



Water

States, cycle, forms, and uses

Water comes in 3 states.

Water is made of molecules-- think of them as little bits of water. When water molecules are in a rigid crystal, they form ice which is hard and cold.

You can sit very still like an ice cube.



Sometimes we call these the phases of water as they move from one to another.

When water molecules start sliding around the water is liquid.

You can make your arms wave and flow like liquid water.



Water moves through the phases in the water cycle.

When water molecules are moving very fast the water becomes water vapor. Steam is hot water vapor and clouds are made from water vapor. You can run around fast like water vapor molecules.



You can sing *Water Forms* to the tune of *Clementine*.

Water's solid, (fist)



Water's liquid, (hand waving)



Water's gas, (hand moving fast)

Don't ya know? (tapping head)



It can change and (hands moving in circles)

It can move and (hands moving horizontally)

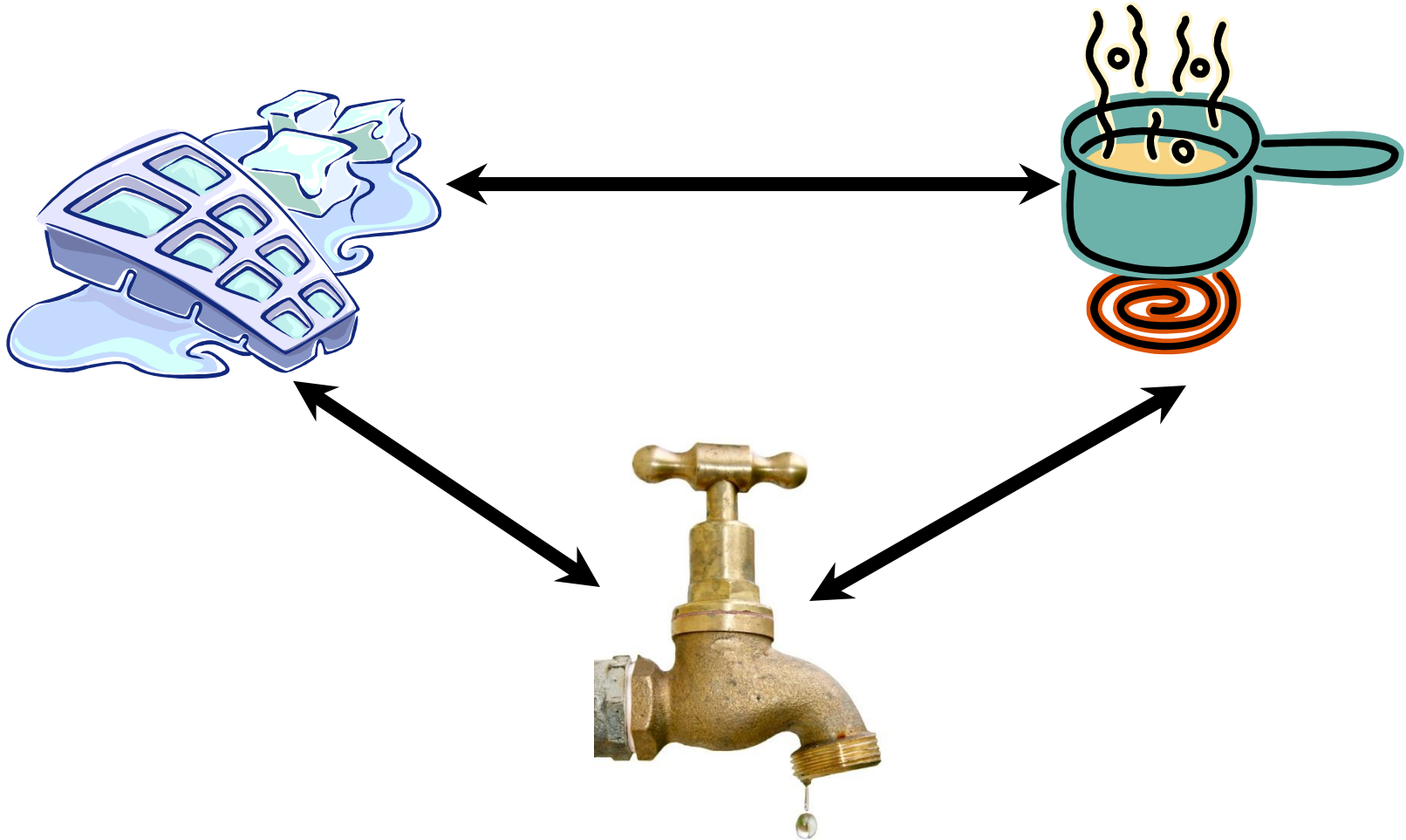
You can see it (touching eyes)



