



Our Mission

The primary objective of Celebrate Water, initiated by the San Antonio Water System, is to cultivate an interest in water among young individuals, encouraging them to become active environmental stewards who carry these values into adulthood. By participating in various water-related celebrations, students can enhance their understanding and appreciation of water resources.

The educational materials provided through Celebrate Water include engaging lessons that are supplemented with hands-on activities, interactive experiments, and opportunities for outdoor exploration.

Completion of the Celebrate Water program equips students for further exploration at our Academy of Water Influencers, where they can apply their knowledge through exciting high school-level projects.



Introducing the founders of the Academy of Water Influencers, an initiative dedicated to empowering high school students.

Stephanie, River, Walter and Teodora are passionate educators committed to leading students through each Celebrate Water adventure, ensuring that every lesson is both engaging and enjoyable.



Student Learning Guide Assistance Manual

How To Log In

The student learning guides are accessible exclusively through a direct link. If the link included in the SAWS email is unresponsive, please copy the entire web address and paste it into your web browser. Should this method also prove ineffective, do not hesitate to contact me at gabriela.diaz@saws.org.

To access the student learning guides on the SAWS Celebrate Water webpage, scroll down until you find the section containing our digital guides. Click on the button labeled "Access Here" or "Student Guide." The student learning guide will then open automatically in your web browser.

How To Print

All Student Activity Sheets and other printable materials will be available for download in PDF format. You can locate the PDF link beneath the student learning guides. These files can be printed using your personal printer.

Additionally, you may print the Student Activity Sheets directly from the digital learning guide by clicking the printer icon in the bottom right corner of the screen. This action will generate a PDF of the student guide. Please note that downloading the student learning guide may take several minutes, depending on the file size. Once the download is complete, you will be prompted to specify the pages you wish to print.

Print





Student Learning Guide Assistance Manual

How To View in Full Screen

To view the student learning guide in full screen, click the square icon located at the bottom of the screen (as illustrated below). To exit full screen mode, you can either press the ESC key on your keyboard or click the same icon again. An exit full screen message will appear above the icon to confirm the action.

Full screen

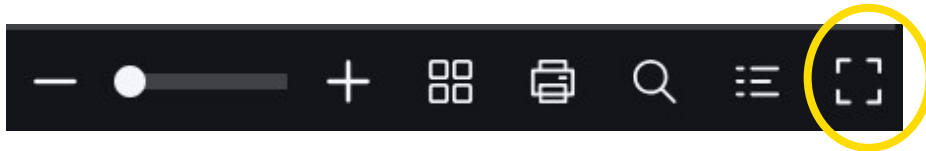


Table of Contents

A table of contents feature has been introduced to facilitate easy navigation to specific lessons or the glossary. This enhancement serves as a valuable resource for students.

Table of contents



Contact

If you encounter any difficulties with these actions or require assistance with a different matter, please do not hesitate to contact me at gabriela.diaz@saws.org. I am here to help you troubleshoot any issues.

Thank you!



TEKS

The educational material included in Celebrate Water student learning guides align to the state curriculum standards, the Texas Essential Knowledge and Skills designed for students from second to fifth grade.

Grade Level	SCIENCE (2020)	ELAR (2022)	SS (2020)	MATH (2022)
2nd	2.1B, 2.2, 2.2D, 2.2E, 2.3A, 2.8	2.1, 2.3, 2.6H, 2.7E, 2.7F, 2.13E	2.5C, 2.15, 2.16, 2.16D, 2.16F	2.3, 2.3A, 2.3D
3rd	3.1, 3.2F, 3.5, 3.7 3.8A	3.1, 3.3, 3.7, 3.9D, 3.13E	3.3, 3.3C, 3.14, 3.14C, 3.15, 3.15A	3.7D, 3.7E
4th	4.1, 4.3B, 4.6, 4.7B, 4.8B	4.1C, 4.3A, 4.7E, 4.13E	4.20, 4.21, 4.21D,	4.1
5th	5.1, 5.1B, 5.6, 5.8,	5.6, 5.6H, 5.7E, 5.13E	5.8, 5.25,	5.1



Glossary

accumulation: The gathering of water on land or underground.

atmosphere: The air around us.

condensation: Tiny drops of water that stick together to form clouds in the cool sky.

evaporation: Water on Earth heated by the sun that rises into the air as water vapor.

impervious surface: Ground which is covered by sidewalks, streets, rooftops, parking lots, or anything that can't absorb water.

pollution: When the environment is contaminated, or dirtied, by waste, chemicals, and other harmful substances.

precipitation: Water released from clouds when they get too heavy.

roof downspout: A roof gutter that takes the water that comes off a roof and directs the water away from the building or house.

storm drain: A system of tunnels throughout the city that captures storm water runoff to prevent flooding.

stormwater runoff: Rainwater that picks up pollutants as it runs off of surfaces such as pavements, rooftops, and lawns that directly flows into nearby rivers, creeks and lakes.

