Years 5 to 8 geography and science

Home water use audit

Australian Curriculum links:
Sustainability cross-curriculum priority
Geography
Year 7 – The nature of water scarcity and ways of overcoming it, including studies drawn from Australia and West Asia and/or North Africa (ACHASSK185)
Science
Years 5 & 6 – Scientific knowledge is used to solve problems and inform personal and community decisions (ACSHE083/ACSHE100)
Year 7 – Some of Earth’s resources are renewable, including water that cycles through the environment, but others are non-renewable (ACSSU116)

In this activity, students conduct a home water audit to estimate how much water their family uses and how to reduce their water wastage.

Equipment
For each student
- One copy of the Home water audit or provide the link so that students can access it online

Preparation
Locate the:
- Bucket loads of savings poster (online or hardcopy) and the Guidelines for use for this poster. Choose the appropriate classroom activities for your needs.
- Be waterwise: make a difference today video [1:56]

Activity steps
1. Display the ‘Home water audit’ checklist. Explain that students are going to complete the audit form at home with the help of their family. Model how you complete the form using the Water usage calculator on the second page of the ‘Home water audit’.
2. Discuss how to estimate the number of uses per week.
3. Ask students to complete the first three columns of the ‘Home water audit’ for homework.
4. The next day review students’ results for their ‘Home water audit’. Show how to complete the ‘Total per week’ (fourth column).
5. Discuss the different types of data or evidence they can use to draw conclusions about home water use. Ask students to suggest the top five water-using activities to compare audit results and to suggest ways that the class could display the data.

6. Discuss the advantages of using a table to organise data. Choose a method to collate the data and display a class ‘Home water audit table’ on a screen or a large sheet of paper. Highlight the difference between first-hand and second-hand data. (The survey data is first-hand data because students collected the data themselves. Data collected by another class would be second-hand data).

7. Calculate the class ‘Total per week’ for each water-using activity.

8. Compare the results from individual households with the total. For instance,
   - Are the results consistent across households? Are they different?
   - In what ways might you be able to save water?
   - In what ways might you be able to reuse water?

9. Play the ‘Be waterwise: make a difference’ today video and ask students to suggest how they might save water at home and at school.

10. Display the brochure or poster and discuss.
    Optional: Use some of the activities from the ‘Bucket loads of savings – Guidelines for use’ to reinforce how students can take action to use water more efficiently and to promote Waterwise behaviours to their families.