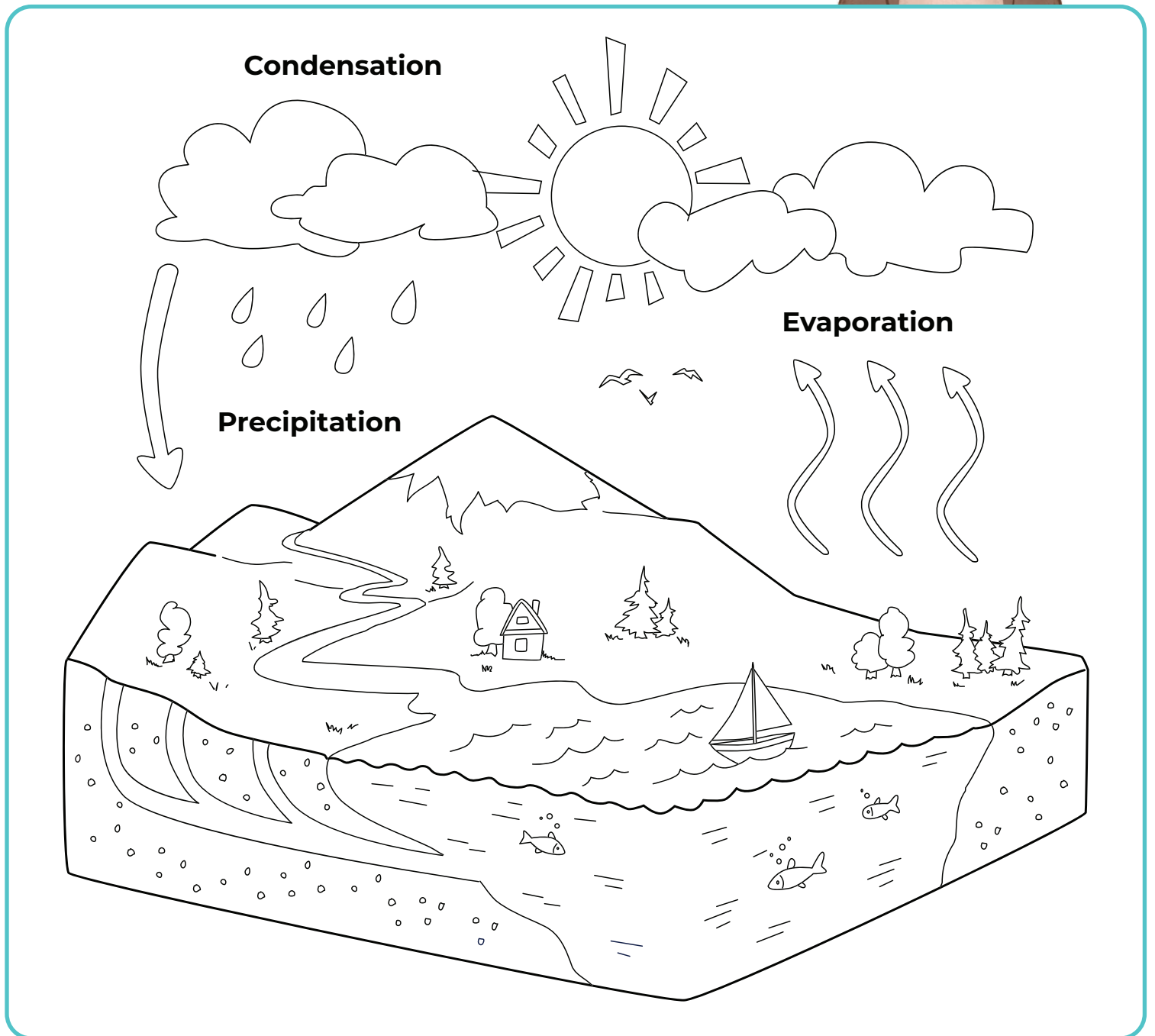
Condensation	The process of water vapor turning into liquid water.
Conserve	To use natural resources carefully in order to prevent waste.
Evaporation	The process of liquid water turning into water vapor.
Pollution	Things that contaminate or dirty our environment.
Precipitation	Rain, snow, sleet or hail that falls to the ground.
Water Cycle	The path that water follows as it moves around the earth.
Watershed	A watershed is a big area of land that drains into streams, creeks, lakes, rivers, or oceans.