The Academy of Water Influencers: A virtual institution of action designed to empower high school students to become water leaders and influencers based here in San Antonio.

water cycle: The continuous movement of water from the earth to the atmosphere.

World Water Day: A day dedicated to educating people all over the world about the value of water and why it is important to keep it clean from pollution.



Student Progress Chart

Utilize this chart to monitor student progress by marking a check or recording the date each lesson activity is submitted. Once all three lessons are finished, students may receive their prize!

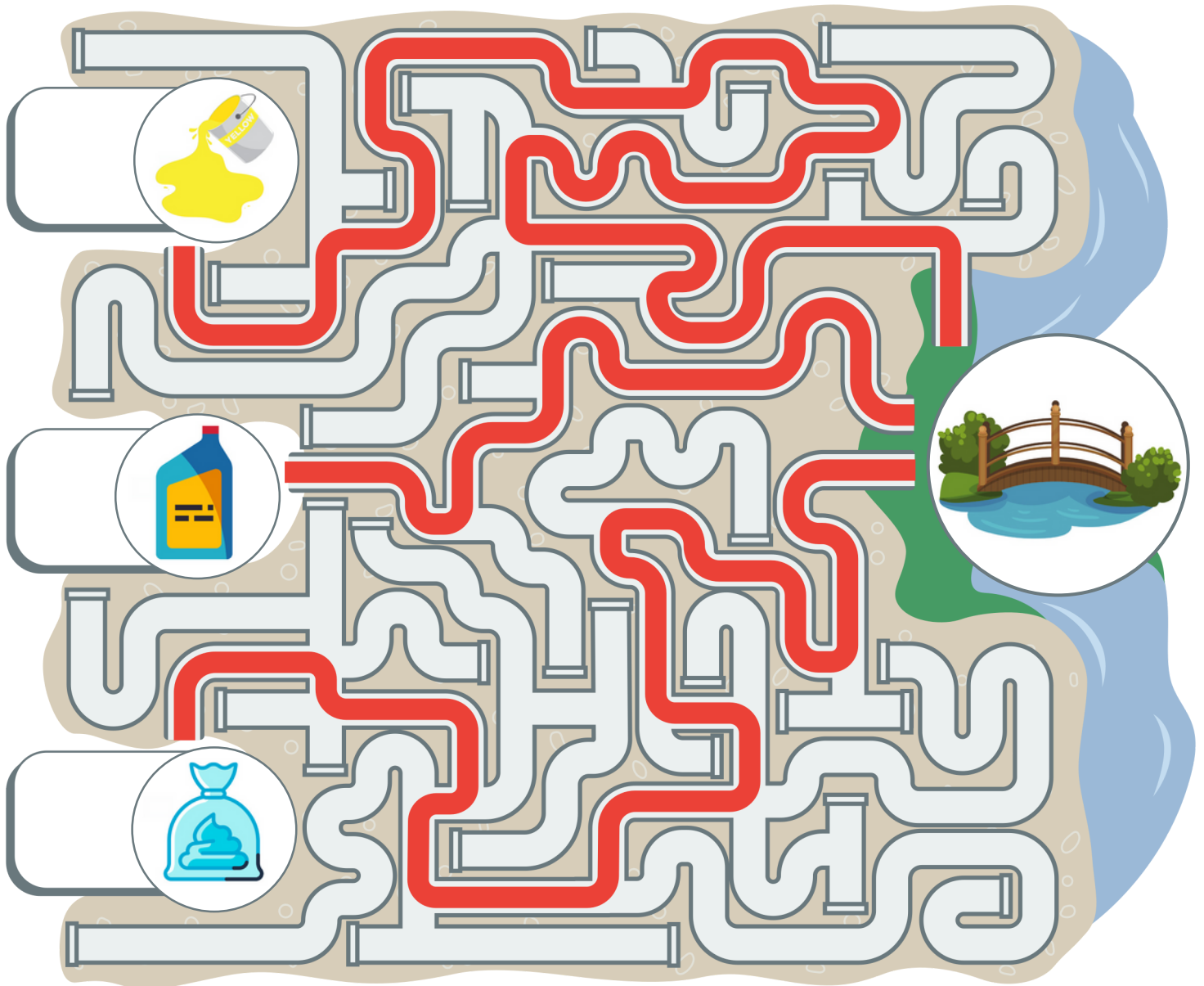
STUDENT NAME	LESSON 1	LESSON 2	LESSON 3
1.			
2.			
3.			
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The Tale of Fiesta Lane Storm Drain Maze

El Cuento de Fiesta Lane Laberinto de Desagües Pluviales

Write the name of each person from the story who improperly discarded the paint, motor oil and dog waste. Next, show the path the pollutants traveled in the storm drain to reach Fiesta Creek.

