THEME: Sustainability

**SCOPE & SEQUENCE UNIT:** Home Water Flow

OBJECTIVE: Household Watersheds

ACTIVITY: Mapping home water flow

Notes: In-class activity & take home activity

Teacher Prep.: This activity is partially homework as students need to have

input from the adult(s) at home.

Time: In-class  $\sim 30$  minutes

#### **Skills:**

Critical & creative thinking

- Math
- Ecological literacy

## **Objectives:**

- To uncover the source of water at home and the treatment of the waste water
- To consider the many uses of water at home, both inside and outside.
- To learn more about personal water use within the community context.

#### **Materials:**

11 X 14 in. sheets of poster board for home water flow drawings Student illustrations/drawings of home water flow

### **Background Information:**

**In rural areas**, the source for domestic water and the treatment of septic water can differ from home to home. This activity explores the variety between homes.

In urban areas the home flow maps will share common sources and treatment (as this is provided by the municipality), and the discussion is more about the many uses of water at the home (both inside and outside).

### **Introductory Discussion:**

Assign the mapping home water flow activity to students to take home and complete, returning with the illustrated map done.

Home water flow mapping activity: create an illustration or drawing of the intake of water into the home, its journey throughout the home, and its exit from the home. Enlist the knowledge of adults at home for any information needed as to source and treatment.

In class, students turn to their right to pair off with their neighbour. Each student in the pair takes 3-5 minutes to explain their home water flow map to the other. Consider what is different between the maps, what is the same. Where is water used at home?

**In rural areas:** Create a class graph - first list all the sources of water as well as treatment methods, making the list horizontal.

Let each source & treatment represent a column. Have students use stickies to write their name on and place in the correct column for their home water source and septic treatment. Total the stickies for each column.

In urban areas: use a frequency graph to chart the distribution of homes with 1,2, 3, + bathrooms; do the same for number of baths, and number of homes that buy bottled water for home drinking. Based on your community, consider other graphing options, such as number of swimming pools, hot tubs, etc.

#### **Reflection Discussion:**

Discuss the results of the class graph. What stands out? Nature recycles everything. Is there any recycling or reusing of water in the home? How many homes use water catchment? What is the water source for garden watering?

# **Student Page:**

11 X 14 in. sheet of poster board for home water flow drawing

### Taking it Further:

In rural areas: Students draw from class graph of water sources and treatment to create a bar graph.

## Exemplar:

