

TEACHER OVERVIEW

Watersheds

Kindergarten – 2nd Grade

Nature Vision Student Packet

The materials contained within this packet for students have been created by Nature Vision, an environmental education nonprofit organization that brings programming to schools and local greenspaces for over 70,000 PreK-12th grade students each year in King and Snohomish Counties. This curriculum is designed to foster an understanding of the importance of water and its integral role in supporting life and shaping our planet. Packets can be completed by students either independently from home or with the help of an adult caregiver. Materials for each day of the week build on the previous days' learning by offering a variety of activities that involve art, writing, safe field exploration, and kinesthetic activities.

These materials are provided to you by Cascade Water Alliance (Cascade). Cascade wants everyone to understand the importance of conserving and protecting our limited water resources. Cascade supports Nature Vision in the development and delivery of water education programs and we are happy to offer these materials to our friends in the community. Learn more about Cascade at cascadewater.org.

This unit supports NGSS Performance Expectations across various disciplines, as well as supporting K-12 Integrated Environmental and Sustainability Standards. These are listed at the bottom of this page. Teachers will be supplied with PDF formats of materials to be emailed to families or teachers may print and send to students to complete at home.

In this packet, students begin with an introduction to the concept of a watershed. After learning about watersheds and our place in them, they continue with lessons and activities focused on the water cycle. Next, they will round out their watershed knowledge by investigating all of the living and nonliving things found around us in nature including person-made objects. They will see examples of different habitats and the creatures found within them before completing their lessons with a focus on stewardship and water conservation.

If you have any further questions or concerns regarding this packet, please email our Office Coordinator at info@naturevision.org.

Grades K-2

Supports NGSS Performance Expectations: K-LS1-1, K-ESS3-3, 1-PS4-3, 2-LS4-1, 2-ESS1-1, 2-ESS2-2, 2-ESS2-3.

Grades K-2
Day 1 - Watersheds
Day 2 - The Water Cycle
Day 3 - Life in the Watershed
Day 4 - Watershed Connections
Day 5 - Stewardship

Stay connected with Nature Vision! Follow us for updates @naturevisionorg



PARENT/CAREGIVER OVERVIEW

Watersheds

Kindergarten – 2nd Grade

Welcome to Nature Vision's student packet for home use. Nature Vision is an environmental education nonprofit organization that brings programming to schools and local greenspaces for over 70,000 PreK-12th grade students each year in King and Snohomish Counties. We are excited to be offering this version of our programming directly to students at home!

This packet is designed to be completed over the course of one week with each day focusing on a different aspect of environmental science and stewardship. The majority of these materials can be completed independently, but we thought it would be important to provide background information for any adults that may be helping to complete or answer questions. We've included the basic learning objectives for each day along with some vocabulary.

These materials are provided to you by Cascade Water Alliance (Cascade). Cascade wants everyone to understand the importance of conserving and protecting our limited water resources. Cascade supports Nature Vision in the development and delivery of water education programs and we are happy to offer these materials to our friends in the community. Learn more about Cascade at cascadewater.org.

Another great resource to learn about saving water and how to help our salmon and watershed is weneedwater.org. Check out the We Need Water webpage or on Instagram @WeNeedH2O to see how you can be part of this campaign! Challenge yourself to use #WeNeedWater to post all the things you are doing with your friends and family to conserve and protect water!

*Please contact info@naturevision.org with any questions or concerns
Stay connected with Nature Vision! Follow us for updates @naturevisionorg*



NOTE: Students may require support in reading directions and/or completing some tasks. While many activities in this packet are creatively-oriented and open-ended, you may consult the answer key located at the back of the packet for additional assistance or guidance.

Unless otherwise noted, images courtesy of freepik.com

PARENT/CAREGIVER OVERVIEW: DAY 1

Watersheds

Background Information: Watersheds are all of the land that water falls on and flows down to one low point. Everywhere you go on this Earth, you are in a watershed. From the bit of land that drains water into a tiny puddle to all of the areas across the planet that drain into the Pacific Ocean, water is always moving. Even person-made objects like buildings, cars, and roads are a part of the watershed and can have a big impact on the water they come into contact with.

Learning Objective: Students will learn what a watershed is and how their own actions can affect the environment around them. They will create various models to help them picture and understand exactly how water flows across the land.

Main Activity: Build a Watershed

- **Overview:** Students will build two watershed models, watching how water flows over the landscape and affects the world around it
- **Parent/Caregiver Tasks:** Help your student gather materials and build each model while supervising the water-pouring portion to ensure no spilling

Optional Activity: We Need Water Challenge

- **Overview:** Students complete a daily task related to a water conservation habit and a challenge to spread awareness on the importance of saving water
- **Parent/Caregiver Tasks:** If possible, help the student post their #WeNeedWater challenge on social media

PARENT/CAREGIVER OVERVIEW: DAY 2

The Water Cycle

Background Information: Water is one of the most important things on Earth. It moves around the planet through the process known as the water cycle. This process provides every living thing with the clean, plentiful water that it needs. The water cycle can be split up into evaporation, condensation, precipitation, and accumulation. If you know where to look, you can see examples of each one of these steps in everyday life!

Learning Objective: Students will understand the process of the water cycle and will be able to name and understand each of its stages. They will be able to provide examples of the water cycle in the real world. Lastly, they will learn that water passes through this cycle again and again, never stopping.

Main Activity: Water Cycle in a Bag

- **Overview:** Students create a contained system where they can watch the water cycle in action
- **Parent/Caregiver Tasks:** Help your student gather materials, fill the bag partially with water, find a suitable location (sunny window), and tape up their model

Optional Activity: We Need Water Challenge

- **Overview:** Students complete a daily task related to a water conservation habit and a challenge to spread awareness on the importance of saving water
- **Parent/Caregiver Tasks:** If possible, help the student post their #WeNeedWater challenge on social media

Optional Activity: Sun and Shadow

- **Overview:** Students will set up an experiment to test how much water evaporates from two separate containers over a 24-hour period
- **Parent/Caregiver Tasks:** Help to gather materials, fill the containers with water, and remind your child to check on each container of water after 24 hours

Optional Activity: Videos

- **Overview:** Students watch an assortment of fun videos and songs about the water cycle
- **Parent/Caregiver Tasks:** Be in charge of internet access and loading each video

Optional Activity: Water Cycle Maze

- **Overview:** Students complete a simple maze/coloring sheet depicting the water cycle
- **Parent/Caregiver Tasks:** None

PARENT/CAREGIVER OVERVIEW: DAY 3

Life in the Watershed

Background Information: Water is essential for every living thing on Earth. Because of that, it is incredibly important that humans learn to share this limited resource. The water cycle is able to provide fresh water, but even in Washington it is not always consistent and humans can cause many problems if they use too much.