The National
Theatre for Children

Color & Share

Let's start with the water cycle! Take a look at the image below to learn how water moves around our planet. Then, color the picture and show it to your family and friends. When you're done, talk to my friend Bob – he will tell you about how we move water in North Texas.



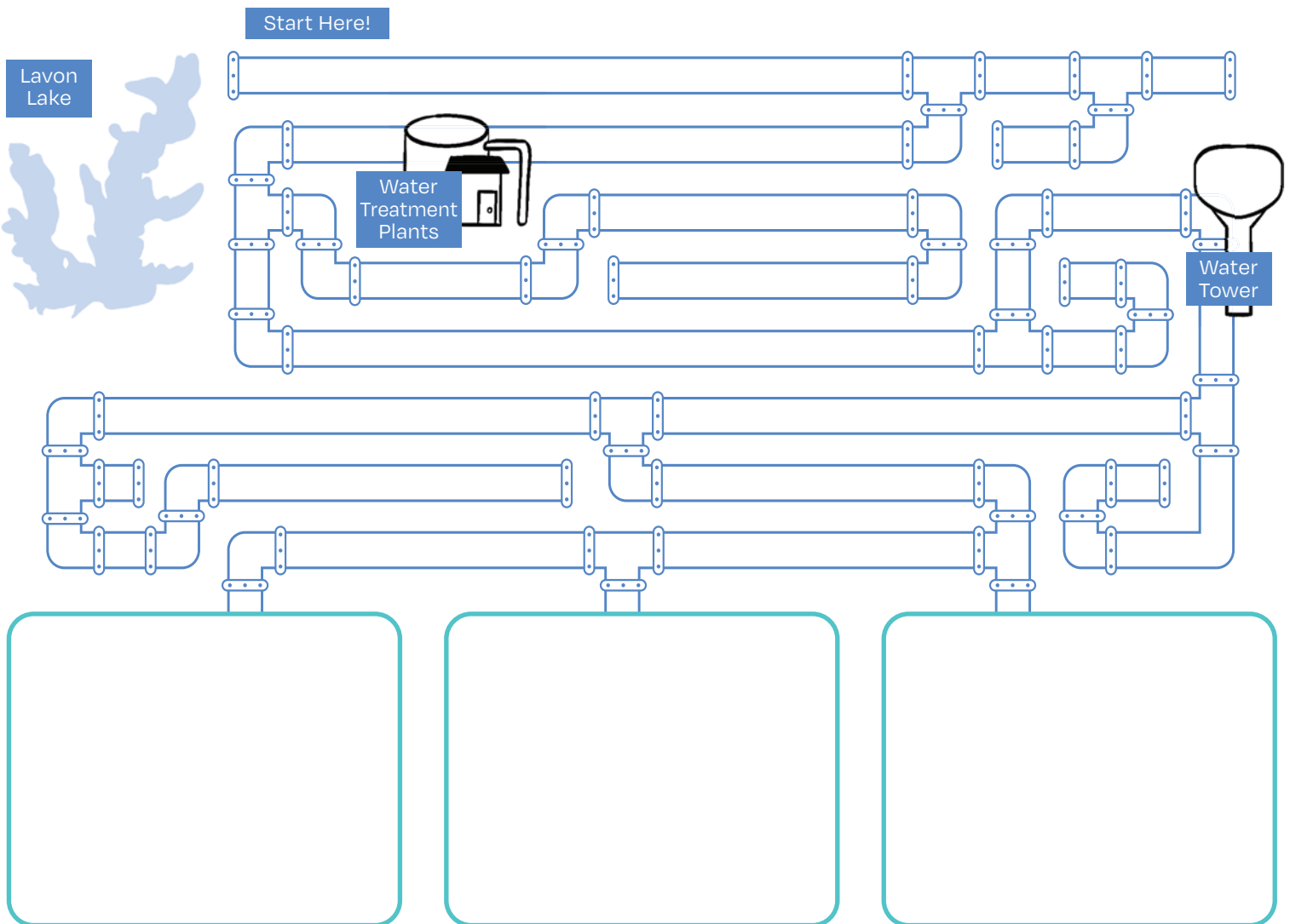
The Incredible Journey of Water

Hey there! I'm Bob the Bobcat. Otis told me you need to know how we move water around. The people at NTMWD use almost **700 miles of pipe** to move our water where it needs to go. Why don't you try it?



