



Let's Get Hydrated

Activity Overview: In this activity, students will learn how water is vital to our health. They will discover the many ways water is used by our bodies. This activity should take approximately 10 minutes.

Objectives:

The students should learn:

- Water is essential, and without it we can't survive for longer than two days
- There is a lot of water in our body, more than half our body weight
- There is water in all our organs
- Everyday we lose about 2 ½ litres of water so it is important to eat and drink

Materials:

- 5 organ symbols (lungs, brain, heart, bones, teeth) and attached 5 organ percentage answer symbols.
- 5 water circles (i.e. two circles symbolizing a small amount of water and three symbolizing a large amount of water)
- Wood plank with water amounts

Set-up: Lay white board with organ/percentage symbols on the table. Set out the 5 water circles on the table

Takedown: Place water circles back into the storage container

Vocabulary:

Dehydration - loss of water from the body

Regulates - controls or maintains

Lubricates - to make smooth or slippery

WHAT WILL I BE DOING? (Procedure)

*Before you start your presentation, check with the teacher or chaperone that the entire group is present and ready to start. Remember that kids have more fun when they are **doing** an experiment and **discovering** the answer, rather than watching and listening.*

Say: "Hello everyone, welcome to Let's Get Hydrated. Today you will learn about how water is important for our bodies and all living organisms. Water helps us stay healthy by making up a major part of our blood, and this blood is needed by our organs, like our heart and lungs, in order for them to work. It also helps with our body temperature and our joint health."

Ask the students: "Does anyone want to guess what percent of an adult's body is water?"

Answer: On average, water accounts for 60% of an adult's weight. The amount of water in our body depends on our age, but water makes up at least 50% of every single body!

Have the students jog on the spot for 15 to 20 seconds.

Ask: “How does everyone feel? Are you hot? Does anyone know what water does when we exercise?”

Answer: It helps regulate (i.e., control or maintain) our body temperature. When we are hot, we sweat, and water leaves our body. The sweat then evaporates from our skin, which lowers our body temperature so that we don’t overheat.

Water will also help our joints during exercise by lubricating our joints (i.e., to smooth or make them slippery). Lubricating our joints helps to make sure they work correctly.

Ask: “Did you know that water also makes up a major part of our blood and that blood is needed by our organs to function? Water is everywhere in our bodies. The amount of water that each organ has is different; some have a lot of water and others don’t have a lot of water.”

Say: “Now we will be participating in an activity to find out how much water these 5 different organs (heart, lungs, teeth, brain and bones) have. There are 5 water circles here; these 3 symbolize a lot of water, and these 2 symbolize a small amount water. Your mission will be to pick which organs have a lot of water and which organs have a small amount of water.”

Ask: “So do you all think the heart contains a small or large amount of water?”

Once they decide, have a student put the water circle that reflects small/large amount of water onto the whiteboard in front of the heart symbol. Repeat with all organs. When completed, go to each organ display and reveal the answer. Indicate if the students were correct and tell them the percentage of water that each organ contains.

Answers:

Heart=73% (a large amount of water)

Lungs=83% (a large amount of water)

Teeth=10% (a little water)

Brain= 73% (a large amount of water)

Bones=31% (a little water)

Say: “From this, we can see that the most vital (or important) organs like our heart, lungs and brain use a lot of water. However, solid organs like our bones and teeth only need a small amount of water. Now it’s important to realize that every day we lose 2 ½ litres of water. Does anyone know how we lose this much water?”

Answer: By breathing and sweating and going to the bathroom.

Ask: “So how can we replace the water we lose so that we can continue to be healthy?”

Answer: Water can be replaced by eating; there is water in our food. It can also be replaced by drinking especially drinking water. We must try to drink about 8 glasses of water a day. If we don’t drink enough water, we get dehydrated (i.e. we lose water from our body).

Remind students that we need to try to drink regularly, not just when we feel thirsty! We need to make sure we have enough water in our body to function properly, so we always need to replace the water we lose.

Specifically remind students that:

Water helps us stay healthy by making up a major part of our blood, and this blood is needed by our organs, like our heart and lungs, in order for them to work. It also helps regulate our body temperature and lubricate our joints.

