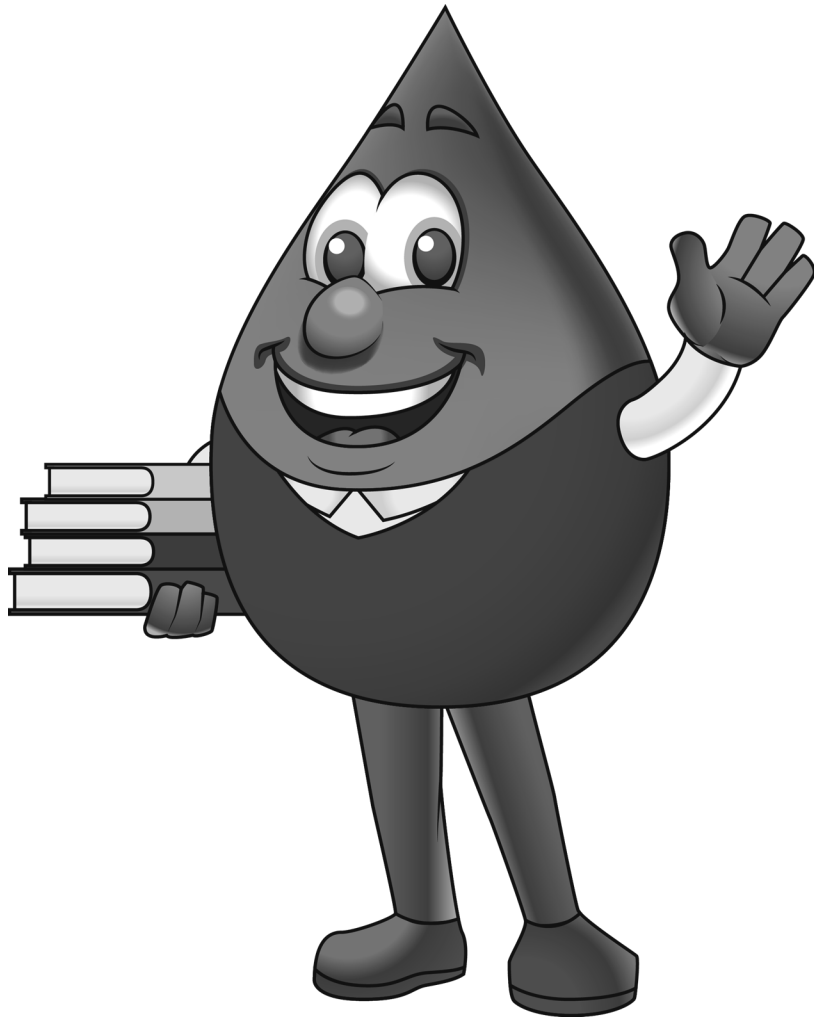


Keep Reading!



STEM Storytimes



Name: _____

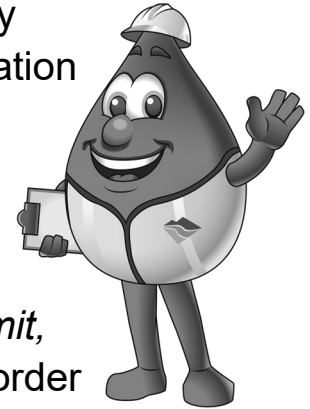
To explore other curriculum and activities developed by
Central Utah Water Conservancy District head to:
<https://cuwcd.com/education.html>

 Central Utah Water STEM Club Passport

Who is Central Utah Water?



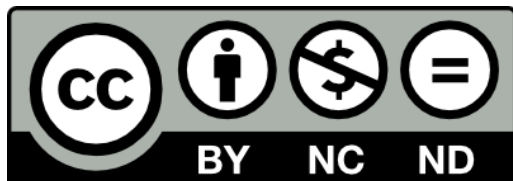
Central Utah Water Conservancy District is a government organization with the mission to move water across county boundaries. We have 8 counties located within the District (*Duchesne, Juab, Salt Lake, Sanpete, Summit, Uintah, Utah, and Wasatch*). In order to meet our mission of moving water, Central Utah Water stores water in 9 reservoirs, maintains over 180 miles of large diameter pipelines, and runs 3 regional drinking water treatment plants.



In addition to our primary responsibility to move water, Central Utah Water is the second largest producer of hydropower in the State of Utah, works to protect endangered species, supports community based water conservation projects, and is a regional leader in water education.

