

Stormwater in the City – water smart plants

Investigate which of your local plants are water smart – plants which do not require a lot of water!

Suitable for ages: Grades 1-8

Curriculum links:

- Grade 1 science: needs of animals and plants
- Grade 2 science: exploring liquids
- Grade 4 science: plant growth and changes
- Grade 5 science: weather watch
- Grade 7 science: interactions and ecosystems
- Grade 8 science: freshwater and saltwater systems

Instructions

What you will need checklist:

- Outdoor space to investigate plants – your garden, your community or a local park.
- Hair dryer
- 2 pieces of paper (try to use recycled paper)
- Scissors
- Tape or glue

Instructions:

1. Find an outdoor space with a number of different plants. Choose one plant at a time and work through the following questions.
2. Are the leaves large or small? Why might the size of the leaf matter for water retention? The larger the leaf, the more water a plant needs to thrive.
3. Look at the edge of the leaf. Is it smooth or jagged? Jagged edges break the flow of water off a leaf and can trap moisture.
4. How might hair reduce water loss on a plant? Let's experiment and see!
 - a. Hold a piece of paper on your arm so your hand is exposed at the other end
 - b. Using a hair dryer, blow air across the paper so it hits your hand.
 - c. Tape some paper strips onto the flat piece of paper to create 'hairs'
 - d. Try blowing air across the paper again. Do you notice a difference?
 - e. Why might keeping air off the surface of a plant leaf help it to retain water?

5. Explore your neighborhood to see if you can find any plants you would label as yard smart (drought tolerant). Remember, water smart plants might have small leaves, jagged edges and a rough texture.
6. You can find out more about water smart plants on the City of Calgary's website: <https://www.calgary.ca/UEP/Water/Pages/Water-conservation/Lawn-and-garden/Water-wise-gardening-and-plants/Water-wise-annuals-and-perennials.aspx> or on the Calgary Horticultural Society's website: <https://www.calhort.org/resources/>



Did you know?

Being YardSmart means choosing water wise plants that not only grow well and thrive in Calgary's short growing season, but are also able to survive cold winter temperatures, drying winds, and limited snow cover.

Share with us!

We would love to see photos of your low-waste crafts and activities at home. Feel free to tag us or hashtag #GreenCalgary in your social media posts! Find us here:



Thank you to the Calgary Horticultural Society for their assistance with this activity!

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