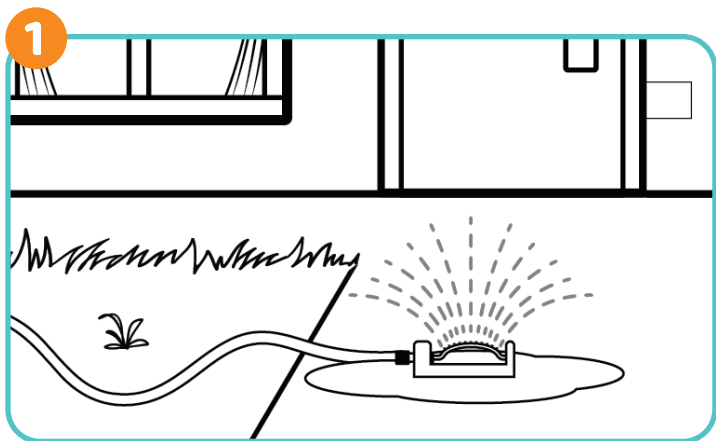
1. Locate **Lavon Lake** and the pipeline leading away from it.
2. Draw some raw water moving in the pipeline from the lake to the **NTMWD Water Treatment Plants**. Next, draw the water travelling to the **Community Water Tower**.
3. Draw the water flowing from the Water Tower to the blank boxes. In those boxes, draw **three different places** in your town that use water.

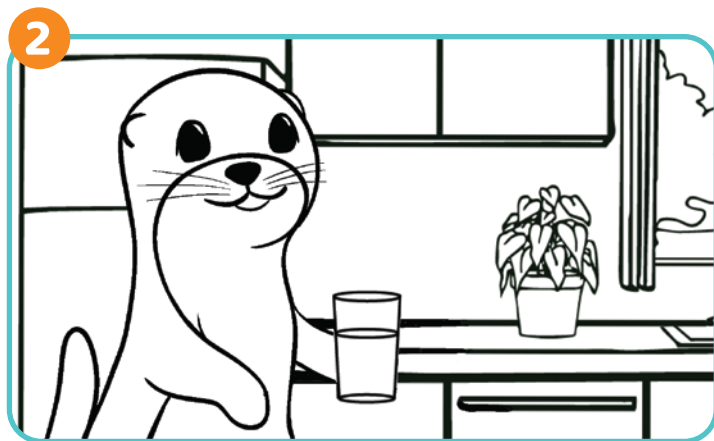
When you're all done, head over to Otis's friend's house.

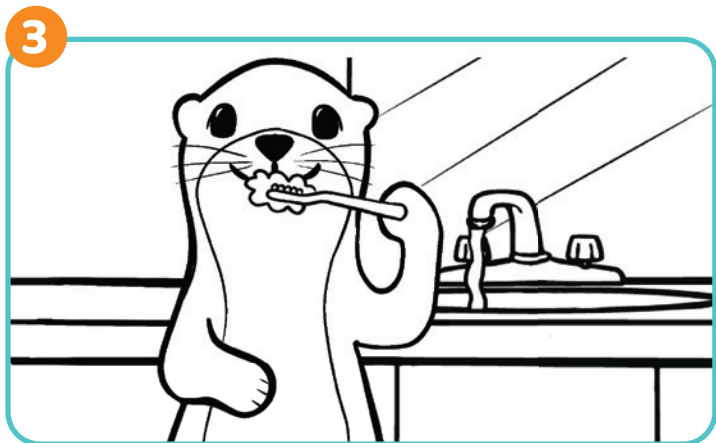


Home Water Waste

Now that you know about the journey water takes to get to you, you probably know it's important to not waste it! Take a look at the four scenes below. In some of the scenes I am wasting water, and in some I am using water wisely. Circle the ones where I am wasting water, and write what I should do differently on the lines below each image. Then go talk to Farah – she's got a big mission planned for you!