To learn more about Central Utah Water and our work in the community go to CUWCD.com

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Further Adventures



Just because this club is done, doesn't mean you have to end the fun! H₂Joe has done his research and found you a bunch of other STEM Storytime related activities and games that you can do at home.

AMNH - Ology Stories

<https://www.amnh.org/explore/ology/stories>

National Geographic Kids

<https://kids.nationalgeographic.com/>

Education.com - Interactive Stories

<https://www.education.com/stories/>


Science A to Z - Science in the News

<https://www.sciencea-z.com/main/resourcetype/type/science-in-the-news>

Welcome to the STEM Storytime Club! Together we will be reading 4 books and then doing some science activities that relate to the book we just read. If we work as a team to complete all the books on our reading list, we will be able to get a special surprise at the end of the club. So lets crack open a book and get started!

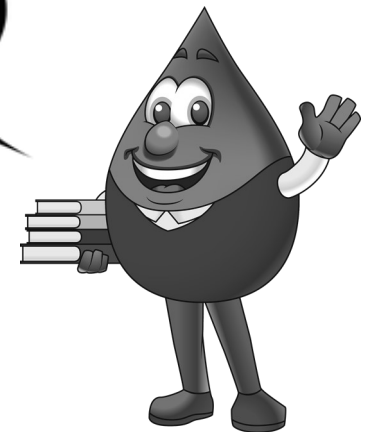
 **Activity 1** - It Starts With A Raindrop

 **Activity 2** - My River

 **Activity 3** - The Watering Hole

 **Activity 4** - Growing Vegetable Soup

Hi, I'm H₂Joe.
I am looking forward to
reading books about
STEM with you!





It Starts With A Raindrop

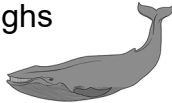
Our first story is one of H2Joe's favorites. 'It Starts With A Raindrop' by Michael Smith is a book of poetry that explores the water cycle and how we connect to it. As we enjoy this STEM Storytime, listen closely for words that describe all the different places water can be found.

For It Starts With A Raindrop I Need...

- | | |
|------------------|---------------|
| Paper Towel Roll | Aluminum Foil |
| Rice | Cardstock |
| Tape | Markers |

FUN FACT

Even though they are in the sky, storms can carry a lot of water. The average thunderstorm weighs about 4,000,000,000 pounds. That is the same weight as 37 full grown blue whales.



H2Joe's Library Challenge



2. H2Joe saw some cool leaves on a hike can you help him find a book that will help him identify the trees he saw?

Book Title: _____

Call Number: _____

3. H2Joe wants to make some yummy recipes with all the vegetables he is growing in his garden. Can you help him find a cookbook?

Book Title: _____

Call Number: _____

4. H2Joe loves learning about dinosaurs. Can you find him a book that talks about dinosaurs that lived in North America?

Book Title: _____

Call Number: _____





H2Joe's Library Challenge

H2Joe loves to read, but sometimes has a hard time figuring out which books he wants to read next. Help H2Joe finding books that match his reading goals.

My Local Library is: _____

My Local Library is located at:

My Favorite Librarian(s):

1. H2Joe really liked the books we read in the STEM Storytime Club. Can you find the call number for one of the books at your library?



18

It Starts With A Raindrop



Humans play an important part in the water cycle because we use water in so many different ways. Help H2Joe three different ways you use water inside your home and three ways you use water outside of your home. Then write down or draw the ideas you came up with below.

Indoor Water Use	Outdoor Water Use



3





It Starts With A Raindrop

When we listen to this story, we can hear the words that the author uses describe different sounds that rainstorms make. Words aren't the only way we can mimic a storm. In this activity, we will be working together to use our bodies to create the sounds of a rainstorm, just like all of the raindrops work together to make an actual rainstorm.

Rubbing Hands = Wind

Tapping 1 Finger = Few Raindrops

Tapping 4 Fingers = Rain

Clapping = Heavy Rain

Slapping Thighs = Downpour

Stomping = Thunder



Growing Vegetable Soup



Seed's don't sprout the moment we plant them. Record how long it takes the seed in your living necklace to sport, grow its first roots, and produce its first leaf.

Draw and describe your observations below:

Day 1	Day 2	Day 3
Day 4	Day 5	Day 6
Day 7	Day 8	Day 9
Day 10	Day 11	Day 12





Growing Vegetable Soup

In this book we learned that it takes many different types of seeds to grow vegetable soup. We also learned that not all seeds look the same. By paying close attention to the shape and size of the seed we can predict what it will grow into.

