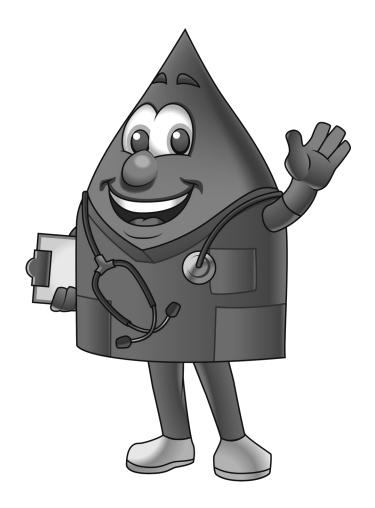
## Stay Hydratedl



# Healthy Hydration



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

#### This curriculum is released by Central Utah Water Conservancy District using creative commons non-derivative license



## 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** 





#### **Further Adventures**



Just because this club is done, doesn't mean you have to end the fun! H<sub>2</sub>Joe has done his research and found you a bunch of other healthy living related activities and games that you can do at home.



**Nestle - Healthy Kids Resources** 

https://www.n4hk.com.au/other-resources/online-games



**PBS - Dinosaur Hydration Station** 

https://pbskids.org/dinosaurtrain/games/hydrationstation.html

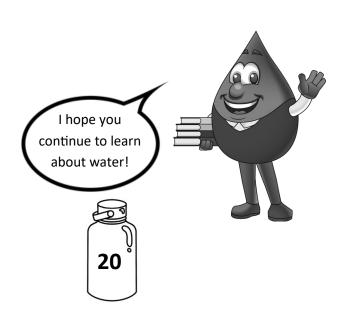


**Project Wet - Water In The Human Body** 

https://www.discoverwater.org/healthy-water-healthy-people/



**University of Oregon - Food Hero** https://foodhero.org/kids



Welcome to the Healthy Hydration STEM Club! Together we will be tackling 4 unique activities, each one exploring a different way that water helps keep us healthy. If you work as a team to defeat all 4 challenges a special surprise will greet you at the end of the club. So wash your hands and lets explore how to stay hydrated!



Activity 1 - Healthy Hydration



Activity 2 - Hydrating Food



(SOAP) Activity 3 - Hygienic Water



Activity 4 - Water Safety





## **Healthy Hydration**



Did you know that the average kid is 65% water? Because water makes up such a large part of our bodies, it is important to that learn how to stay properly hydrated so that our bodies stay healthy.

#### For The Hydration Activities I Need...

Reusable Water Bottle

Pee Chart

**Colored Pencils** 

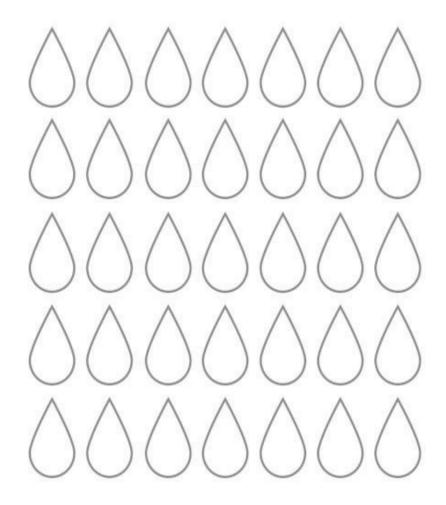
#### **FUN FACT**

The average American drinks 58 gallons of water per year! This makes it the most popular beverage consumed in the United States.





Track how many days you drink water this month by filling in a water drop for each day!







## **Healthy Hydration**



Choosing the right safety equipment can keep as safe while playing in water.



Dehydration can make it difficult to stay focused on your classes, prevent you from playing as hard as you would like, and can even make you feel sick. By staying hydrated you help yourself to become the smartest, fastest, and strongest kid possible.

While drinking water is one of the best ways to stay hydrated, it isn't the only liquid we drink. Think about what you drink over an average day.

Beverage 1	Beverage 2	Beverage 3	Beverage 4





## **Healthy Hydration**

## **Water Safety**



Not drinking enough water can make you sick, but drinking too much water can also be harmful. Learning the signs of both dehydration and overhydration can help us make sure that we drink just the right amount of water.

Signs of Dehydration	Signs of Overhydration

One of the best ways to stay safe when playing or exercising around water is to make sure you have a buddy. Buddies can be an extra pair of eyes to keep a look out for danger, can call for help if someone gets in an accident, and help each other recognize the limits of their skills.







## **Water Safety**

## **Healthy Hydration**



When playing in, on, or around water, it is important to understand your surroundings. Things to pay attention to include the water depth, temperature, velocity, and any debris it may be carrying. When it doubt, it is best to 'Turn Around and Don't Drown!'

Always be cautious and use good judgement when traveling across ice.

No ice is guaranteed to be safe. Proceed at your own risk!

No ice is guaranteed to be safe. Proceed at your own risk!

No ice is guaranteed to be safe. Proceed at your own risk!

Single snowmobile or ATV\*

\*Not recommended. Proceed at your own risk!

Utah State Parks



Tracking the water going in and out of your body not only tells you about your hydration level, but it also tells you things about your health. Differences the things we eat and different diseases can cause humans to pee the colors of the rainbow.