High and low. (pointing up and down)

<http://www.scholastic.com/teachers/lesson-plan/water-changes-and-moves>

Water moves between states as it gets hotter or colder and molecules move faster or slower.



You can sing the *Water Cycle Song* to the tune of *She'll Be Coming Round The Mountain*.

Water travels in a cycle, yes it does. (use finger to draw a big circle)



Water travels in a cycle, yes it does. (repeat action)

It goes up as evaporation, (move hands up into the sky)

Forms clouds as condensation, (make a cloud with your arms over your head)

Then comes down as precipitation, yes it does!



We find water in many places.

We find water in puddles, ponds, lakes and oceans.

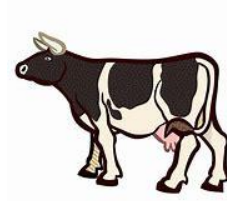
We find water in creeks, streams and rivers.

We find water in glaciers and waterfalls.

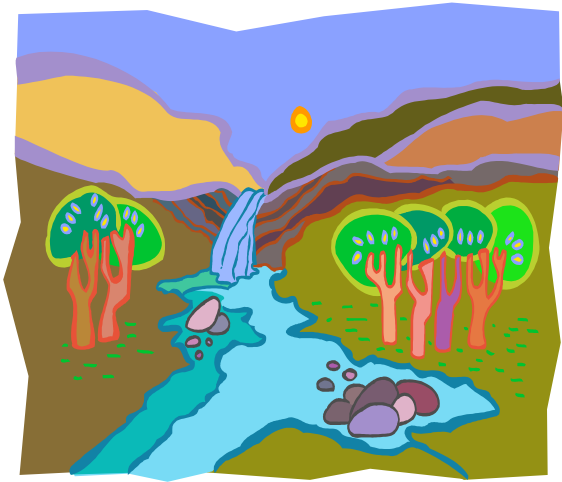
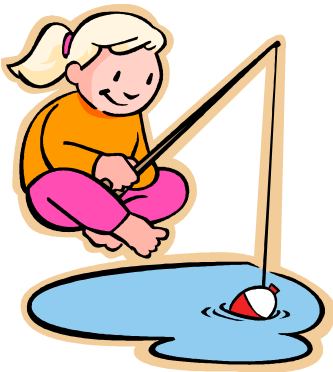
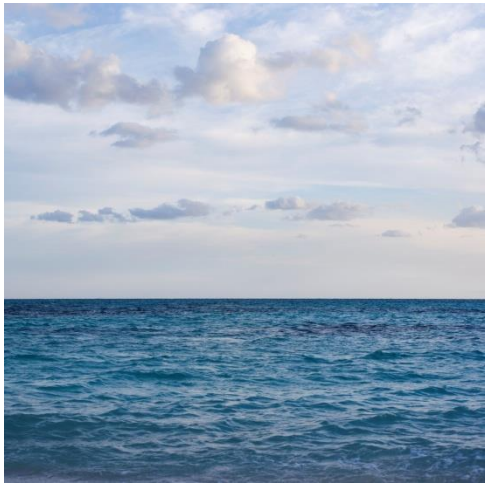
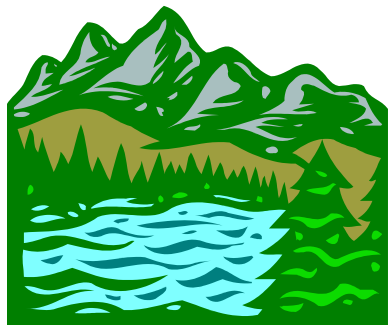
We find water in soil and plants and caves.