Answers: 1. Move the sprinkler to the grass; only water twice per week. 2. Otis is using water wisely. It's good to stay hydrated! 3. Turn off the faucet when you brush. 4. Otis is using water wisely. 5 minute showers use less water!

Champions

Hello! I'm Farah the fox, and I'm excited to meet you!

Did you know that we all live in a watershed? That means when it rains or when we water our grass and gardens, all that water flows to the same place—our lakes and rivers!

On the next page, you'll find a map of the North Texas Municipal Water District with a winding path through our lakes and watersheds. As you follow the path, you'll learn how to protect our precious water. Read the instructions below, then let's start our adventure!



What You Need:

- 1-4 players (friends, family, or guardians)
- 1 coin per player (to mark your spot on the board)
- 1 six-sided die

How to Play:

- 1. Start:** All players place their pennies on the aqua "Start Here" rectangle. The youngest player goes first, then play continues clockwise.
- 2. Your Turn:** Roll the die and move your coin that many spaces along the path.
- 3. Landing Spots:**
 - Blank spots or encouragement from Otis, Bob, or Farah:** Your turn is over—nice job!
 - Spots with instructions:** Follow the directions on that spot.
- 4. Special "Roll the Die!" Stops:** If you pass a stop sign that says "Roll the die!" you must stop there and roll again:
 - Odd number (1, 3, 5):** Move backward as shown on the spot
 - Even number (2, 4, 6):** Move forward as shown on the spot
- 5. Winning:** Be the first player to reach the aqua "END!" rectangle. You don't need to land on it exactly—just reach it!

Ready to become a water champion? Let's play!

Lake Texoma

START HERE!

Strong start!



You enjoy a picnic at Bois d'Arc lake and clean up your trash afterwards.
Go ahead 2 spaces.

Bois d'Arc Lake

You scraped your dirty plate into the kitchen drain.
Go back 2 spaces.

Roll the Die!

ODD ROLL - Whoops, you've dumped your pet waste into the storm drain.
Go back 3 spaces.

EVEN ROLL - Great job! You have planted native plants to prevent erosion.
Go ahead 1 space.

You find a leaky faucet and tell a parent or guardian.
Go ahead 2 spaces.

Howe

Jim Chapman Lake

Roll the Die!

ODD ROLL - Uh-oh, you forgot to turn off the tap when brushing your teeth.
Go back 2 spaces.

EVEN ROLL - Hooray! You have volunteered to remove trash from the shoreline.
Go ahead 2 spaces.

Great job so far!



Frisco

Anna

Greenville

Lavon Lake

Plano

Allen

ODD ROLL - Oh, no! You forgot to take your yard waste to the disposal site.
Go back 1 space.

EVEN ROLL - Congrats! You've installed a rain garden to reduce pollution.
Go ahead 2 spaces.

Roll the Die!

You ran the dishwasher when it was only half-full.
Go back 2 spaces.

You visit ntmwd.com to learn more about your water.
Go ahead 2 spaces.

Mesquite

Lake Tawakoni

East Fork Water Resuse Project

Kaufman

Roll the Die!

ODD ROLL - Oops! You watered your lawn in the rain.
Go back 1 space.

EVEN ROLL - Nice! You put up a poster to remind your family not to waste water.
Go ahead 2 spaces.

Almost there!