Learning Objective: Students will understand the importance of water for every single organism. They will also understand and be able to explain why people should learn to save and protect water in the environment.

Main Activity: Watershed Design

- **Overview:** Students take an empty picture of watershed and fill it with all of the natural and human-made things that they can imagine
- **Parent/Caregiver Tasks:** None

Optional Activity: We Need Water Challenge

- **Overview:** Students complete a daily task related to a water conservation habit and a challenge to spread awareness on the importance of saving water
- **Parent/Caregiver Tasks:** If possible, help the student post their #WeNeedWater challenge on social media

Optional Activity: Watershed BINGO

- **Overview:** Students observe and explore the world around them, searching for plants, animals, and man-made things that interact with water
- **Parent/Caregiver Tasks:** If going outside, accompany your student and ensure they are being safe and respectful

PARENT/CAREGIVER OVERVIEW: DAY 4

Watershed Connections

Background Information: There are many different locations that make up our local watersheds. We focus on three specific habitats found throughout our region: wetlands, rivers, and forests. Each one is home to different living things, and each one is important in its own way. In particular, wetlands serve a vital role in controlling the flow of water through the watershed, helping to keep plants and animals both healthy and happy.

Learning Objective: Students will investigate some of the different habitats and ecosystems found throughout our watersheds and will be able to identify some of the things that can be found in each one.

Main Activity: Pieces of the Puzzle

- **Overview:** Students cut out images taken from around the watershed and will attempt to place those images in the correct habitat or location
- **Parent/Caregiver Tasks:** Assist with cutting if needed

Optional Activity: We Need Water Challenge

- **Overview:** Students complete a daily task related to a water conservation habit and a challenge to spread awareness on the importance of saving water
- **Parent/Caregiver Tasks:** If possible, help the student post their #WeNeedWater challenge on social media

PARENT/CAREGIVER OVERVIEW: DAY 5

Stewardship

Background Information: Stewardship is how we care for the natural world. Stewardship includes conserving natural resources (e.g. water) that all living things need to survive, thinking and acting carefully about how we interact with the world around us and doing our best to ensure that we positively impact the environment. Specifically, these stewardship activities center around what everyone can do to save water and keep it clean for the rest of the environment.

Learning Objectives: Students will combine their knowledge gained throughout the week to consider ways they can support the environment. They should focus on water conservation by thinking carefully about natural resource use.

Main Activity: Decoding Water

- **Overview:** Students decipher codes to explore the smart ways to save water
- **Parent/Caregiver Tasks:** None

Optional Activity: We Need Water Challenge

- **Overview:** Students complete a daily task related to a water conservation habit and a challenge to spread awareness on the importance of saving water
- **Parent/Caregiver Tasks:** If possible, help the student post their challenge on social media

PARENT/CAREGIVER OVERVIEW: VOCABULARY

DAY 1

Watershed: An area of land that allows water to flow off and drain into rivers, lakes, streams, and oceans

DAY 2

Accumulation: When water gathers together on the ground (as rivers, lakes, oceans, glaciers, icebergs, and more)

Condensation: When water in the air comes together to form drops and clouds

Evaporation: When water heats up and rises to the sky

Precipitation: When water falls from the sky (as rain, snow, or hail)

Water Cycle: How water moves up, down, and around the world

DAY 3

Organism: A living thing

DAY 4

Habitat: The home of an animal or plant

Wetland: An area that stays wet for most of the year

DAY 5

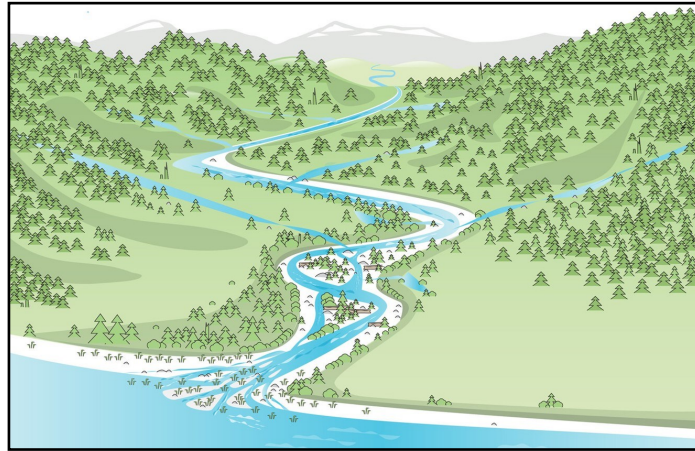
Conservation: Protecting the natural world, especially by making smart choices about our natural resource use

Stewardship: Taking care of something; being a protector

DAY 1

Watersheds

Our lessons this week are all about **watersheds**. A watershed is all of the land that water falls on before sliding downhill, kind of like a bowl made out of land. You are part of a watershed right now! When rain falls all around us, it gathers together and then starts to move! Maybe it goes dripping off the roof, across a lawn, or down the street and into a drain. This is what it looks like in nature:



Watersheds are always named after the body water at the bottom. If you live near Lake Washington, for example, you are probably part of the Lake Washington watershed! This means that a raindrop that falls near your home will one day flow into Lake Washington. Watersheds can be big or small, but all of them are important!

Here in Washington, we are lucky because we see a lot of rain! This makes it very easy for plants and animals to get all the water that they need from the watershed, but we still need to be careful! If people get too greedy and use too much water, it can be hurtful to all kinds of living things all around us. We want to make sure that there is enough water for people, plants, and all of the different animals.



If you want another way to think about what a watershed is, then we can create our own example with our hands! Let's try it out.

First, hold out both your hands in front of you with your palms facing up and your pinky fingers together. Next, raise your fingers tips up towards the ceiling. Your hands should look like a bowl!



Your hands are now your own personal watershed! Your fingertips are rising up like mountains and the palms of your hands are the low point in your watershed. Imagine a tiny rain cloud floating over your fingertip-mountaintops and dropping water down on them. Where would that water go next? Would it form rivers as it slides down your fingers, then make a lake in your palms?

You could even have an adult slowly drip some water over your fingertips over a sink or tub and watch as it flows! If you have an outdoor space, with an adult you can try to dribble water over plants there, or dribble water over plants inside. Be careful, it's very easy to spill and make a mess this way! Also, try not to waste water.

Vocabulary

Watershed: An area of land that allows water to flow off and drain into rivers, lakes, streams, and oceans

Main Activity

Build a Watershed

It's one thing to make a watershed out of your hands, but it's even more fun to build your own with materials that you have around the house. Today we will do two experiments to watch how water flows across a watershed.

Make sure to do these experiments in a sink, bath tub, or somewhere that is OK getting wet! Ask for adult permission first!

