



## Water Works Toolkit

Water is an essential nutrient. Up to 60% of the adult human body is water.

### Our bodies need water!

- Water helps to move nutrients and oxygen to every cell in our body.
- Water helps to remove waste and toxins.
- Water helps to regulate body temperature (e.g., the evaporation of sweat cools us down).
- Water cushions all of the tissues and organs in our body.
- Water helps our muscles contract.
- Water helps us digest food.

### Water is inexpensive!

- Tap water costs less than 1 cent per litre (4 cups).

### Water is easy to find!

- Tap water can be found almost anywhere (e.g., schools, restaurants, parks, community centres).
- Our bodies also get some water from foods and beverages (e.g., milk, soup, fruit and vegetables).

### Drinking tap water is good for the environment!

- Drinking tap water saves energy since there is no need to make or transport plastic bottles.
- Drinking tap water reduces the number of plastic bottles that end up in landfills.

### Tap water is safe!

- There is no evidence that bottled water is safer than tap water. In Canada, municipal tap water meets or exceeds required health and safety standards, and is considered safe to drink.
- Note: If your water source is untreated or inadequately treated, contact your local public health unit to make sure it is safe to drink.

### Drink water throughout the day!

- There are no specific water requirements because the amounts needed vary so much per person. However, on average, boys and girls aged 6-11 years old need about 1500-1750 ml (6-7 cups) of fluid each day.
- Our bodies naturally lose water during the day, and these fluids must be replaced to avoid dehydration. Dehydration can lead to fatigue, dizziness, headache, irritability, muscle cramps and impaired physical performance.
- Carry a refillable water bottle with you to make it easier to sip water throughout the day.
- Drink more water in hot and humid weather, or when you are very active.





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## Water Works – Student Survey

Grade: \_\_\_\_\_

**1. How much water do you usually drink each day? (circle one)**

*\* Think of 250 ml (1 cup) as the amount of water it would take to fill a baseball.*

Less than 250 ml (1 cup)

250-750 ml (1-3 cups)

1-1.5 litre (4-6 cups)

1/75-2.25 litres (7-9 cups)

2.5 litres (10 cups) or more

**2. How much water do you drink at school? (check one)**

- I only drink water at home.
- I drink more water at home than at school.
- I drink almost the same amount of water at school as I do at home.
- I drink more water at school than at home.
- I only drink water at school.

**3. Why don't you drink more water at school? (you can check off more than one)**

- There is no water fountain available.
- I do not have a refillable water bottle.
- The water fountains are too dirty.
- The water fountains do not work very well.
- The water at school is unsafe to drink.
- The water at school does not taste good.
- I drink other types of drinks instead.
- I don't really think about drinking water.
- I don't want to have to use the school bathroom.
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_

**4. Would you drink more water if it was easy for you to refill your water bottle? (circle one)**

Yes

Maybe

No

## Water Works – School Staff Survey

### Administrators and Educators

- Is water served at all school meetings and events?
  - Are there competing beverages served as well?
- Are students allowed to access water during instructional time?
- Are there any restrictions about where water can be served or consumed at school?
- Are there preferences about how and where students can access drinking water?
- Does the school or school board have plans to renovate the school, or build new facilities?
  - If so, can these plans include improved access to drinking water?
- Do you have any ideas or suggestions for helping students and staff drink more water?

### Noon Hour Aids and Staff Preparing Food

- Is drinking water available when food is served and/or eaten?
  - What is the source of the water?
- Are you willing and able to help with promoting water?
- Do you have any ideas or suggestions for helping students and staff drink more water?

### Custodians

- Are there procedures in place for ensuring the school's water sources are kept clean and working?
  - If not, are you willing and able to help clean and maintain the school's water sources?
- Do you have any ideas or suggestions for helping students and staff drink more water?

## Water Works – School Scan

Learn more about the sources of water at your school!

Walk down each hallway of the school. Visit the gymnasium. Look in any areas that usually serve food.

Do you see any sources of water? Answer the following questions for each water source you find.