Animals make water and their bodies are made of water.

We are made of water and our tears and saliva are both water.



How many places to find water can you name?





We can be finger water!

Water in the river, (hands making waves)

Water in the pool, (swimming)

Water from the faucet, (turning handle)

Rainwater makes us cool! (raindrops falling).



You can sing the *Water Places* song to the tune of *Farmer in the Dell*.

There's water in a pond. There's water in a pond. (hands in circle)

Splish, splash and drippity drop

There's water in a pond.

There's water in a lake. There's water in a lake. (arms circle)

Splish, splash and drippity drop

There's water in a lake.

There's water in the ocean. There's water in the ocean. (arms spread wide)

Splish, splash and drippity drop

There's water in the ocean.

There's water in a creek. There's water in a creek. (1 finger)

Splish, splash and drippity drop

There's water in a creek.

There's water in a stream. There's water in a stream. (hand)

Splish, splash and drippity drop

There's water in a stream.

There's water in the river. There's water in the river. (arm)

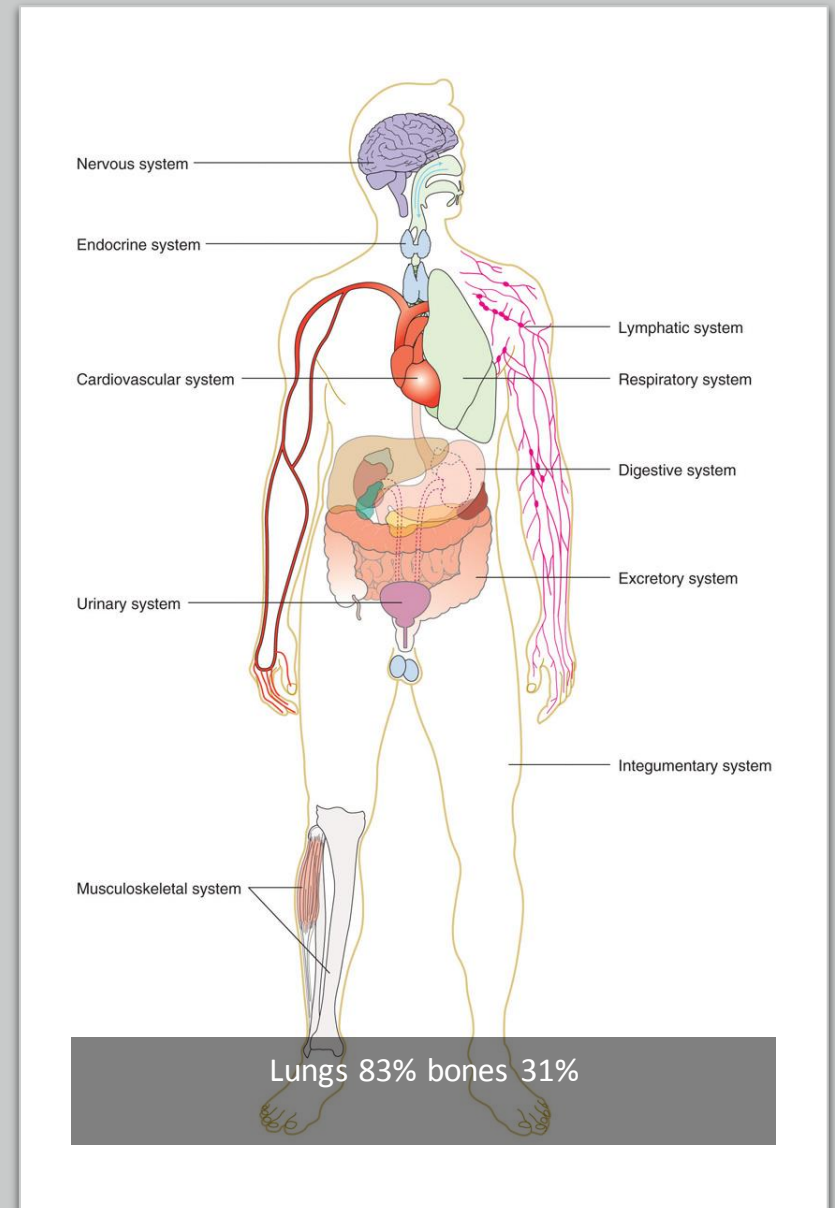
Splish, splash and drippity drop

There's water in the river.