Watershed Experiment #1

Materials: Plain paper, washable markers, water, spray bottle or bowl

1. Crumple your paper into a ball. Don't worry, this is part of the plan!



2. Gently un-crumple your paper, but don't smooth it out! We still want your paper to be bumpy and uneven.



3. Observe your paper – does it look like a landscape in nature? Do you see some parts that are taller than the rest, like mountains? Do you see some parts that are low and deep, like valleys?
 - Take a blue marker and draw lines anywhere you think a river or lake should be.
 - Take a brown marker and draw lines on all of the ridges, or high points.
 - Take a green marker and draw trees and plants all over your watershed.
 - Take a red marker and draw some houses, roads, or anything else that people might build.



4. If you have a spray bottle, fill it with water and gently spray the top of your paper.
5. If you don't have a spray bottle, fill a small bowl with water. Dip your fingertips in the water, then flick the water from your fingers onto your paper.
6. Keep spraying, watching how the water moves. Do you see any bodies of water forming, like rivers or lakes? Where did all of the color from the markers end up?

Watershed Experiment #2
Let's go even bigger!

Materials: Plastic bag (shopping bag or trash bag), multiple household objects (blocks, toys, cups, bowls, bottles, or more), washable markers, water, spray bottle or bowl

1. Gather a few objects from around your home with adult permission. You can use toys, blocks, cups, bowls, anything else that it is OK to get wet!
2. Take your objects and place them in any shape or order you like. Try to make sure that you have some tall objects and some short ones.
3. Take your plastic bag and place it over the top of your items, like you are covering them in a blanket.
4. Observe your watershed. Do you see some parts that are taller than the rest, like mountains? Do you see some parts that are low and deep, like valleys?
 - Take a blue marker and draw lines anywhere that you think a river or lake should be.
 - Take a brown marker and draw lines on all of the ridges, or high points.
 - Take a green marker and draw trees and plants all over your watershed.
 - Take a red marker and draw some houses, roads, or anything else that people might build.
5. If you have a spray bottle, fill it with water and gently spray the top of your watershed.
6. If you don't have a spray bottle, fill a small bowl with water. Dip your fingertips in the water, then flick the water from your fingers onto your watershed.
7. Keep spraying, watching how the water moves. Do you see any bodies of water forming, like rivers or lakes? When the water flows, does it affect or change any of the things you drew?

Optional Activity

We Need Water Challenge

One of the great things about our watersheds is that they create the bodies of water that we use for food, recreation and exercise. Do you have a favorite stream, pond, lake, or river where you do something fun? Let's draw it!

Materials: Writing utensil, crayons/markers/colored pencils

Draw your favorite place with water, or even imagine a new place that you think would be nice to visit.

Now, draw a picture of how you enjoy the water in your watershed. Maybe you go swimming in the summer, fishing in the fall, or exploring and nature watching in the springtime.

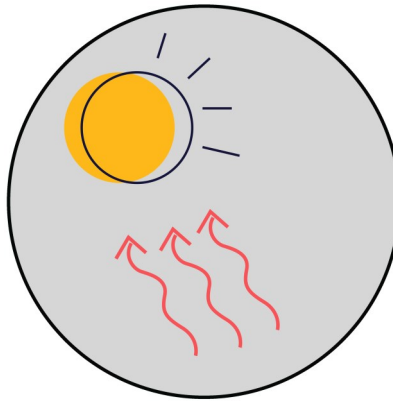
To share your work, post your challenge to Facebook and/or Instagram (with an adult) so other people in your community can learn, too! Don't forget to use the hashtag #WeNeedWater and tag @weneedh20 and @naturevisionorg in your post so we can see your work!

DAY 2

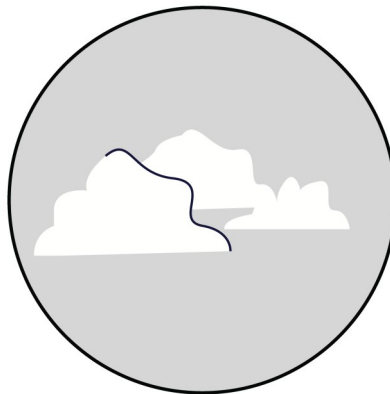
The Water Cycle

Water is one of the most important things on Earth. Every living thing needs water to live – including humans, other animals, plants, and more. Lucky for us, nature has a way of giving us good, clean and healthy water! Today we will learn all about the **water cycle** where we will see how water moves up, down, and all around while it travels around the world. The water cycle can be split up into 4 different parts:

1. **Evaporation** - Think about a hot summer day when you feel the sun on your skin, or when you touch a piece of metal that has been sitting in the sun. Sometimes it feels so hot it's almost burning! The same thing happens to water when the sun shines. When water gets warm enough, it starts to break free from the pond, lake, or ocean that it sits in and slowly rises up to the sky. This is what we call evaporation!



2. **Condensation** - One of the amazing things about water is that no matter where in the world it goes, it always wants to find a friend! When two drops of water bump into each other, they don't just bounce off of each other like bouncy balls. They join together, like two people linking arms and not letting go. As the drops of water in the air start to bump into each other, they form bigger and bigger drops, and then those drops gather together to make a cloud. We call this condensation!



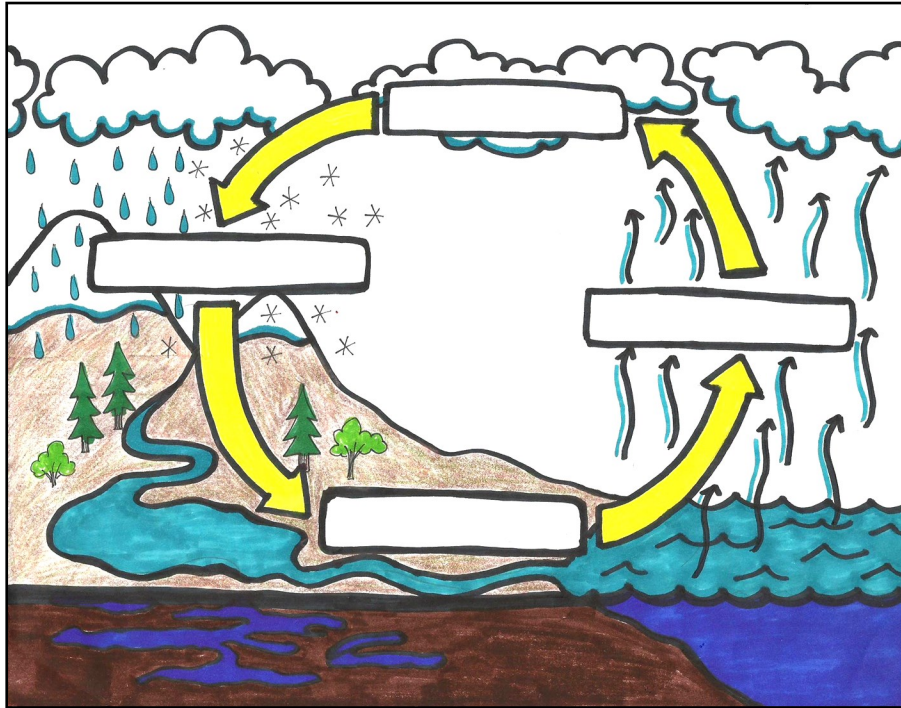
3. **Precipitation** - Picture a big, dark cloud up in the sky. This cloud is heavy and full of water, just waiting to continue the water cycle by falling back down to the ground. You're probably picturing rain right now, which is correct...but there are also some other ways that water can fall. It can fall as light, fluffy, frozen crystals that we call snow, or it can fall as hard, solid, chunky pieces of ice that we call hail! We have one single word for all of these different ways that water can fall, and that word is precipitation!