Escriba el nombre de cada persona de la historia que descartó incorrectamente la pintura, el aceite de motor y los excrementos de perro. A continuación, muestra la ruta que recorrieron los contaminantes en el desagüe pluvial para llegar a Fiesta Creek.



CUT HERE

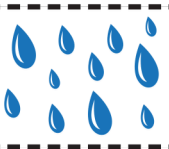
PRECIPITATION

CONDENSATION

ACCUMULATION

EVAPORATION

CUT HERE



CUT HERE

The gathering of precipitation on land or underground.

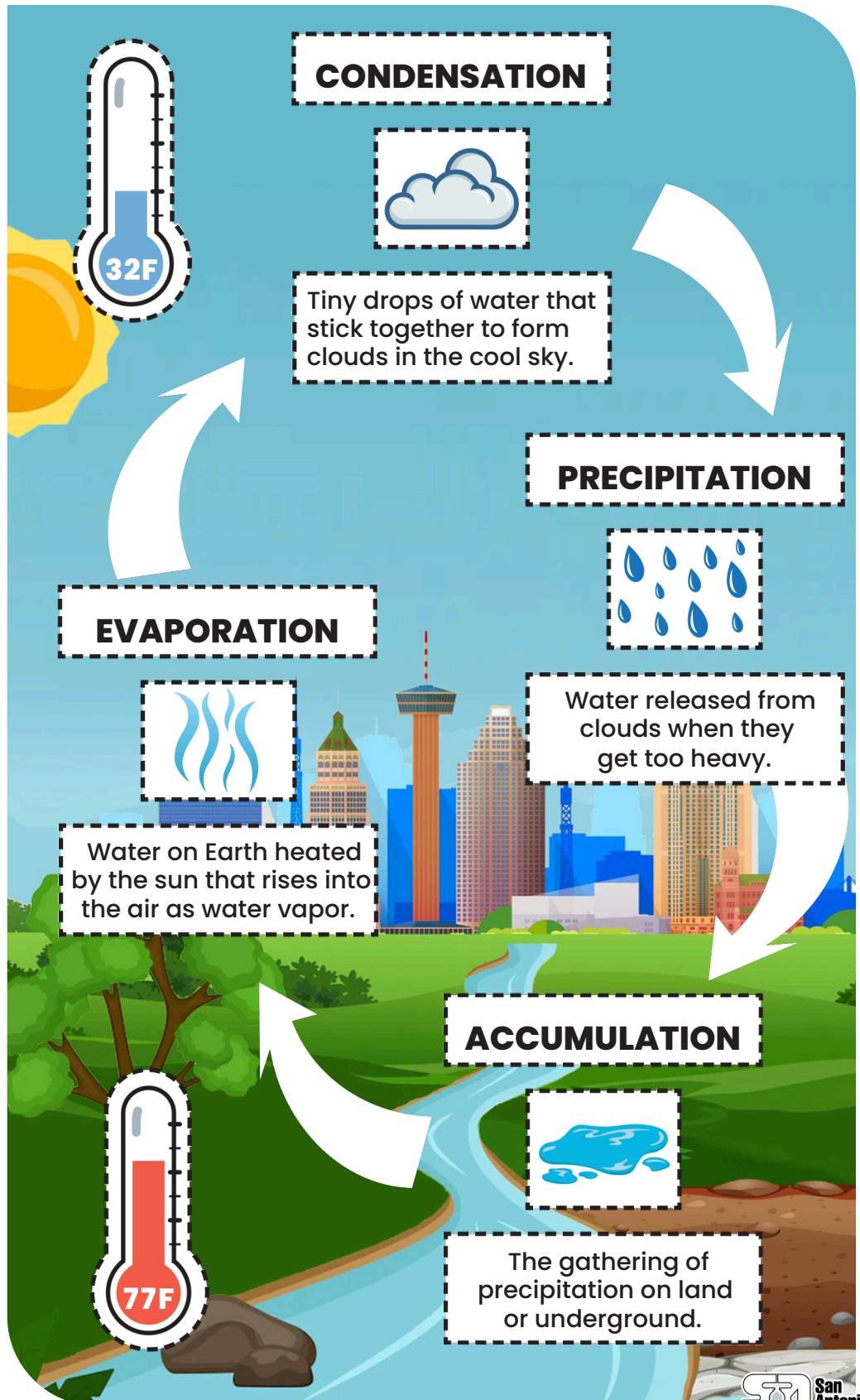
Water released from clouds when they get too heavy.

Water on Earth heated by the sun that rises into the air as water vapor.

Tiny drops of water that stick together to form clouds in the cool sky.