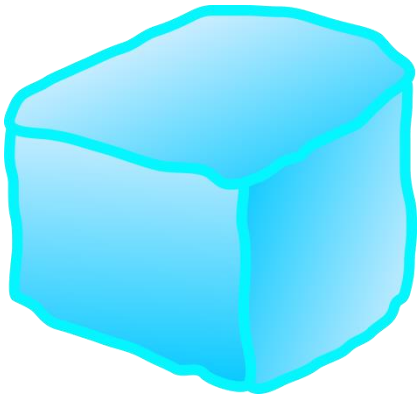


Did you know you are mainly water?

Babies 90%, grown-ups 60%



Only one quarter of a percent of the water on Earth is drinkable.



71%



96%



.25%



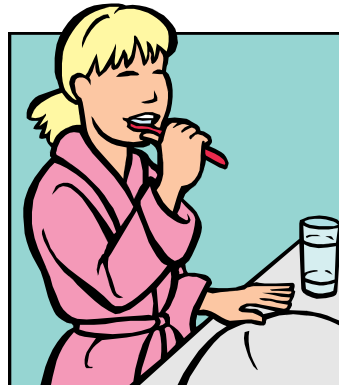
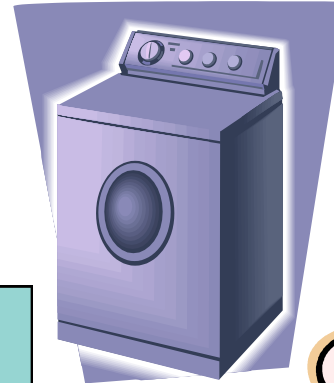
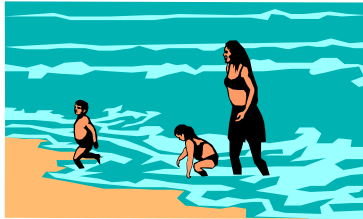
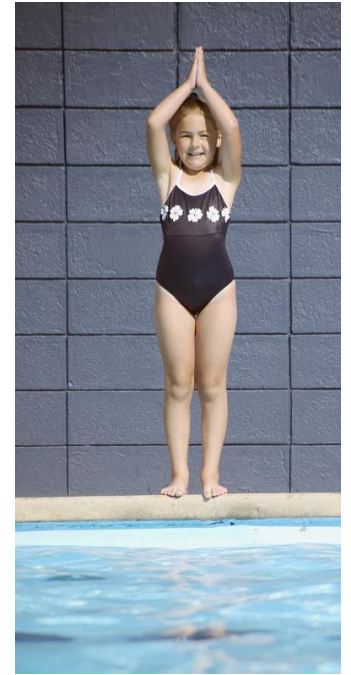
We use water in many ways. We can be water users, but don't forget to turn off that faucet and be water savers!



We can act out lots of ways water is used! How can you show--

- drinking
- swimming
- bathing
- mopping
- irrigating
- cleaning
- washing dishes
- watering plants
- laundry
- running factories
- brushing teeth

How many ways that we use water can you name?



You can sing *We All Use Water* to the tune of *Frere Jacques* From Growing Up WILD.

Drinking water, drinking water,
You and me, you and me.
Everyone is thirsty
So we're drinking water
Sip, gulp, slurp, sip, gulp, slurp.
Going swimming, going swimming
In the pool, in the pool.
Soon I'll be nice and cool
Playing in the swimming pool
Jumping in, jumping in.
Now I'm bathing, now I'm bathing
Squeaky clean, squeaky clean.
Playing with the bubbles,
Washing my arms and legs
Splish splash splish, splish splash splish.