4. **Accumulation** - Once the water is back on the ground, where does it go? For the final step in our water cycle, water will “find a friend” again and connect with every other drop of water that it touches. Water will come together in lots of different ways: it can gather a few drops together to form a puddle, or you could find LOTS of water that came together to make a lake or even an ocean! Maybe the water fell as snow and it came together like a frozen white blanket on top of a mountain, or maybe that snow melted and the water came together as a little river flowing down the side of the mountain. When water comes together in any of these different ways, we call it accumulation!



Now let's put all of those parts together to create the complete water cycle. Can you write the name of each part of the water cycle in the boxes below?



The best thing about the water cycle is that it is happening every day, all over the world! Can you write or draw an example of where YOU have seen the water cycle in real life?

Hint: Think about how you have seen water move or gather in a low spot.

One more amazing water fact is that every drop of water you use is even older than the dinosaurs! The water you drink, the water you swim in, and even the water in your body may have once been part of a dinosaur millions of years ago.

Vocabulary

Accumulation: When water gathers together on the ground (as rivers, lakes, oceans, glaciers, icebergs, and more)

Condensation: When water in the air comes together to form drops and clouds

Evaporation: When water heats up and rises to the sky

Precipitation: When water falls from the sky (as rain, snow, or hail)

Water Cycle: How water moves up, down, and around the world

Main Activity

Water Cycle in a Bag

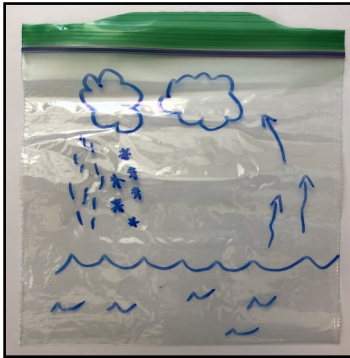
The water cycle goes around and around, and up and down! But the world is so big, sometimes it can be hard to see where it goes. Today, we will create our own mini water cycle in a bag!

Materials: Re-sealable plastic bag, markers, water, tape, adult permission

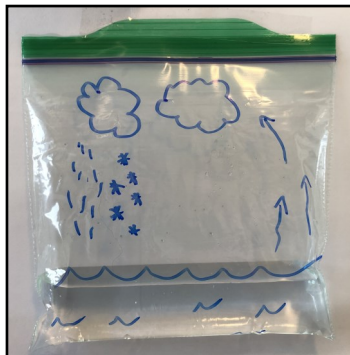
1. Take a clear plastic bag and lay it flat on a table it is okay to draw on.



2. On the front of the bag, take your marker and draw a picture of the water cycle.



3. Next, fill the bottom of the bag with a small amount of water (the water should fill about 1/4 of the bag).



4. Seal the bag and tape it to the sunniest window you can find.



5. Check your water cycle experiment every hour or two. Now you can watch the bag throughout the day, looking for all of the parts of the water cycle.

Describe all the ways you see the water cycle in your bag. Can you spot...

Evaporation? Where? Draw a picture of it here:

Condensation? Where? Draw a picture of it here:

Precipitation? Where? Draw a picture of it here:

Accumulation? Where? Draw a picture of it here:

When you are done with your experience, pour remaining water on a plant to save water! You can also wash the plastic bag and reuse!

Optional Activity

We Need Water Challenge

Water is always on the move, but sometimes the things we build get in the way. For today's #WeNeedWater challenge, you are going to look for things in your local watershed that were built by people.

Materials: Writing utensil, crayons/markers/colored pencils

You might be able to find something inside your home, or you can look outside your window too! If you can go for a walk outdoors with an adult to look, please make sure you are safe, responsible, and respectful. When you find human made structures that are part of your watershed, draw a picture of them here:

To share your work, post your challenge to Facebook and/or Instagram (with an adult) so other people in your community can learn too! Don't forget to use the hashtag #WeNeedWater and tag @weneedh20 and @naturevisionorg in your post so we can see your work!

Optional Activity

Sun and Shadow

You know that water evaporates when the sun shines on it, but usually that happens so slowly that you can't see it. In this experiment, we will fill two cups of water and measure how powerful the sun is when it comes to making water evaporate.

Materials: 2 identical cups or bowls, water, washable marker

1. First, find two cups, bowls, or containers that are exactly the same size and shape.
2. Fill both cups with the same amount of water.
3. Using a washable marker, make a line showing how high the water level is in the cup.
4. Take one of the cups and place it in the sunniest spot you can find indoors, maybe on a bright windowsill!
5. Take the other cup and place it in the darkest place you can find indoors (maybe inside a closet).
6. Make sure both cups are in a safe place where they won't be knocked over by people or pets! Then, leave both cups alone for one full day.
7. After 24 hours, take both cups and place them side by side. Do you see a difference? How much water did the sunny cup lose to evaporation? How much water did the shaded cup lose? Do you think the sun is doing a good job at starting off the water cycle?

Try and imagine how much water could evaporate from a big lake or an ocean during a sunny day!

Optional Activity

Videos

Please ask for an adult's permission to watch these videos.

There are a lot of great videos online that can teach you more about the water cycle! With an adult, check out some of these fun water cycle songs and try to sing along!