Answer Key

Water Cycle Diagram





RAINY DAY IN A GLASS

EXPERIMENT

LEVEL: EASY / TIME: 8 MIN



How it Works

In this experiment the shaving cream symbolizes clouds, while the water acts as air. When the colored water permeates the "cloud," it accumulates weight until it can no longer retain the water. Consequently, it "rains" into the jar, resembling the process of rain falling through the atmosphere, like in the precipitation stage of the water cycle.

Materials

Shaving Cream
Clear Plastic Cup
Water
Food Coloring
Mixing Cup
Spoon or Dropper

Instructions

1. Add a few drops of food coloring to the mixing cup.
2. Fill half of the clear plastic cup with water.
3. Spray shaving cream on top of the water evenly.
4. Gently add colored water to the top of the shaving cream.

Further Experiments: Try placing food coloring directly into shaving cream cloud or adding less water to the glass. Make colorful rain by using more than one color of dye. What happens?

Please Note: Food coloring will stain, cover table before beginning experiment.



Share and discuss experiment results together.





RAINDROP PAPER HAT

PRE-LESSON ACTIVITY



LEVEL: EASY / TIME: 5 MIN

Purpose

This activity serves as an excellent preparation for engaging in the outdoor exploration featured in the lesson. By envisioning yourself as a raindrop and tracing the path of water on land, you can gain a deeper understanding of stormwater runoff and its connection to water pollution. Key water-related concepts such as **impervious surfaces**, **storm drains**, **stormwater runoff**, and **roof downspouts** can be discussed at this time.

Materials

Prints of Raindrop Paper Hat Cut-Out

Prints of Rubbish Cut-Out

Crayons or Color Pencils

Scissors

Glue

Stapler (optional)

Instructions

1. Color the Raindrop Paper Hat Cut-Out and Rubbish Cut-Outs.
2. Using scissors cut out the Raindrop Paper Hat and the Rubbish Cut-Outs.
3. To form the Raindrop Paper Hat, glue or staple one band to the left tab and the other band to the right tab. The fourth band can be used to adjust the hat as needed.
4. If litter is encountered during the Stormwater Stroll, glue the rubbish cut-outs to the paper hat.

Further Experiments: Draw, color and cut-out different types of rubbish you believe you will encounter on the Stormwater Stroll and add it to the Raindrop Paper Hat if found.



Creative and Imaginative Learning



Rainwater Drainage Reference Guide

Rainwater drainage systems help control stormwater runoff and excess rain.



Roof Downspout

Downspouts can be pointed into the ground or onto a paved surface, like a driveway, sending water directly into the street during a rainy day.



Storm Drain

Openings found throughout the city that collect stormwater runoff to prevent flooding.



Creek

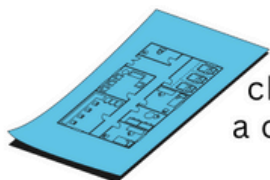
Stormwater runoff goes directly to our creeks without being treated at a water treatment facility.



Lesson 2

Activity

STORMWATER STROLL OBSERVATIONAL DRAWING SCHOOL CAMPUS INVESTIGATION GUIDE



Check with a person in charge of your school for a campus blueprint. It can be helpful during the stormwater stroll and can be used as a reference when creating the stormwater stroll picture.

Locate the highest point on your campus and look over the land paying attention to the way the ground slopes down.



Ask Yourself: If it rained, where would water flow?

Look for storm drains on campus during the exploration.



Ask Yourself: How many storm drains did you find?



Search for gardens, trees, or other green areas where rain can soak into the ground.

Did you observe trash?
If so, make sure to add it to your raindrop paper hat and your notes.



Complete the Raindrop Paper Hat pre-lesson activity before beginning the stormwater stroll.



Ask for permission to take photos of areas of interest s to help make a more detailed observational drawing later.

Make a list in a journal of what you see during the stormwater stroll.



On my campus, water flows to :

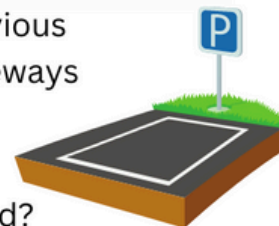
- ☐ Low points
- ☐ Storm drains
- ☐ Ditches
- ☐ Culverts
- ☐ Roof downspouts/Gutters
- ☐ River/Stream/Lake/Pond



On its way, it passes :

- ☐ Bare Soil
- ☐ Grass/shrubs/trees
- ☐ Streets
- ☐ Parking Lots
- ☐ Litter
- ☐ Houses
- ☐ Industry
- ☐ Store

Do you see any impervious surfaces, such as driveways and parking lots, that don't allow water to seep into the ground?



Challenge: Create a site map instead of an observational drawing for this activity.



Outdoor Learning Experience