We save water!

How can we save water—
gardening,
washing hands,
watering lawn,
showering,
doing laundry,
washing dishes?



Water STREAM examples

- Science—acting out water cohesion, adhesion and capillary action



- Technology—using a prism to show how water droplets make rainbows



- Reading—Water by Frank Asch



- Engineering—designing a water collection device



- Art—painting a sidewalk with water/painting with cotton balls and water



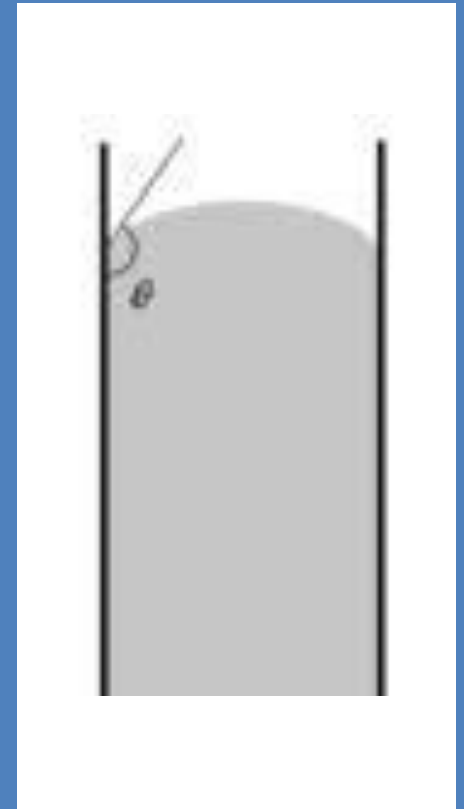
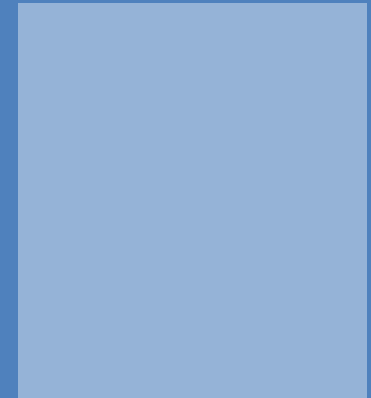
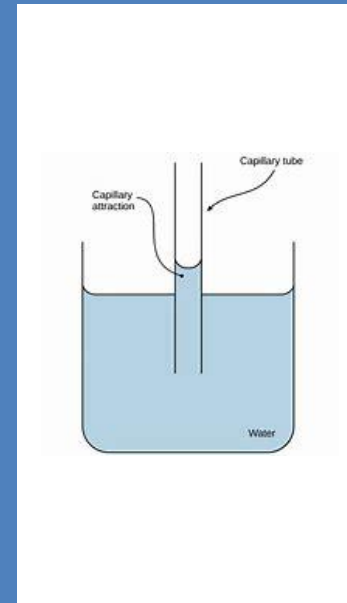
- Math—measuring water with different sized cups