**“I found a source of water!”**

**Awesome!! Now please answer these 10 questions about this water source...**

1. Describe where is it located? \_\_\_\_\_

2. What is the type of water source? (check one)

- Water Fountain
- Water Bottle Refill Station
- Sink With a Tap
- Large Insulated Container
- Uninsulated Pitcher or Jug
- Individual Bottled Water
- Other: \_\_\_\_\_

3. Is water currently available at this water source? (check one)

- Yes (e.g., water comes out of the fountain and is drinkable)
- No (e.g., dispenser is broken, water is turned off, jug is empty)

If you checked 'no', please describe why: \_\_\_\_\_

4. Who can access this water? (check one)

- Students
- Staff
- Everyone

5. How much time does it take to get 250 ml (1 cup) of water? \_\_\_\_\_

*Grab a measuring cup and use a stopwatch, timer or clock to see how long it takes to fill the measuring cup up to the 250 mL line (250 mL = 1 cup).*

6. What is the temperature of the water? \_\_\_\_\_

*Using the water that's now in the measuring cup after question #5, grab a digital thermometer to measure the temperature of the water.*

7. What is the appearance of this water source? (check one)

Clean

Dirty

If you checked 'dirty', describe what you see (e.g., rust, mold, gum, garbage): \_\_\_\_\_

8. Are drinking cups available at this water source? (check one)

Yes

No

If you checked 'yes', describe the type of cup available: \_\_\_\_\_

9. Are there any signs that promote or discourage drinking water near this water source?

Yes

No

If you checked 'yes', describe the sign: \_\_\_\_\_

10. If you can, take a photo of the water source and label it. Was a photo taken?

Yes

No

**Other General Notes (Optional):**



## Tips for Promoting Water

Make water the drink of choice at your school!

### Educate the school community on the benefits of water!

*\* Try to share information in at least 3 different ways to maximize the amount of people you reach and engage.*

- Create an eye-catching bulletin board.
- Include information in the school newsletter.
- Include fun water facts in PA announcements.
- Add information and activities into lesson plans for various subjects.
- Share messaging in an assembly.
- Host a tasting event for flavoured water.

### Make water the easy choice!

- Serve water at all school events and celebrations.
  - Eliminate or reduce the availability of competing beverages at school events and celebrations (e.g., juice, pop, sports drinks).
- Create a process to allow students to access water during instructional time.
- Create a policy that addresses access to drinking water during the school day, as well as ensuring that water is served at all school events and celebrations.
- Work with your school's custodians to create a cleaning and maintenance schedule for the school's water sources.
- If you have limited water sources at your school, consider fundraising (or looking for funding) to purchase and install hydration stations.
- Sell refillable water bottles as a school fundraiser.
- Provide refillable water bottles for all students.





## Passport to Hydration Scavenger Hunt

Have students create a poster for each of these water messages and hang them above a variety of different water fountains and/or hydration stations throughout the school...

1. Choose water first to quench your thirst!
2. Water brings oxygen and nutrients to working muscles.
3. Water makes up about 60% of your body.
4. Water cushions our organs and joints.
5. Water is used to make sweat that keeps us cool on hot days.
6. To keep your water cool, add a few ice cubes to your water bottle before filling with cold water.
7. Clean your water bottle daily.

Challenge students to take their water bottles and a copy of the form below and search the school to find the water messages. All completed forms will be entered into a draw to win a prize.

### Passport to Hydration Scavenger Hunt

There are 7 posters around the school that share different water messages. All of the posters are above either a water fountain and/or hydration station. Grab your water bottle, find the posters and record the 7 different water messages below. While you're there, fill up your water bottle!

Water Message #1: \_\_\_\_\_

Water Message #2: \_\_\_\_\_

Water Message #3: \_\_\_\_\_

Water Message #4: \_\_\_\_\_

Water Message #5: \_\_\_\_\_

Water Message #6: \_\_\_\_\_

Water Message #7: \_\_\_\_\_

Name: \_\_\_\_\_

Grade: \_\_\_\_\_

Teacher: \_\_\_\_\_





## Flavoured Water Recipes

Flavoured water tastes best when the fruit, vegetables and/or herbs are left in the water for a period of time before drinking. If you prepared flavoured water in a large jug and want to refill it, know that the remaining fruit, vegetables and/or herbs will no longer provide much flavour to any added water. You will want to add more fruit, vegetables and/or herbs when adding more water to the jug.