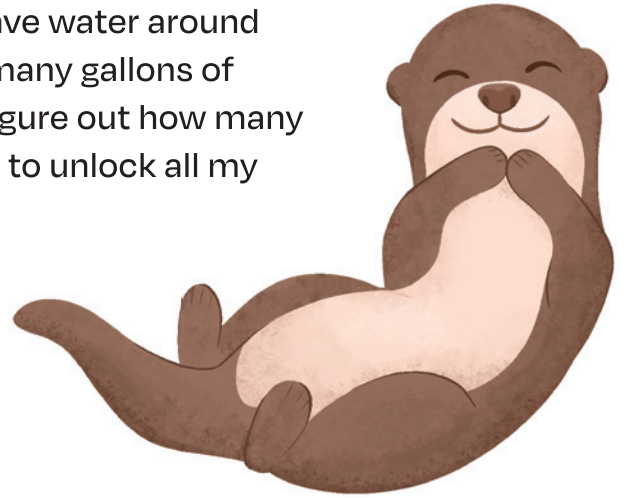
Kemp

END!

You are a water champion!

Water Math

I may be an otter, but I actually know a lot of ways to save water around the house. The trouble is, I can't quite remember how many gallons of water each of these tips can save. Can you help me? Figure out how many gallons each symbol is worth, then solve the equations to unlock all my water-saving knowledge!



Equations

$$2 + 3 = \text{toothbrush}$$

$$\text{toothbrush} \times 4 = \text{dishes}$$

$$\text{showerhead} + 15 = \text{washing machine}$$

$$\text{dishes} + 5 = \text{showerhead}$$

$$\text{toothbrush} + \text{dishes} + \text{showerhead} + \text{washing machine} = 90$$

Answers



Turning off the water when you brush your teeth

= _____ gallons per day saved



Only doing full loads in the dishwasher

= _____ gallons per week saved



Taking a shower shorter than five minutes

= _____ gallons per day saved



Only doing full loads in the washing machine

= _____ gallons per week saved

Answers: Turning off the water when you brush your teeth can save 5 gallons a day. Only doing full loads in the dishwasher can save 20 gallons a week. Taking a shower shorter than 5 minutes can save 25 gallons a day. Only doing full loads in the washing machine can save 40 gallons a week.

Watershed

Secret Code

Oh no! I had an awesome message all about watersheds prepared for you, but someone who doesn't want us to have clean water came in and removed some of the words. Can you help me figure out what I was trying to tell you?

Have you ever wondered where our water comes from? In North Texas, lakes and

_____ Lake, Lake Texoma, and the Trinity River give us the
★ 👍 ◆ ◎ ◆

water we use every day, but it all starts with _____!
* 👍 ⚙️ 💧 □ ⚙️ 🖐️ 💧 ➔ ⚙️

A watershed is an area of land where rain and streams _____ into the
➔ □ 👍 ● ◆

same place, like a lake or river. That's why we should pick up trash and not

_____ anything down storm drains. Clean watersheds mean clean water for
➔ 😊 ❄️ ✎️

us, and safe _____ for fish, plants, and animals too!
🖐️ ◎ ❄️ 💧 ⚙️



Secret Code

A	D	E	H	I	L	M	N
👍	➔	💧	🖐️	●	★	❄️	◆
O	P	R	S	T	U	V	W
◎	✎️	□	⚙️	⚙️	😊	◆	*

Spread the Word

Thanks for all of your help with our missions. Now it's time to take what you've learned and share it with your community! Use the next page to design and draw a poster, tear it out and hang it in your home or school for all to see.

Need ideas? Your poster could include the following:

