# Lesson Plan



# Grade: 7 & 8

# How do we measure the water we use?

## Students will be able to:

- learn how water coming into your home is measured and charged
- understand why it's important to know how much water is used
- identify ways to introduce water conservation into the home

# **Lesson Details:**



#### Where is water used in the home.

Have students draw a plan of their home showing all the points where water is used. Make sure plans include all the water outlets such as taps, toilets, dishwashers, washing machines, hoses and watering systems. Ask students to answer the following questions based on their house plans.

- 1. How many water outlets did you find in your home.
- 2. What type of water is actually needed in those places (treated, recycled or grey water)?
- 3. Where do you need treated drinking water?
- 4. Where could you use water that is not of a high quality (grey water)?
- 5. Is there anywhere that you could use recycled or grey water?

Now thinking about your school, answer these questions.

- 1. Is there any way you could re-use water at your school?
- 2. How would you do it? (Research guidelines on internet, some municipal areas have restrictions on using greywater or recycled water.)
- 3. Can you think of or research ways that could improve water efficiency in your home or school? What would that involve?
- 4. What would the costs for water efficiency be? What are the benefits?
- 5. What recommendations would you make about the ways that water is used at your school?

\*Contact our Education Officers to learn about the definitions of recycled water and grey water.

#### **Curriculum Links**

#### Grade 7

#### Science

- ACSSU222
- ACSHE121
- ACSIS130

#### English

- ACELY1720
- ACELY1725
- ACELY1728

### Geography

• ACHGK040

#### Maths

ACMSP169

# **Grade 8**

#### Science

- ACSHE136
- ACSIS145
- ACSIS148

# Maths

MCMMG195

## Geography

- ACHGK051
- ACHGK054

#### English

- ACELY1736
- ACELY1810
- ACELY1738



• Date: July 2015



# **Lesson Plan**



# Lesson Details continued:



# Introduce students to GaBaToiLaKi (Garden, Bathroom, Toilet, Laundry and Kitchen).

- 1. Ga the garden uses about 35% of a household's water
- 2. Ba the bathroom uses 26%
- 3. Toi the toilet uses 19%
- 4. La the laundry uses some 15%
- 5. Ki the kitchen uses 5%

Have students create a graph to depict the water usage in the various rooms of a home based on the percentages above.

Seek suggestions from students about the types of things that can be done in each room to reduce water use. Explore why it is important to understand water use from a local perspective but also a global perspective.

Ask students to carry out a home water audit to determine if their water use aligns with the percentages explained above. Access from our website the Home Water Audit Activity Sheet and the Volume Table for reference.

#### **Lesson Reflection:**

- 1. What would happen if we didn't understand how much water is being used by households?
- 2. What habits will you change in your home as a result of GaBaToiLaKi?
- 3. What did your water audit tell you about your water consumption?
- 4. Have you learnt how to read your water meter?



# Did you know?

The average Australian uses approximately 350 litres of water per day.



# 3. Learn how to read a water meter.

The best way to understand household water consumption is by learning to read your water meter. It measures the amount of water flowing into your home and is generally located on the property boundary. Access the Water Meter Activity Sheet from our website and view the image of a water

- 1. Read the water meter from left to right.
- 2. The black section on the meter is kilolitres (1 kilolitre = 1000 litres).
- 3. The figures in the shaded area show part of a kilolitre (litres).
- 4. Ask students to answer the questions about water use on the activity sheet.

# 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**

How much water does your school use? Seek assistance to locate the water meter at your school, TasWater can have a Meter Reader come and show you how the readings are taken and the process to download the information for calculating the water bills. Maybe you can monitor how much water your school uses - you may be surprised! Contact your local Education Officer for details.



<sup>•</sup> Date: July 2015