Video #1: Water Cycle from Go Noodle

This video can be found by doing a YouTube search for "Water Cycle from Go Noodle" or by following this link: <https://www.youtube.com/watch?v=KM-59ljA4Bs>

Video #2: Water Cycle Song from Have Fun Teaching

This video can be found by doing a YouTube search for "Water Cycle Song from Have Fun Teaching" or by following this link: <https://www.youtube.com/watch?v=TWb4KIM2vts>

Video #2: Water Cycle Boogie from The Banana Slug String Band

This video can be found by doing a YouTube search for "Water Cycle Boogie from The Banana Slug String Band" or by following this link: <https://www.youtube.com/watch?v=-CoeJnjZtXg>

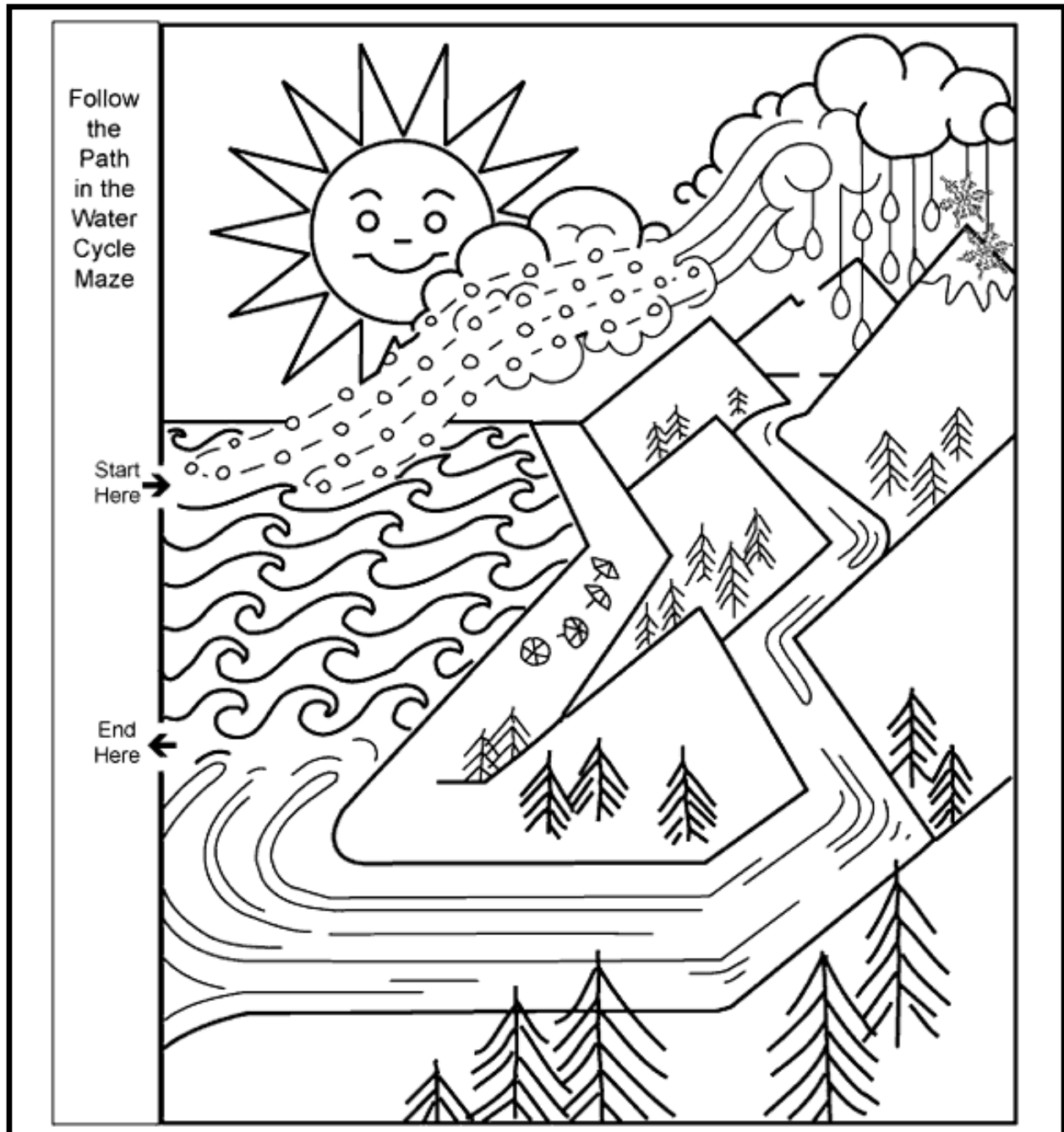
Materials: Computer/tablet/phone, internet access

Optional Activity

Water Cycle Maze

Help the water drops make their way through the water cycle! Try to draw one non-stop line from START to END, and imagine the journey that water goes on every single day.

Materials Writing utensil



DAY 3

Life in the Watershed

Every living thing on Earth needs water to live, from the biggest whale in the sea to the tiniest bug in the forest. All around our watershed there are living things, or **organisms**, using water in lots of different ways.



Off the top of your head, can you write or draw 2 things that you have seen using water in the past week?

All living things, including humans, need to share the same water. Does the water cycle make some rain just for people and some rain just for plants? No, when rain falls it goes to everything! That is why we need to be careful with our water and make sure that we don't take too much. Think about these questions: What would happen to the plants in the forest if we took all of the water for ourselves? What would happen to the fish?

Vocabulary

Organism: A living thing

Main Activity

Watershed Design

You have learned all about the different things that we find in our watersheds, and now you have a chance to create your own! Try to think about all of the ways that these living and nonliving things are connected!

Materials: Writing utensil, crayons/markers/colored pencils

On the next page, you will find a picture of an empty watershed. It is now your job to complete the picture by adding all of the things that you might find there.

Be sure to include:

- At least 3 kinds of plants
- At least 5 kinds of animals
- At least 3 things that are person-made (something that wouldn't be there if there were no people around)

After you draw on the watershed on the next page and color it in, answer the questions below!

Out of all the things you drew, what needs the most water?

What needs the least amount of water?

Is there anything that you can do to make sure that there is enough water for all of the living things in your watershed drawing?



Optional Activity

We Need Water Challenge

You can save two gallons of water for every minute you don't let your faucet run. Make a small sign to put next to the sink in your home to remind people to turn off the water when they aren't using it.

To share your work, post your challenge to Facebook and/or Instagram (with an adult) so other people in your community can learn, too! Don't forget to use the hashtag #WeNeedWater and tag @weneedh20 and @naturevisionorg in your post so we can see your work!

Materials: Writing utensil, crayons/markers/colored pencils

PAGE LEFT BLANK INTENTIONALLY

Optional Activity

Watershed BINGO

There are so many things out there using and affecting water right now! Let's see if we can find some examples in the real world...

Materials: Writing utensil

Head outside if you can and you have an adult with you. Be sure to be safe and respectful of other people and animals. If you can't go outside, remember that nature is all around you! You can search around your home, or look out from your window, porch, patio, or balcony. Can you spot any of these things without going outdoors?

Using the BINGO board below, we will now explore our home and neighborhood to look for some of the many ways living things are using and interacting with water. When you find an item on the board, draw a big water drop in that box! You can score points for how many you find:

- 1 point for every box you cross off
- 10 extra points for every 5-in-a-row line you complete
- 100 extra points for completing the ENTIRE board!

Bird	Fruit	Bee	Toilet	Tree
Pavement	People	Shower	Sink	Cups
Spider	Rain	Water!	Storm Drain	Slug
Flower	Squirrel	Ant	Sun	Puddle
Hose	Dog	Soil	Mushroom	Grass

DAY 4

Watershed Connections

We've learned about how water moves through a watershed, and how every plant and animal needs this water. Today we will learn about three **habitats** that can be found in our watershed. A habitat is the home of an animal or plant. The three different habitats are: **wetlands**, rivers, and forests. We can find all three of these habitats in our watersheds.