### Food Safety Tips:

- When choosing fruit, vegetables and/or herbs, look for ones that are not bruised or damaged.
- Keep sliced fruit and/or vegetables cold.
  - If buying pre-sliced fruit and/or vegetables, make sure to store them in the fridge as soon as you get back to school.
  - If the time it takes to travel from the grocery store to the school is long enough for the sliced fruit and/or vegetables to get to room temperature, transport them in a cooler with a cold pack.
- Keep fruit and/or vegetables separate from meat, poultry and seafood to ensure there is no cross-contamination.
- Keep your fridge at the proper temperature (4°C or below). Use a fridge thermometer to check.
- Clean, rinse and sanitize your utensils and cutting boards. Clean counter-tops with hot soapy water and then wipe them down with a sanitizer. \*Confirm what the approved sanitizer is for the school.
- Wash your hands with hot water and soap for at least 20 seconds before touching any food.
- Wash fruit, vegetables and/or herbs well under cool running water before slicing or peeling them. Once sliced, store the fruit, vegetables and/or herbs in the fridge until ready to use.
- Throw out any sliced fruit, vegetables and/or herbs that have been left at room temperature for two hours or more.
  - If you prepared flavoured water in a large jug and want to refill it, make sure the first batch of fruit, vegetables and/or herbs remained cold (with ice) and were not left to come to room temperature. If you think they did get to room temperature, you should empty, clean, rinse and sanitize the jug before making a fresh batch.



## Watermelon Basil

500 mL of seedless watermelon, cubed

10 to 12 basil leaves

2 Litres of water

Pour water over watermelon and basil in a pitcher. Refrigerate at least two hours and then serve in glasses over ice. Garnish with a sprig of basil. (Source: Sip Smart! Ontario)

## Cucumber Melon

1 large cucumber, sliced

¼ honeydew melon, cubed

¼ cantaloupe, cubed

2 Litres of water

Place cucumber, melon and cantaloupe in a pitcher and add water. Allow flavours to blend at least two hours in the refrigerator and then serve in glasses over ice. (Source: Sip Smart! Ontario)

## Citrus Cucumber

1 large lemon, sliced

1 large lime, sliced

1 large orange, sliced

1 large cucumber, sliced

2 Litres of water

Place all vegetables and fruit in a pitcher and add water. Allow flavours to blend at least two hours in the refrigerator before serving in glasses over ice. (Source: Sip Smart! Ontario)

## Water Works – Trivia Questions

Utilize these trivia questions in a fun classroom game (e.g., Jeopardy).

### 1. The price of bottled water is more than 1,000 times the price of tap water. True or False?

**TRUE**

- Bottled water can cost anywhere from about 8 cents per 500 mL bottle (house brand bought in bulk at a grocery store) to \$2.50 per 500 mL bottle (e.g., high-end brand in a vending machine).
- In Canada, tap water costs households and businesses less than 1 cent per litre (1000 mL).

### 2. Bottled water is cleaner, and thus safer, than tap water. True or False?

**FALSE**

- Tap water is regulated by Health Canada and the provinces and territories. There are guidelines that list the maximum levels of potentially harmful substances that are allowed in drinking water. Municipalities test their water sources constantly to make sure they are within limits.
- Bottled water is not subject to the same guidelines because it is classified as a food and falls under the Food and Drugs Act. Aside from arsenic, lead and coliform bacteria, the act does not set limits on specific contaminants but simply says that food products cannot contain 'poisonous or harmful substances' and must be prepared in sanitary conditions.

### 3. When you feel thirsty, you are already in the early stages of dehydration. True or False?

**TRUE**

- When you are first feeling thirsty your body is already a little dehydrated. This level of dehydration can result in poor mental capacity (thinking), headaches, feelings of being tired, stomach aches, decreased athletic performance and moodiness. That afternoon fogginess and sleepiness may be due to not drinking enough water.

**4. I need to drink exactly 8 glasses of water a day. True or False?**

**FALSE**

- Our individual water needs vary, so it's difficult to measure the exact amount that will keep us healthy. Under normal circumstances, most of us can trust our sense of thirst to prevent dehydration. Most people can meet their hydration needs simply by drinking water with meals and when thirsty.