Match the seed with the type of plant it grows into:



Corn



Peas



Beans



Pumpkins



Carrot

'Water Cycles Around' Song



(To the Tune of the Wheels on the Bus)

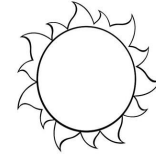
The water on the earth goes round and round
Round and round
Round and round
The water on the earth goes round and round
Water cycles around



Actions

Circle your arms

The sun helps the water go up, up, up
Up, up, up
Up, up, up
The sun helps the water go up, up, up
Water cycles around



Reach to the sky

The clouds in the sky get big, big, big,
Big, big, big
Big, big, big
The clouds in the sky get big, big, big
Water cycles around



Make a circle with your arms and make it bigger

The rain in the clouds goes drip, drip, drip
Drip, drip, drip
Drip, drip, drip
The rain in the clouds goes drip, drip, drip
Water cycles around



Wiggle your fingers and bring them down to the ground

The water in the river flows down, down, down
Down, down, down
Down, down, down
The water in the river flows down, down, down
Water cycles around



Make a motion wave with your hands

The sun helps the water go up, up, up
The clouds in the sky get big, big, big
The rain in the clouds goes drip, drip, drip
The water in the river flows down, down, down
And water cycles around



Follow the actions from the previous verses



My River

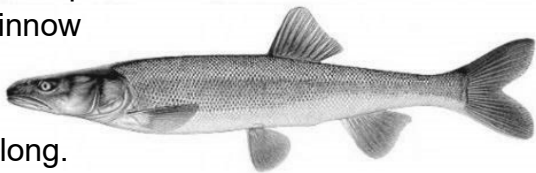
Our second book is 'My River' by Shari Halpern. In this book we be learning about river ecology. As we enjoy this STEM Storytime pay close attention to all of the living creatures that call the river home and the adaptations they use to live in the water.

For To My River I Need...

- 2 Paper Plates
- Scissors
- Glue
- Crafting Supplies

FUN FACT

Some species only live in one water body, and develop special adaptations to help them live there. One of H2Joe's favorite examples of this is from the Colorado River. The Pikeminnow is a real life minnow that can grow up to 6 feet long.

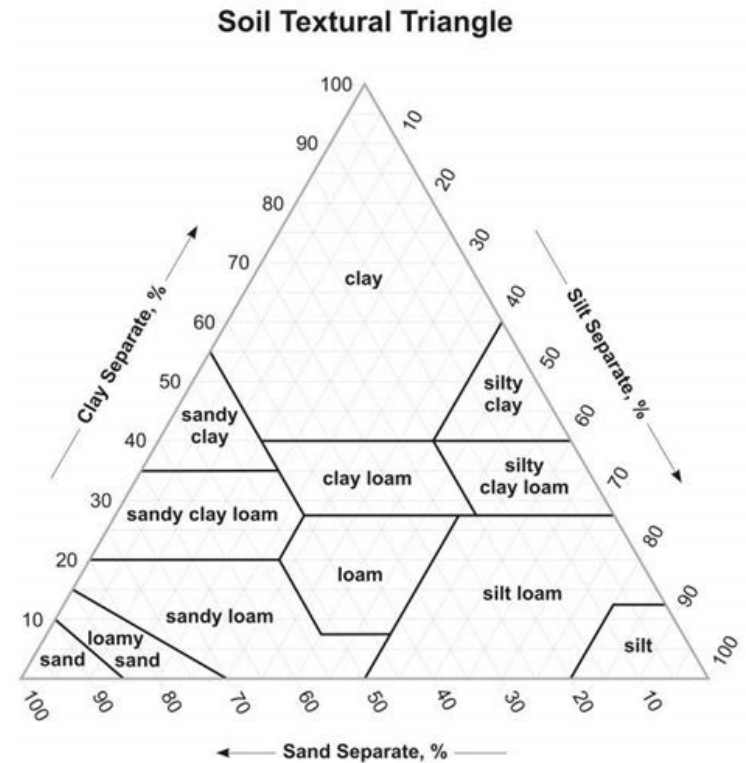


Growing Vegetable Soup



When starting a garden, it is important to start with good soil. The soil holds water and nutrients that the seed needs to grow into a healthy plant.

By feeling the soil we can determine what type of soil we have:





Growing Vegetable Soup

Our final book is 'Growing Vegetable Soup' by Lois Ehlert. This story explores what plants need to grow. As we enjoy this STEM Storytime pay close attention to the different plants that are being grown in the garden.

For To Growing Vegetable Soup I Need...