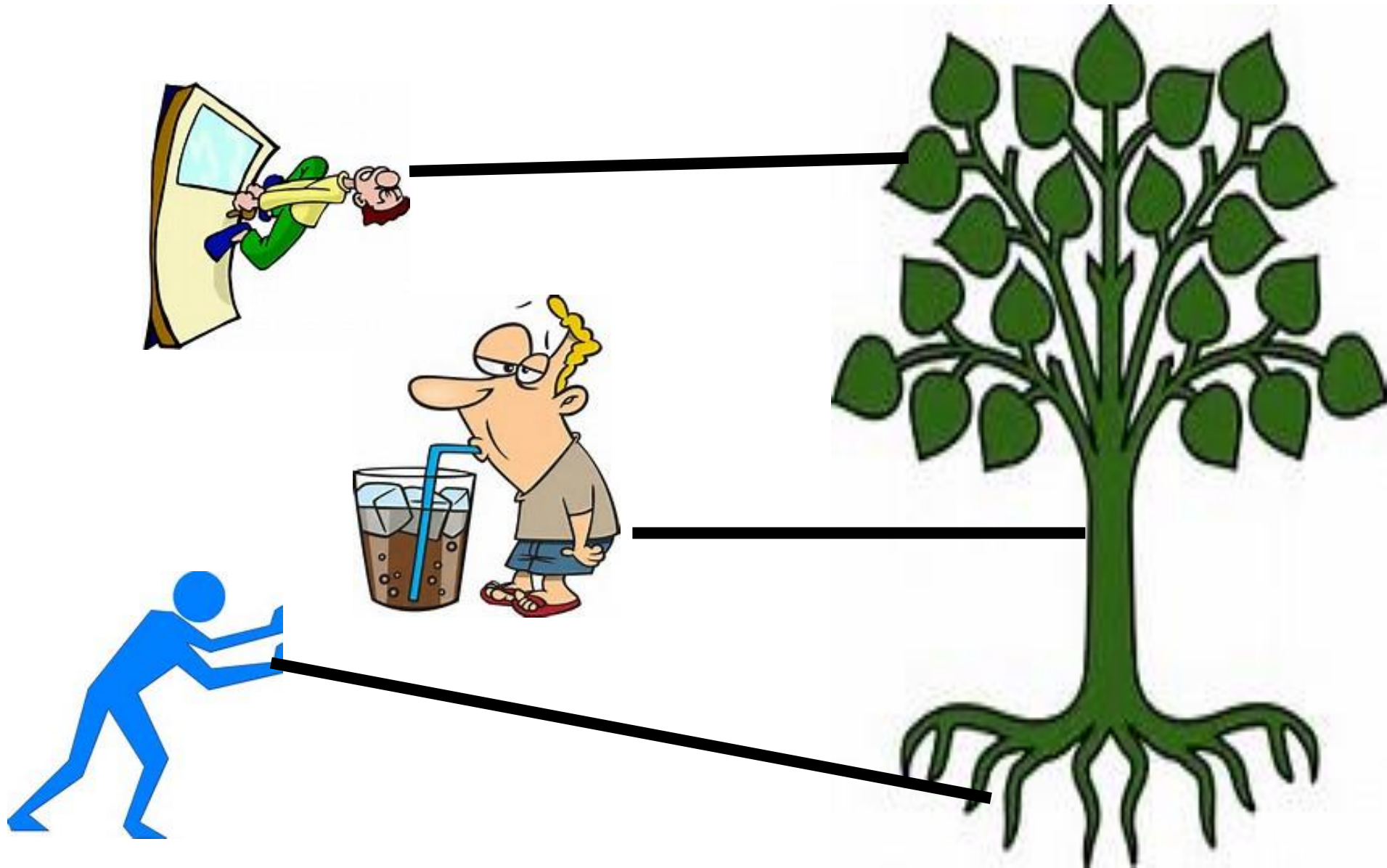
We can be water properties!

Adhesion—water molecules stick to other molecules—go to a wall and stick to it! Capillary action—water sticks to the surfaces and goes up through thin tubes—raise your hands upward.

Cohesion—water molecules stick together—find a friend and stick together. Meniscus—in a container water molecules stick together and form a rounded surface—make your two hands into an arc.

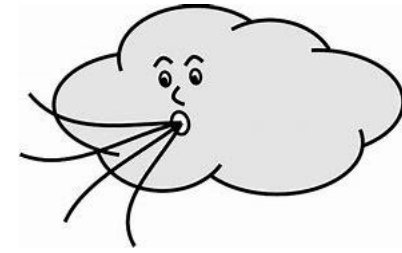


Water transport in trees: roots push the water up, capillary action moves it higher, and leaves pull it all the way to the top!



We can act out being a storm!

We are the winds—blow.



We are the gentle rain—lightly tap fingers.



Now we are the thunder—clap loudly.

And the lightning—open and close hands.



Now the heavy rain—stamp feet.

Light rain—tap.