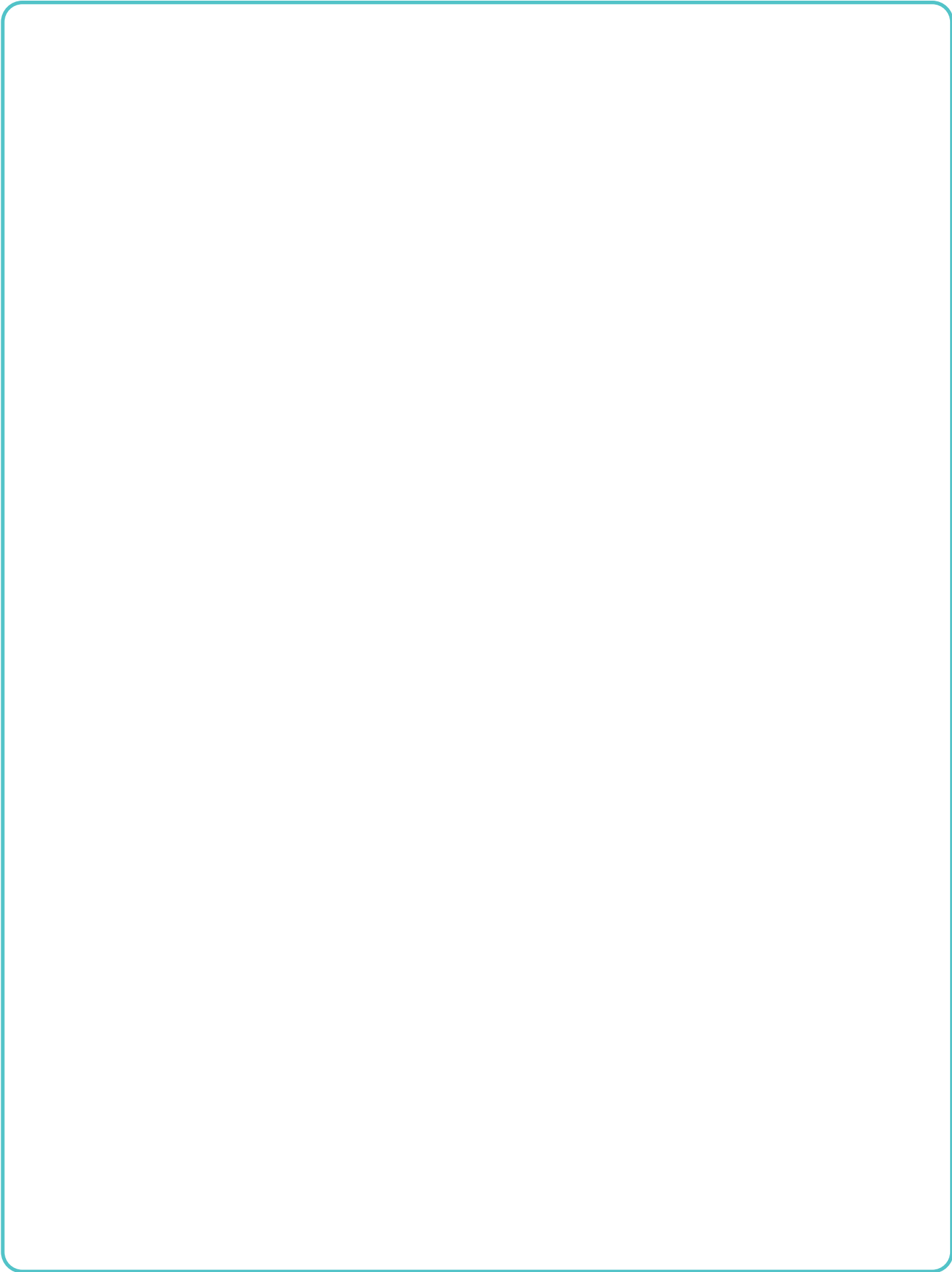
- The Water Cycle from page 3
- Pipelines carrying water from page 4
- People saving water at home, as seen on page 5
- A drawing of a lake and watershed from page 6

Extra Challenge

Try to include a "Call to Action," or CTA. A CTA gives the viewer of your poster a clear action to take. What's something you could write that would encourage people in your home or school to save water? If you need some inspiration, look at the tips on page 5, 8, or 9. It's up to you! Just make sure your CTA is clear and stands out from the other drawings or words on your poster.

Good luck, and thanks again! We couldn't have done it without you. In fact, we would like to make you an official member of the Water4Otter team! Don't forget to keep saving water and you'll make a difference in no time.







**NORTH
TEXAS
MUNICIPAL
WATER
DISTRICT**

Hey parents, students and teachers!

GO TO: ^{NTC}**playworks.com**



Check out more fun
learning activities
on this topic at
NTCplayworks.com!

Here's How:

1. Go to [NTCplayworks.com](https://www.ntcplayworks.com)
2. Select your state and program
3. Enjoy the digital games, interactive activities, e-books and more