Wetlands - Ponds, creeks, and swamps are types of wetlands. Land that is wet! Wetlands will always have water in them. Wetlands will always have plants and roots that love water. Since plants need soil to grow, wetlands have soil that is soaked with water. Plants that don't do well with a lot of water or need dry soil won't be found in wetlands.



Rivers - There are many rivers in our watersheds. Rivers are important as habitat for many fish, amphibians, birds, and mammals. Many of these animals will travel up and down a river to find good places to take care of their babies and to find food. Rivers connect with smaller creeks and helps to move water all over our watersheds. Rivers in our watersheds are also where we get our drinking water!

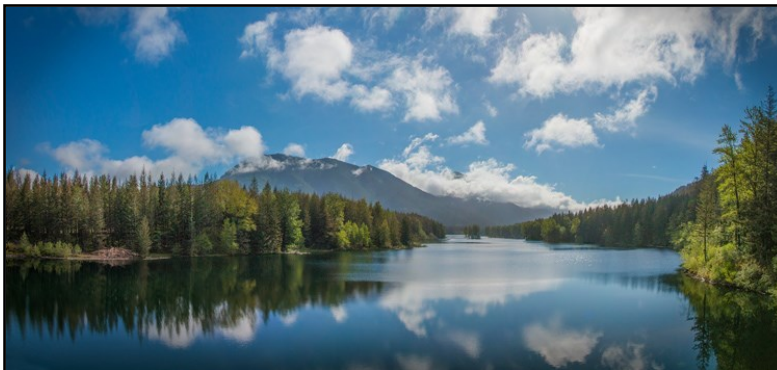


Photo: Seattle Public Utilities

Forests - A big part of our watersheds is water, but the trees and plants that build a forest are very helpful in keeping our watershed healthy. Forests soak up a lot of rain that fall in our watershed. A forest makes sure the rainwater doesn't go rushing into our rivers and wetlands all at once!



Wetlands, rivers, and forests are important habitats in our watersheds. Many different animals and plants live in our watersheds. Sometimes these animals and plants live in only a wetland, a river, or a forest. Some animals and plants can live in all three habitats, moving everywhere in a watershed. A watershed is not just one place where all animals and plants live. It is made up of different places, like wetlands, river, forests, and even our cities.

Vocabulary:

Habitat: The home of an animal or plant

Wetland: An area that stays wet for most of the year

Main Activity

Pieces of the Puzzle

Now that you know about some of the different places in our watershed, we will find out what exactly we might see in each one of those places!

Materials: Scissors

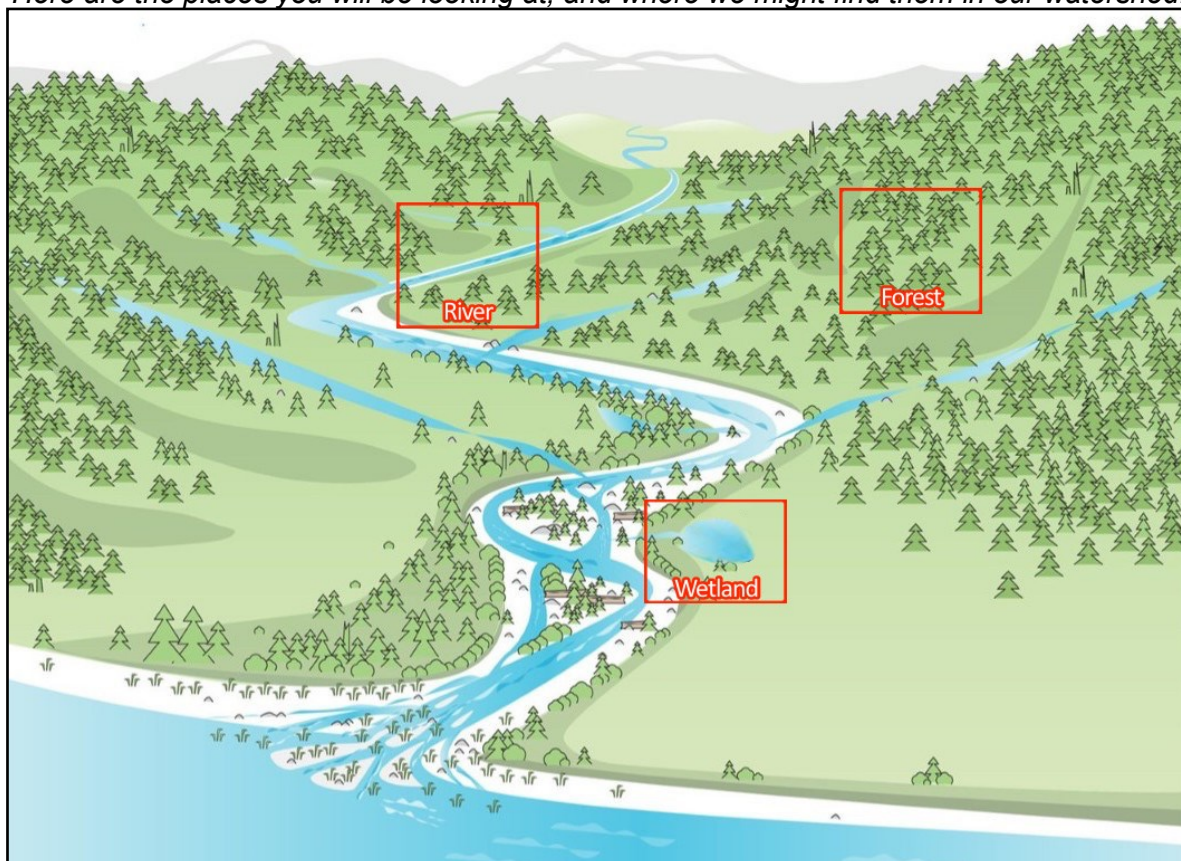
With the help of an adult, cut out the square pictures on the next page, then use the following 3 pages of habitat pictures to complete the activity.

Try to place each picture where you think it belongs. Ask yourself a few questions, like...