**5. Water bottles are environmentally-friendly because they can be recycled. True or False?**

**FALSE**

- Only about 70% of plastic drink containers in Canada are recycled, according to the Canadian Beverage Association, although recycling rates vary by province.
- Some of that plastic waste gets shipped abroad for recycling – creating more greenhouse gases in the process.
- Roughly 1.5 million tonnes of plastic are expended in the bottling of 89 billion litres of water each year around the world.
- Besides the sheer number of bottles produced, the energy required to manufacture and transport these bottles puts a huge strain on the earth's natural resources and releases many toxins into the environment.

**6. What percentage of your body weight is water?**

- Water makes up about 60% of human bodies. Every system in our body uses water.

**7. What are 2 signs of dehydration?**

- Thirst
- Dry Lips & Mouth
- Flushed Skin
- Headache
- Dizziness & Fainting
- Dark Yellow & Strong Smelling Urine
- Low Blood Pressure & Increased Heart Rate

**8. Sometimes there are reasons why we should drink more water. Name 2 reasons.**

- Physical Activity
- Hot and/or Humid Weather
- Illness
- Wearing Heavy Sports Equipment (e.g., hockey or football)

## Photovoice Activity

You will need two days (approximately 45 minutes per day) to complete the Photovoice Activity.

### DAY ONE (45 Minutes)

#### Materials:

- Example Photo (e.g., a photo showing littering)
- Photo Taking Tips (handout)
- Digital Cameras or Smart Phones/Tablets

#### 1. What is Photovoice?

- Photovoice is a method of advocacy that uses photos to engage the community in conversation and encourage positive social change.
- Within a school community, the photos help the decision-makers (adults) within the school community see and understand the student's perceptions of the health or social issue that needs to be addressed. The students can often identify innovative solutions to issues that the decision makers may not come up with.

#### 2. Using TAP for Analyzing Photos

- Show students the Example Photo and ask them to pretend this photo was taken at their school. Walk them through the TAP process, asking them to identify the T-A-P as a group.
  - **T:** Tell others about what you see.
  - **A:** Analyze the strength or problem.
  - **P:** Propose something you can do about it.

#### 3. Making Connections

- Find out what the students think about water access at school. Some prompt questions are:
  - What do you think of school water fountains?
  - Do you drink from all of the school water fountains? Why or why not?
  - How might we encourage students and staff to drink more water at school?
- Explain that they will use the Photovoice tool today to take pictures of anything to do with getting drinking water at school – where they get water, why it's important to get water, things that help or hinder their water drinking, etc...

## 4. Photography Techniques

- Familiarize students with the different ‘views’ of photo taking as well as explain camera functions (e.g., focus, zoom, flash) and offer tips for effective photo taking and safety reminders.  
\* Distribute the ‘Photo Taking Tips’ handout.

## 5. Getting Behind the Lens

- Divide students into groups. Group members should take turns taking photos. This will help to capture different opinions (points of view).
- Give student groups a time limit. When time is up, ask them to return to the classroom to return cameras and have a group discussion.

## 6. Getting Ready for Day Two

- Inform students that they will be applying the TAP concept to their photos tomorrow. Ask them to think about their photos and experiences, and what they want others to know.
- Download photos from the camera (or have students submit them by email) and name them with the group name. Print out photos (4 per page).

## DAY TWO (45 Minutes)

### Materials:

- Printed Photos
- TAP Worksheet (handout)

### 1. Using TAP for Analyzing Photos

- Have students work with the same groups they did on Day One. Pass out their printed photos. Have students pick their top three photos, number them and fill out the TAP Worksheet.

### 2. Group Sharing

- Have students share their top three photos with the rest of the class.

### 3. Next Steps

- Lead a group discussion on the various advocacy efforts that were highlighted in the ‘P’ section of their TAP analysis. Emphasize how important all of their ideas are.
- Optional: If possible, offer students the opportunity to share their work with School Board decision makers. Students may want to collaborate as a class to develop one presentation that highlights work from every group.

