

Can We Drink That?

Activity Overview: Students will discover the truth about their tap water by participating in a true or false game. Students will be given statements focusing on drinking water in Peel that will either be true or false.

Materials:

- Laminated statement cards

Set Up: Take the laminated statement cards out of the bin.

Take Down: Place the laminated statement cards back into the bin.

Vocabulary:

Bacteria – germs that are cleaned in the water treatment process.

Benefits – something good we get from an activity or object.

Bottled Water – water we buy at the store that comes in a plastic bottle.

Chlorine – a chemical substance that is added to drinking water to provide disinfection.

Environment – all the surrounding living and non-living things found in nature (animals, plants, rocks).

Fluoride – added to tap water to make our teeth stronger.

Hydration – drinking enough water every day to stay healthy.

Parameters – Something that can be measured or tested to tell us if water is clean or not.

Pathogens – disease carrying germs that are cleaned in the water treatment process.

Reusable – to use something over and over again.

Tap Water – water we use at school, at home, or in our fridge.

Treatment – process of cleaning water to make it safe to drink.

Source – where our drinking water comes from.

Sustainability – the wise use of resources so that they don't run out and are available for the future.

Well – a structure created in the ground to access groundwater in an aquifer.

What will I be doing? (Procedure)

*Remember that **doing** an experiment and **discovering** the answer is more powerful than watching and listening to someone, so try to involve as many children as possible.*

Say: “Hi and welcome to the *Can We Drink That?* activity! My name is _____ and through this activity, we are going to learn more about the importance of drinking tap water and how it is safe for us to drink.”

Say: “For this activity, I will read out a statement and you tell me if it is true or if it is false. You will decide by yourself if you believe it is true or false. To tell me I want you to shape your body like a “T” for truth or an “F” for false.”

**Volunteers are welcome to come up with other actions that the kids can do to explain true and false (thumbs up or thumbs down, pretending to drink water or making an X with their arms over their chests).*

Say: “After you have shown me if the statement is true or false I will then explain the answer to you. Are we all ready?”

Questions, answers, and explanations that are found on the cards:

1. **In Peel, tap water is safe to drink and I do not need to boil it before I drink it.**
TRUE – Tap water in Peel is safe and does not need to be boiled. All the water in your home comes from one main pipe, and it is then distributed to all the different taps.
2. **It is safe to drink water straight from the lake.**
FALSE – It is not safe to drink water straight from the lake. Lake water contains pathogens and bacteria, so it must be treated or cleaned before we can drink it.
3. **It is important for us to drink lots of water.**
TRUE – It is very important for us to drink lots of water, especially when we are active in the summer.
4. **Humans are not able to survive without water.**
TRUE – Humans are only able to survive without water for 2-3 days.
5. **Most of the Earth’s water is freshwater.**
FALSE – Humans, animals, and plants need freshwater to live but there is not as much freshwater on Earth compared to saltwater, which comes from lakes, rivers, groundwater, etc.
6. **Drinking water that looks cloudy when it first comes out of the faucet is safe to drink.**
TRUE – Cloudy water is caused by tiny air bubbles in the water, like tiny gas bubbles in pop. After a while the bubbles rise to the top and are gone.
7. **Tap water can be taken right from my tap and does not need to be filtered before it is safe to drink.**
TRUE – There are treatment facilities in Peel that clean the water before it reaches your tap. This means that the water from the tap is already clean and it is safe to drink.
8. **It is safe to pour hazardous materials like oil or paint down the sink or toilet.**
FALSE - Anything that goes down your drain, eventually finds its way back to your water source which is Lake Ontario here in Peel. It is not safe to put anything hazardous down your sink or toilet.
9. **It is safe to collect rainwater in buckets and use it to water plants outside.**
TRUE - Rainwater can be collected and used on plants outside.
10. **It is safe to drink from a garden hose.**
FALSE – Garden hoses have chemicals in them to keep the hose flexible, these chemicals can get into the water as it runs through the hose and are not good for you.
11. **Tap water is healthier for you than bottled water.**
TRUE – Tap water is very clean and good for you. It has undergone extensive testing to make sure that it is clean and safe to drink.
12. **Tap water is more cost effective (or cheaper) than bottled water.**
TRUE - A reusable bottle can be refilled 770 times for the same amount of money as a bottle of water.

13. Drinking water is regularly tested in Peel.

TRUE – At Peel’s water treatment facilities, the operators test the water at least 4 times a day, for over 100 parameters and the water is constantly being monitored by computers.

14. Water taken from Lake Ontario takes a long time to get to our homes, schools, and businesses.

FALSE - Water arrives at schools, homes, and businesses in 1-3 days after it is pumped from Lake Ontario.

15. Drinking water has a little bit of fluoride added to it which is good for my teeth.

TRUE – A small amount of Fluoride is added to our drinking water. Fluoride is also found in toothpaste and helps keep our teeth healthy.

16. Water that comes out a fire hydrant is the same water that comes out of my taps.

TRUE – The water that comes out of our taps is the same water that will come out a fire hydrant. The pipe that connects them is called a water main.

17. Bottled water has more of an environmental impact than tap water.

TRUE - It is estimated that the ecological impact of bottled water is 3,500 times worse than tap water because of the plastic bottle and the transportation. It is important that we recycle the plastic bottle when we’re done with it.

18. Chlorine in our drinking water is bad for our health.

FALSE – Chlorine is used worldwide to make sure the water stays clean on its journey to our homes. Tap water only has a small amount of Chlorine, much less than a swimming pool.

19. Tap water tastes good and is a healthy choice.

TRUE – Tap water is good for us and tastes good. If you don’t like the taste of your tap water you can try drinking it cold or add fruits or vegetables like lemon or cucumber.

20. In Caledon, residents primarily consume well water which comes from underground.

TRUE – There are 15 municipal wells in Caledon that provide clean drinking water.

21. Unlike tap water in Mississauga, Brampton, and Bolton, well water does not need to be tested.

FALSE – Well water should be tested as it can still contain contaminants such as bacteria. All tap water in Peel is regularly tested.

Wrap-up

Say: “I want to thank you for being such great listeners! I hope you all enjoyed this activity and learned something new! Remember, we all have the power to make healthier choices!”