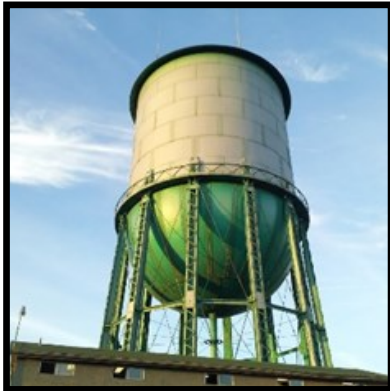
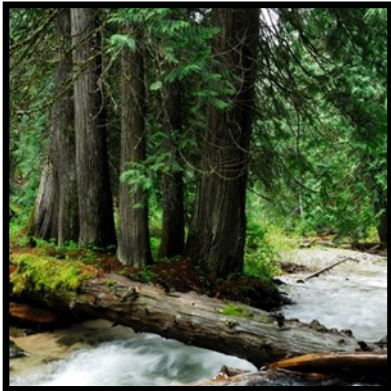
- Does this picture go near water?
- Does this picture have anything in common with other pictures? Should it go near them?
- Have I seen something like this before in real life? Where?

If you're having trouble deciding where to put a picture, you can read the back of the square for a clue. Remember, there may be some things that can go in more than one habitat! Do any of these things move around to different places in the ecosystem? You might also see things that were made by people; try to find a place for them without hurting anything in nature.

Here are the places you will be looking at, and where we might find them in our watershed:



PAGE LEFT BLANK INTENTIONALLY



This tree has been chewed up by a beaver! Beavers like to chop down trees to build their homes in the water.

These salmon eggs need to be in clear, cold, fresh water!

These people fishing are in a boat, catching as many fish as they can.

These cattail plants LOVE wet, squishy soil. They have to stay wet in order to grow.

This water tower is holding a LOT of water for people in the neighborhood to use. Where do you think this water came from?

Trees and plants are growing all over the place. Every one of them needs water in order to survive.

When salmon swim up the rivers to lay their eggs, eagles are waiting! An adult salmon makes a delicious meal for these birds.

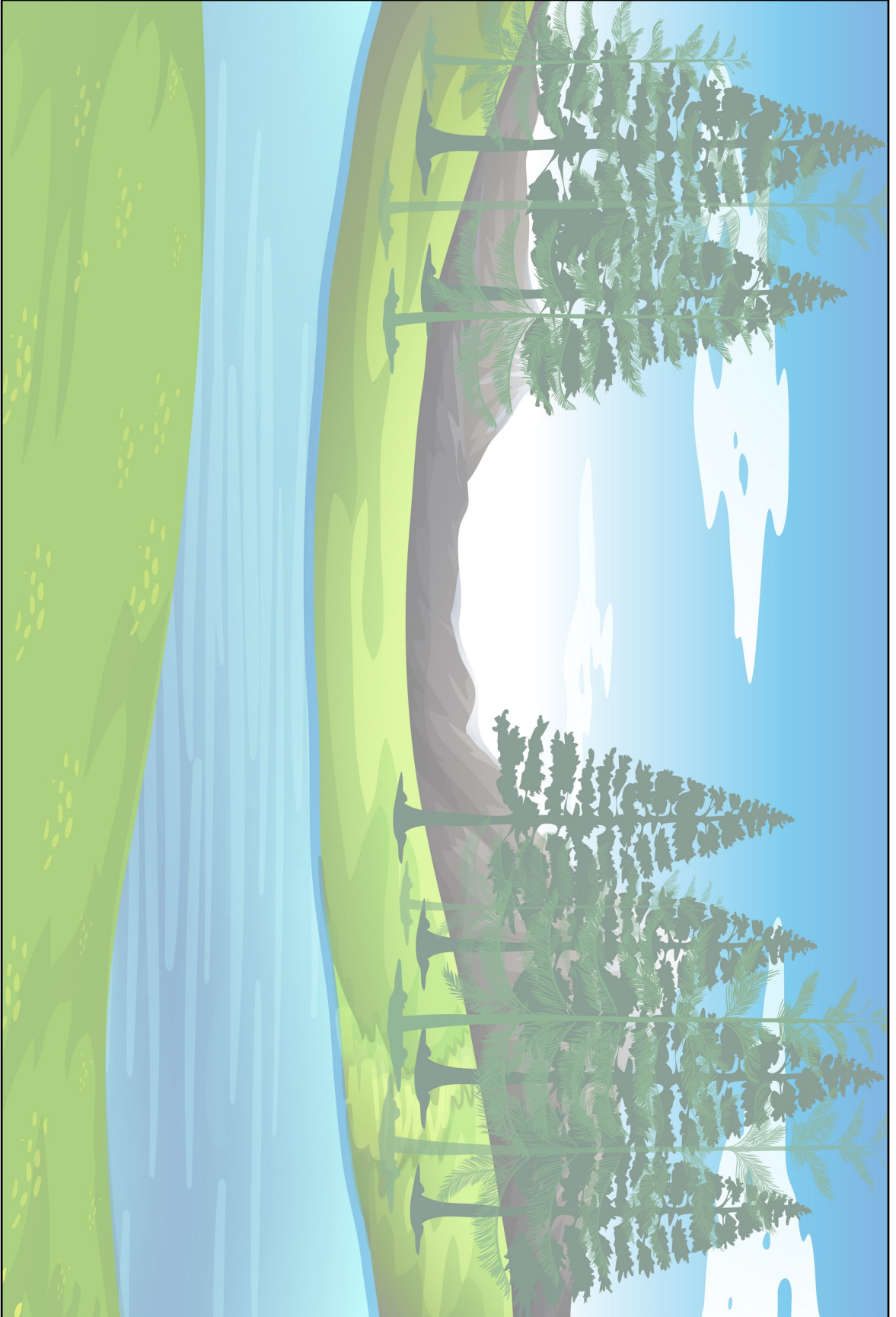
After salmon lay their eggs, they die. Their bodies become food for animals and even help the plants and trees to grow!

We build houses and roads all over the place. When water falls, it has to flow over all of these buildings.

Many bugs and insects start their life cycle in the water.

The great blue heron walks around areas with a lot of water, searching for fish to eat.

Bears eat all kinds of things, but they are extra happy when they catch a salmon!