## Photo Taking Tips

- Try different angles
- Try different points of view
- Keep the sun to your back, or to the side
- Centre your subject in the photo
- Try to fill the photo with your subject
- Keep your fingers away from the lens
- Don't cover the flash
- Stand about 3-8 feet away from your subject
- Reduce blurry photos by holding your elbows close to your sides and holding your breath when taking the photos

## Safety and Respect

- Stay safe when you are taking your photos
  - Stand on a solid surface
  - Look before you step into or cross a street
  - Be aware of things around you, like traffic
- Ask permission. If you choose to take a photo of someone, always ask permission first. Check with your teacher if you need to have a signed photo consent form before taking a photo of someone for this project. If people can be recognized in a photo, ask permission before showing the photo outside of your working group.
- Be respectful. If certain people don't like their photo taken, respect their feelings.
- Be prepared. Be ready to explain your project to family, friends or strangers because they may ask what you are doing. A simple explanation is "I am part of a Photovoice project exploring ways to improve access to water and promoting water as the drink of choice. We are taking photos of our observations and talking about them with other people in our working group. Thank you for letting me take your picture."



## TAP Worksheet

### **Photo #1:**

T: Tell others about what you see.

---

A: Analyze the strength or problem.

---

P: Propose something you can do about it.

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### **Photo #2:**

T: Tell others about what you see.

---

A: Analyze the strength or problem.

---

P: Propose something you can do about it.

---

### **Photo #3:**

T: Tell others about what you see.

---

A: Analyze the strength or problem.

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P: Propose something you can do about it.

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## PA Announcements

- Did you know that water makes up about 60% of our bodies? It's a good thing too, because water is a nutrient that our bodies need to survive. But, did you also know that our bodies naturally lose water by sweating, breathing and going to the washroom? So, it's important to replace any of the water we lose, and the best way to do that is by drinking water throughout the day.
- Did you know that all living things need water to survive? This is why we need to respect and protect the good water that we have. Try your best not to waste water, help protect our lakes and water sources from pollution, and educate others to do the same. Together we can make a difference!
- Did you know that we should be trying to have no more than 10 tsp of free sugar each day? One can of pop has about 10-12 tsp of free sugar in it. That means if we choose to drink a can of pop, we've already reaching our daily limit for free sugar in just one drink. Choose water more often!
- Did you know that sipping on sugary drinks like pop, juice or sports drinks throughout the day can lead to tooth decay? The sugar mixes with bacteria in our mouths to produce acid. Acid damages tooth enamel, which is the protective coating on teeth, and this can lead to cavities. Diet drinks may not contain sugar, but they can still have acid. Make water your drink of choice!
- Have you ever tried homemade flavoured water? Adding fruit, vegetables and/or herbs to water can create a nutritious and delicious twist on water. Berries, cantaloupe, cucumber, lemon, lime, mango, orange, pineapple and watermelon are vegetables and fruit you may want to try adding to water alone or in combinations. Just remember to wash all vegetables, fruits and herbs before cutting, eating or using them as a garnish. What's your favourite combination?