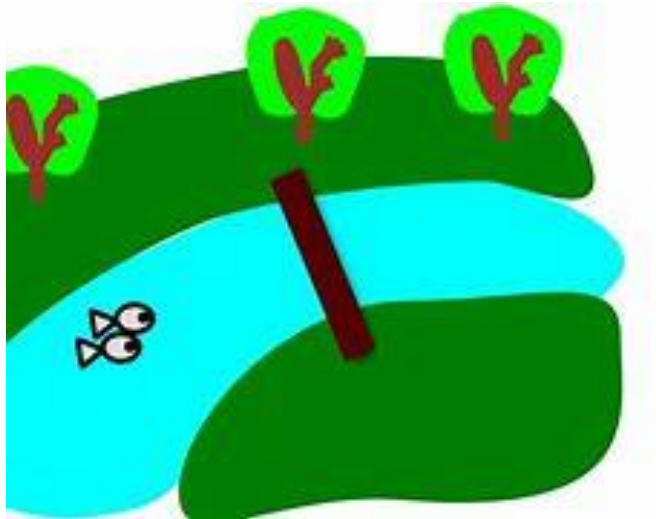
Wind—blow—quiet.....



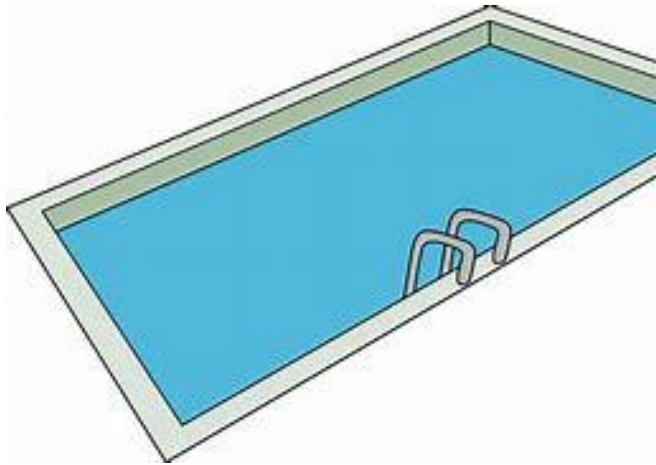
We find water in different
places!

WATER, WATER EVERYWHERE





Water in the river.



Water in the pool.



Water from the faucet.



Rainwater makes us cool.

We can search for water!

Where can you find water in your house? How about outside your house?

How many ways can you play with water? Pouring, splashing, spraying, mixing food color in, filling water balloons, blowing bubbles, and can you think of more?





You can do a Water Adventure Walk!



Will we sweat?
Will we find dew?(plants
sprayed with water bottle)
Will we find a river? (blue
plastic river)
Will we see clouds?
Will we find a pond?
(small swimming pool
with a little water in it to
wade through)

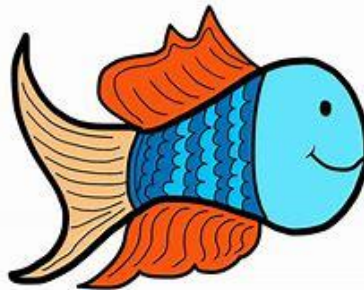
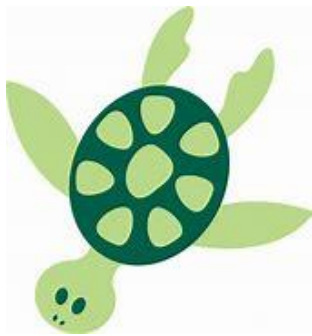


What might you see on a water walk?





You can be a water artist: colored post-its or scraps to make the colors on a rainbow, curling ribbon rain from a cotton ball cloud, crepe paper or tissue paper waves on a blue ribbon stream, and folded paper waves on a paper or blue cellophane pond.



You can attach water creatures, boats, cups, plants, etc., to show water use, to your poster.

What other ways can you do water art?

You can paint the outside walls with water!



You can do cloud painting with a cotton ball!



You can make a yummy water snack!

Ice water and watermelon



Goldfish and blue gelatin



You can make a mini-book!

1. Fold the paper in half
2. Then in half again.