#### Write favorite cause for each color of pee:

Clear
Pink
Red
Orange
Yellow
Light Yellow
Green
Blue
Violet
Black





## **Hydrating Foods**

## **Water Safety**



About 80% of the water we need comes from the fluids we drink. The other 20% comes from the food we eat. By choosing foods that contain a lot of water we can stay hydrated even when exercise and play dry us out.

#### For The Food Activities I Need...

Sugar Free Jell-O Hot Water

Canned Fruit Cold Water

Bowl Measuring Cups

Tablespoon 6 Cups

#### **FUN FACT**

While humans need to drink water everyday, some animals have evolved to get all the water they need from the food they eat. A local animal that does this is the kangaroo rat.

Water provides recreation opportunities all year long. Identify at least 3 water related activities that you can do in each of the four seasons.

Spring	Summer
Fall	Winter







## **Water Safety**

## **Hydrating Foods**



Water can keep us healthy inside and out. One important way it does this is by giving us many fun and unique ways to play and exercise. But while we are enjoying ourselves it is important that we find ways to recreate with water safely.

#### For The Food Activities I Need...

'Turn Around Don't Drown' Activity Sheet 'Got Your Six' Buddy Cards

#### **FUN FACT**

Did you know that over 4 billion people worldwide don't know how to swim? You can help to reduce this number by taking classes and personally learning to swim!





Some of the most hydrating foods are mostly made out of water. See if you can identify which foods have the highest percentages of water in them.

Write down the percentage of water in each food and circle the one with the highest water content:

Apples	% Or Oranges	%
Celery	% Or Carrots	%
Peaches	% <b>Or</b> Pears	%
Cucumbers	% Or Lettuce	%
Pineapples	% Or Watermelon	%
milk Milk	% Or Soup	%





## **Hydrating Foods**

## **Hygienic Water**



We can also make hydrating snacks with materials from home. Here is one of H<sub>2</sub>Joe's favorite hydrating recipes.

H<sub>2</sub>Joe's Hydrating Fruit Jell-O Cups

Ingredients:

- 1 Can of Fruit
- 1 3 oz Box of Sugar-free Jell-O
- Hot Water
- Cold Water

#### Instructions:

- 1. Place several pieces of canned fruit at the bottom of six of the cups.
- 2. Pour the Jell-O powder and 1/2 cups hot water into a bowl and stir until all the Jell-O powder is dissolved.
- 3. Add the juice from the canned fruit and 1/2 cup of cold water into the bowl of Jell-O and mix completely.
- 4. Pour the Jell-O mixture into the cups with fruit in them. The measuring cups can be used to help you pour the mixture without making a mess.
- 5. Chill the Jell-O for 2 to 4 hours so that it sets.
- 6. Eat your hydrating snack by flipping it out of the cup onto a plate or by eating it directly out of the cup.



In order for water to keep us safe and healthy, it has to be clean. To make sure water is clean and safe when we use it three steps (filtration, disinfection, and storage) have to take place.

Filter	Disinfect	Store/ Transport



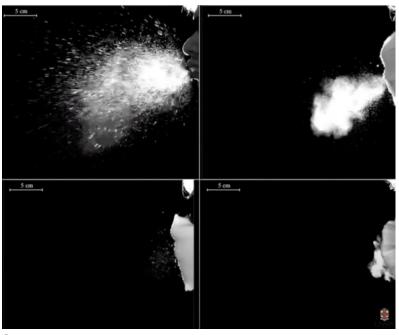


## **Hygienic Water**

## **Hydrating Foods**



The shape of water doesn't just help dissolve things. It also makes water want to stick to things. This property of water is what allows cloth masks to help protect us from some types of disease.



Scientists use special cameras to how coughing and sneezing spread water particles. Above are pictures from the University of New South Wales showing how different types of masks block particles from a sneeze.



While lots of foods provide us with water, others require water to digest. Eating these types of foods can cause us to become dehydrated.

Foods dehydrate in different ways. Draw lines between the food and how it dehydrates the body:

**Dried Fruit** 

Low Water

Chocolate Bar

**Potato Chips** 

High Salt

Crackers

Colas

Caffeine





### **Hygienic Water**

**Hygienic Water** 



Water doesn't just help keep our insides healthy, it also helps the outsides of our body's healthy too. We can use water's ability to keep us healthy by washing our hands, taking a bath, and wearing a mask to help reduce the spread of disease.

#### For The Food Activities I Need...

Liquid Soap Pepper

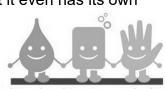
A Cup Water

Spray Bottle 2 Masks

#### **FUN FACT**

Hand washing is so important it even has its own holiday to celebrate it. Global

Hand Washing Day is held every October 15th!



Water molecules have a special shape which makes them a polar molecule. This shape allows it to dissolve lots of different types of substances such as sugars and salts...but it can't dissolve everything. To clean up oily messes, water needs help from soap.

What happened when you added pepper to the water?

What happened to the pepper and water when you added soap?

How can this experiment help us understand why we us soap when we wash our hands or take a bath?