## Newsletter Insert

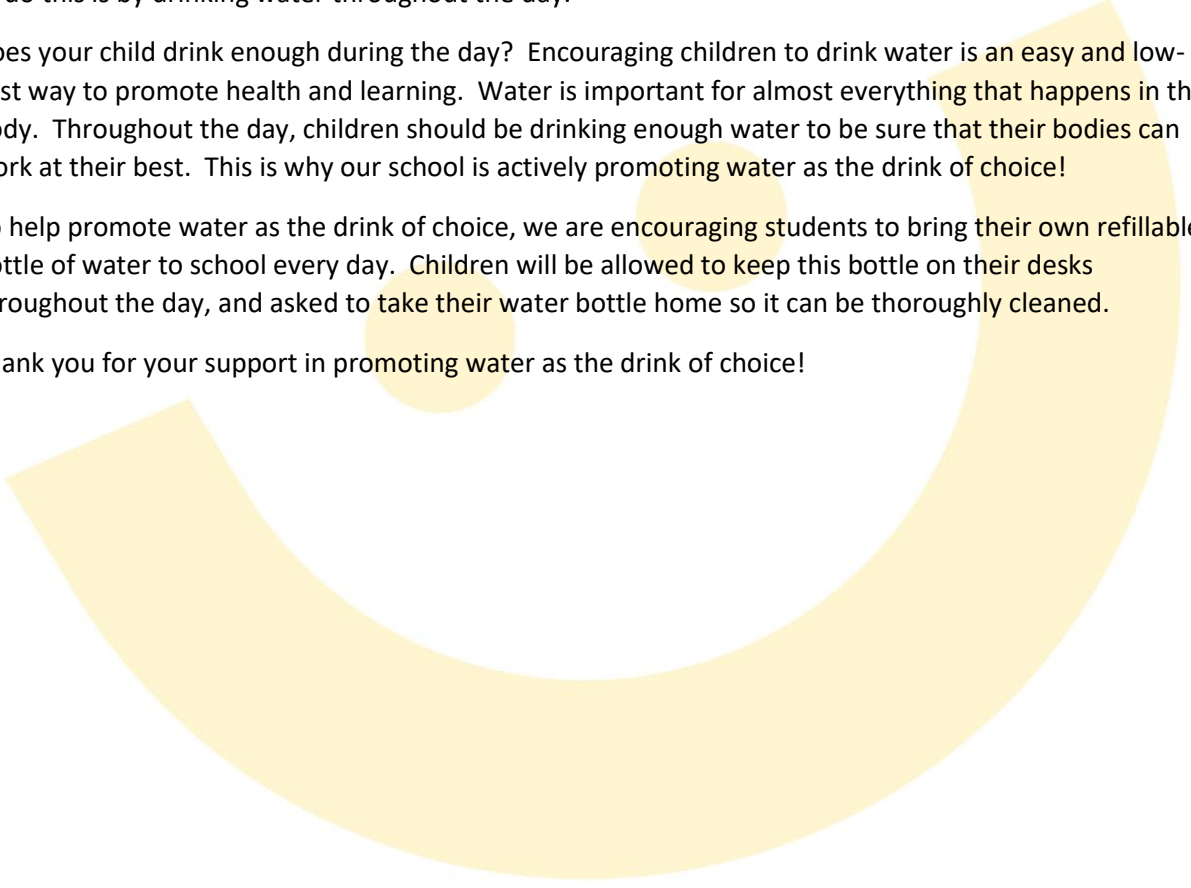
### **Water is Cool in Our School!**

Did you know that water makes up about 65% of our bodies? Water is considered an essential nutrient because our bodies need water to survive. Our bodies naturally lose water by sweating, breathing and going to the washroom, which is why it's important to replace any of the water we lose. The best way to do this is by drinking water throughout the day.

Does your child drink enough during the day? Encouraging children to drink water is an easy and low-cost way to promote health and learning. Water is important for almost everything that happens in the body. Throughout the day, children should be drinking enough water to be sure that their bodies can work at their best. This is why our school is actively promoting water as the drink of choice!

To help promote water as the drink of choice, we are encouraging students to bring their own refillable bottle of water to school every day. Children will be allowed to keep this bottle on their desks throughout the day, and asked to take their water bottle home so it can be thoroughly cleaned.

Thank you for your support in promoting water as the drink of choice!



## Make it Policy

### Have SMART Goals

*Specific, Measurable, Attainable, Realistic and Timely*

Some examples include:

- Safe, free and appealing drinking water is accessible throughout the school day, without restrictions.
- All children have an equal opportunity to drink water throughout the school day.
- The curriculum includes education about the health benefits of drinking water.
- Safe tap water is accessible and promoted over single-use bottled water.
- The policy is accepted and embraced by the whole school community.

### What to Include:

#### Access

- Number of water sources and their locations
- How water sources will be maintained
- Time water sources are available for student use
- When and where students are allowed to use refillable water bottles

#### Safety / Water Quality

- Frequency of water quality testing and the contaminants to be tested
- Plan for communicating results of water quality testing

#### Promotion

- School activities to promote water consumption
- School staff role model healthy beverage consumption

#### Education

- Information about the benefits of drinking water integrated into the formal curriculum

#### Monitoring & Evaluation

- Frequency of monitoring and the outcomes to be measured
- Plan for disseminating evaluation findings
- Plan for making improvements based on evaluation findings