River

PAGE LEFT BLANK INTENTIONALLY

Forest



PAGE LEFT BLANK INTENTIONALLY

Wetland



PAGE LEFT BLANK INTENTIONALLY

Optional Activity

We Need Water Challenge

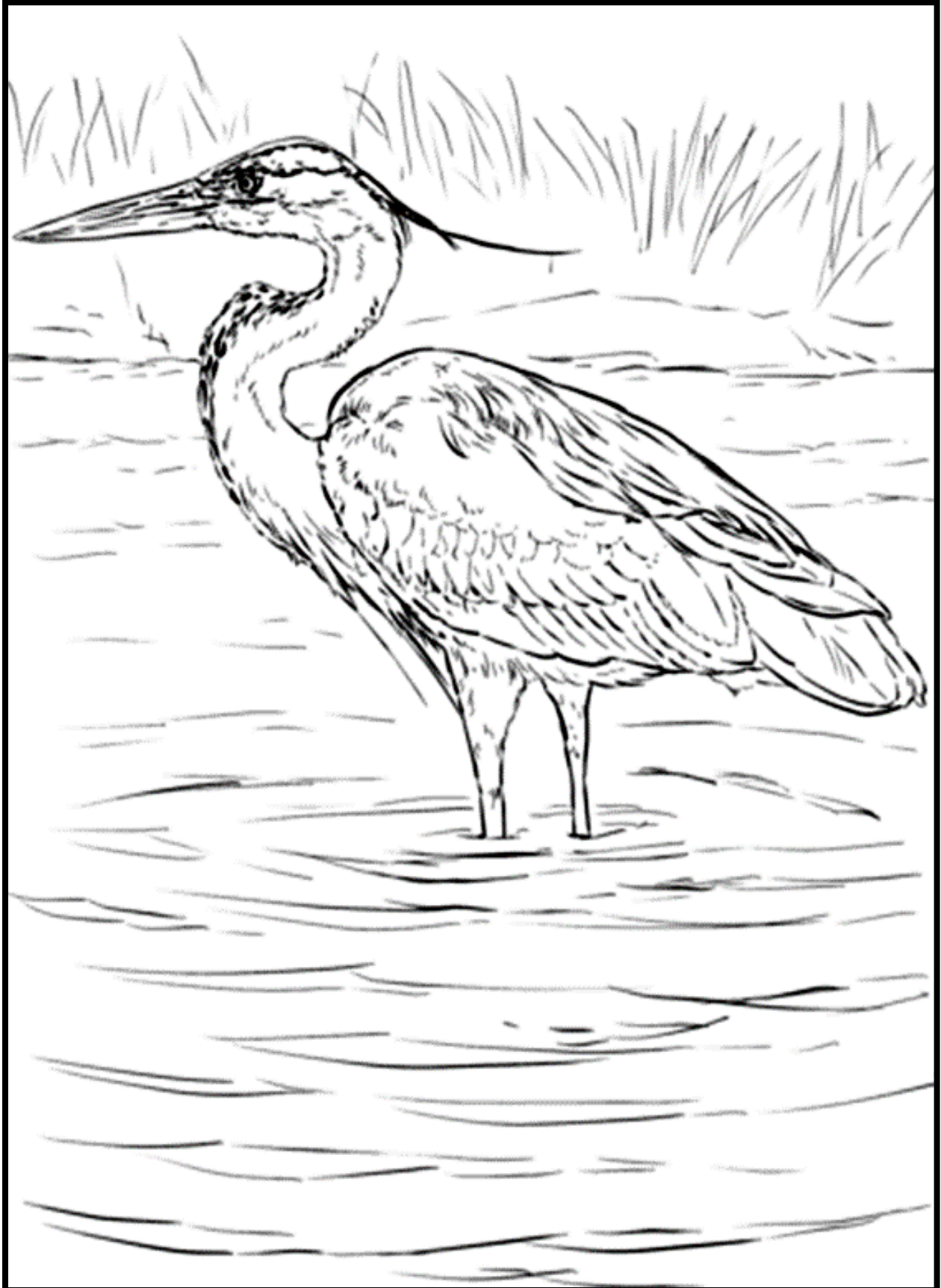
A very important kind of habitat in our watersheds are ponds! Ponds are wonderful places for land animals, fish, birds and plants to live. Ponds are one of the many places in our watershed that hold water.

Materials: Writing utensil, crayons/markers/colored pencils

If you can, go with an adult to a pond in your neighborhood or at a nearby park that is walking distance. Together, try and find as many plants or wild animals as you can. Make sure you and your adult watch from the trail and you don't bother plants or animals. Remember, a pond is their home. Be safe, responsible, and respectful when outdoors.

If you can't go outside or don't have a pond in your neighborhood, that's okay! Color the great blue heron on the next page instead. Hang it up on your window so your neighbors can see an animal that lives in a pond and their watershed!

To share your work, post your challenge to Facebook and/or Instagram (with an adult) so other people in your community can learn, too! Don't forget to use the hashtag #WeNeedWater and tag @weneedh20 and @naturevisionorg in your post so we can see your work!



DAY 5

Stewardship

Stewardship is a big word that means taking care of something. This week we learned a lot about watersheds. We want to take care of our watershed by taking care of things like water, our habitat, and other things that other living creatures need to survive. Another big word is **conservation**, which means taking care of nature and doing our best to make sure that we do positive things for the world.

This is a picture of students taking part in stewardship. They are planting more trees in our watershed! Trees make our watershed a healthy place to live for other plants, animals, and humans. Trees also help keep the water in our watershed clean. A healthy watershed needs clean water and plenty to share. We can take care of our watershed every day by not wasting water and using it in smart ways. Let's discover ways to think about water conservation when we use water at home and school!



Vocabulary:

Conservation: Protecting the natural world, especially by making smart choices about our natural resource use

Stewardship: Taking care of something; being a protector

Main Activity

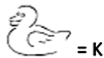
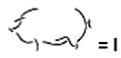
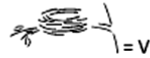
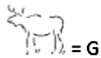
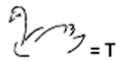
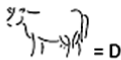
Decoding Water

It is super important for us to save water! Let's try to solve some puzzles and figure out some good and smart ways to use our water.

Materials: Writing utensil

1. Each Picture shows you a smart way to save water. *We want to make sure we don't waste water!*
2. Use the Alphabet Code Key to figure out the secret codes
3. Each code letter matches with an alphabet letter
4. Write each alphabet letter on the line under the matching code
5. When you have all the letters written, read aloud the smart way to save water!
6. *Optional: can you now **think** of the wasteful way to use water for each picture below?*

Alphabet Code Key





ଶୂନ୍ୟ ସମୟ

ଶୂନ୍ୟ ସମୟ



ଶୂନ୍ୟ ସମୟ

ଶୂନ୍ୟ ସମୟ



ଶୂନ୍ୟ ସମୟ

ଶୂନ୍ୟ ସମୟ



ଶୂନ୍ୟ ସମୟ

ଶୂନ୍ୟ ସମୟ

Optional Activity

We Need Water Challenge

There are so many ways to save, protect, and care for our water. At the end of every daily lesson, we will be giving a challenge to help you show off what you've learned.

Materials: Writing utensil, crayons/markers/colored pencils, computer/phone/tablet, internet

Using what you've learned this week, it's time to make your own #WeNeedWater challenge! Think about all of the things we learned. What new thing can you do to share what you now know or new ways you've learned to save water?

To share your work, post your challenge to Facebook and/or Instagram (with an adult) so other people in your community can learn, too! Don't forget to use the hashtag #WeNeedWater and tag @weneedh20 and @naturevisionorg in your post so we can see your work!

Answer Key

Day 5 Main Activity



SHORT

SHOWERS



WATER AT

THE ROOTS



TURN OFF

THE FAUCET



FIX

LEAKS