

Grade: 7 & 8

Bottle or tap?

Students will be able to:

- understand the differences between bottled water and tap water
- make cost comparisons between bottled water and tap water
- learn about the environmental impact of bottled water

Lesson Details:

1. Is bottled water better for us?

We know that water is good for our health and we are encouraged to drink plenty of it. Is there an assumption that bottled water is healthier for you and tastes better than tap water? Is bottled water really healthier, do we know that or just accept it because of clever marketing?

Have students research the key differences between how bottled water and tap water is regulated. What are the key restrictions or limits on the composition of bottled water? Is it mandatory for bottled water to undergo microbiological testing? Where is water sourced from for bottling?

Compare this with tap water. Where is it sourced from? How is it treated? What is removed during the treatment process? How often is it tested? How is it disinfected? What guidelines and Act are TasWater legally obliged to comply with to protect public health?

Ask students to prepare a report either for or against bottled water or tap water. Contact your Education Officer for assistance with sourcing information.

2. Put tap water to the test!

A simple and fun experiment, have students carry out a water taste test with their peers. Simply assemble glasses of water from both tap and bottled water. Make sure they are not distinguishable and are the same temperature. Develop a series of questions based on taste, smell and preferences. Record findings and share results, why not have a debate? Which was more popular? Why?

Curriculum Links

Grade 7

Science

- ACSSU116
- ACSHE119
- ACSHE121
- ACSIS130
- ACSIS133

English

- ACELY1723
- ACELY1725
- ACELY1728

Geography

- ACHGK037
- ACHGK040
- ACHGS054

Maths

- ACMSP169
- ACMNA158

Grade 8

Science

- ACSHE135
- ACSHE136
- ACSIS145
- ACSIS148

English

- ACELY136
- ACELY1738

Geography

- ACHGK051
- ACHGK059
- ACHGS062

Maths

- ACMMG195
- ACMNA187

Lesson Details continued:

3. The cost of bottled water.

Get students to bring in a copy of their TasWater bill or check the TasWater website for the latest price per kilolitre of water.

Calculate how much water would cost for a litre. Have students research the cost of bottled water and make a comparison between both. Discuss your findings. Would students consider converting to tap water based on cost?

4. What is the environmental impact of bottled water?

Explore with students the environmental impact of bottled water. Here are some ideas:

1. Impacts on landfill
2. Chemicals and energy required to produce bottles
3. How much waste is produced from making bottles
4. Greenhouse gas emissions to transport bottles to distributors
5. Energy consumption to keep bottled water in fridges at shops
6. Potential impacts from re-using plastic bottles

5. Prepare a school campaign.

Students should have enough information to develop a campaign to encourage students to re-use BPA free drink bottles and more importantly refill from tap water.

Carry out a survey before and after the campaign to learn if habits and attitudes have altered. Include questions about cost, saving money, access to tap water, increase in consumption habits, type of bottle used. Was the student campaign successful? Why? Why not?

Lesson Reflection:

1. What are the key differences between tap water and bottled water?
2. What are the guidelines that tap water in Tasmania must adhere to? Why?
3. What guidelines or standards is bottled water required to comply with?
4. What impact is bottled water having on our environment?



Did you know?

TasWater could fill 10,000 one litre bottles of water for \$10.00 or you could buy a bottle of water for \$2.50!

More Information

Contact our Education Officers who can visit your classroom and share some engaging water activities with your students. Alternatively visit our website, complete an online request form and our Education Officers will contact you.

Email: education@taswater.com.au

Website: www.taswater.com.au

Additional Activities

Research how many communities, institutions, businesses or schools have encouraged the switch from bottled water to tap. How many drinking water fountains are in your community? Is it easy to access tap water? Do your students want to lead a campaign so their school becomes a bottle free zone? Think how much waste would be reduced and the health benefits.