- | | |
|------------|---------------------|
| Seed | Cotton Ball |
| Yarn | Plastic Jewelry Bag |
| Hole Punch | Soil |
| Water | |

FUN FACT

Different plants need different amounts of time to grow. Scientist can help us determine when to plant crops so that they can fully grow up by using Hardiness Zones.



My River



We have read about many different plants and animals that called a river home. Now let's build a river ecosystem of our own. Start by building a plant that will live in your river.

Draw and describe your plant below:





My River

Now that we have plants to provide the foundation of our ecosystem, let's make some animal to live in our river.

Draw and describe your animal below:



The Water Hole

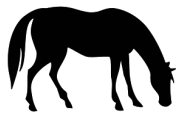
In order to make sure everyone has enough water, we need to share. We call the act of sharing water with others 'conservation.'

Connect how animals conserve with how humans conserve to break the code:

1. SAGUAROS store rainwater for dry periods.		A		WATERING AT NIGHT reduces water loss from evaporation.
2. KANGAROO RATS are active at night, which reduces water loss from evaporation.		W		LOW - FLOW TOILETS require very little water.
3. DESERT TORTOISES do not need water. They get moisture from plants they eat.		R		WATER TANKS store rainwater for dry periods, for families to water plants with.
4. SPADEFOOT TOAD tadpoles grow fast and use water only for a short period.		T		BROOMS do not need water. Clean walkways with a broom instead of a hose.
5. PALO VERDE TREES require very little water.		E		SHOWER TIMERS remind you to shower fast and use water only for a short period.

Conserve 1 2 3 4 5 for the future!

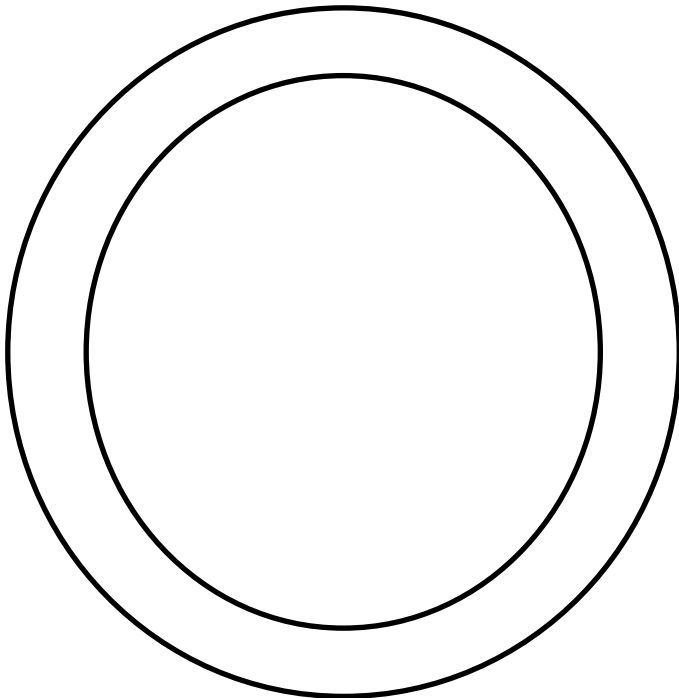




The Water Hole

While some water holes are big, some are very small. Some of the smallest watering holes play important role making sure that bees, butterflies, and other important pollinators stay hydrated during the hot, dry summers.

Draw the design you will paint on your bee watering hold below:



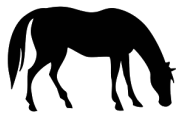
My River

Every creature that lives in a river needs 4 things to live: Air, Water, Food, Shelter. When creating an ecosystem it is important to think about how a creature will access each of these 4 things.

Write and Draw you your creature gets the things they need in the spaces below:

Air	Water
Food	Shelter





The Water Hole

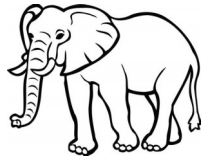
Our third book is 'The Water Hole' by Graeme Base. This story explores watering holes in different ecosystems around the world. As we enjoy this STEM Storytime pay close attention to how much water each habitat has as we move through the book.

For Mother Nature's Reservoir I Need...

- Pie Tin
- Oil Based Paint
- Ecosystem Cards
- Pebbles or Marbles
- Brushes

FUN FACT

The Okavango Delta in Botswana is one of the largest watering holes on earth. During the rainy season rivers bring water to this giant wetland, allowing it to support over 1060 species of plants, 32 species of large mammals, 650 bird species, and 68 fish species during the long dry season.



The Water Hole

Water holes help plants and animals survive long periods of drought all around the world. Using the information on the ecosystem cards, see a food chain that might live at a Utah water hole.

Write or Draw the ecosystem that you create:

