Foundation Lesson 3 How water cares for us

www.logan.qld.gov.au

Learning objectives

Students will be able to:

- understand the health benefits of drinking water regularly
- understand the requirements of other animals and plants for water

Learning outcomes

Subject	Strand & content descriptors
Science	Science understanding • Living things have basic needs, including food and water. (ACSSU002) Science as a human endeavour • Science involves exploring and observing the world using the senses. (ACSHE013) Science inquiry skills • Respond to questions about familiar objects and events. (ACSIS014) • Explore and make observations by using the senses. (ACSIS011)
Mathematics	Number and algebra • Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond. (ACMNA002) • Sort and classify familiar objects and explain the basis for these classifications. Copy, continue and create patterns with objects and drawings. (ACMNA005)

Important questions

- Why should I drink water regularly?
- In what other ways does water keep me healthy?
- Is water important for other animals and plants?

Background information

Water is vital for survival. Humans can survive for many days without water, however just one or two days without water can make a person very ill.

More than 60 percent of the human body is water and over 2 litres needs to be replaced every day. Drinking water regularly and eating food with high water content can help to replenish lost water; high water content foods include most fruits; including watermelon and grapefruit and many vegetables such as lettuce and tomatoes.

Water helps to keep our body cool, especially when we exercise. It protects our brain and spinal cord; keeps our skin moist and helps to get rid of waste products.

We lose water when we exercise and sweat, when we breathe (breathe on a mirror and observe the moisture) and when we go to the toilet.

Just like humans, plants need water to survive. The water they take in through their roots moves to the rest of the plant through the stem. Plants make food using the sun's energy, carbon dioxide and water in a process called photosynthesis. Tiny pores on the leaves called stomata open and close to allow the exchange of water and gas in plants. This is called transpiration and is similar to evaporation.

Plants also use water to carry nutrients around their body and to keep them upright - a plant that is droopy is usually lacking water and will straighten up when it is given a drink.

Lesson plan

Begin the lesson by asking all the students to have a drink of water. Ask them how they feel if they don't drink water regularly. Alternatively, replace water with slices of watermelon to introduce the concept of rehydrating with food as well as water.

Ask the students why it is important to drink water? Reinforce key points such as to keep us healthy and cool; discuss other healthy uses of water such as washing hands and cleaning teeth.

Announce that students will keep a count of how many times they use water for drinking, hand washing, or teeth cleaning. Use the icons in Activity sheet 4 to display the count on a wall. Students can colour or decorate the icons.

At the end of each day the class should count the icons and record their water use.

To complete the lesson ask students to identify 2 things at home that need water to survive (for example a pet such as a dog or a goldfish; plants, trees or even the front lawn; or members of their family or household). Students draw the item and produce a simple text that describes where the animal, plant or person gets their water from. Drawings are displayed in the class.

Resource requirements

- Butchers paper
- Activity sheet 4 - Watersaver icons

Additional activities

Water the garden: using plants in the school garden, pot plants or punnets of seedlings experiment with watering and caring for plants and observe changes and differences recording these as entries in a journal, drawings or photographs. For example select certain plants not to water and compare with plants that are regularly watered; place mulch (straw or shredded paper) over part of a garden bed and, using observation

and touch, compare with a non-mulched section of the garden (e.g. moisture levels, temperature, plant condition).

Exploring water using the 5 senses: encourage students to explore water using their five senses.

Sight – how does it look?

Sound – play a range of sounds of water (collected for Water bingo in Lesson 2).

Smell-how does it smell?

Taste-use Activity sheet 5 as the basis for a tasting activity

Feel – encourage students to touch water and ice, how does it feel?

Activity sheets

Activity sheet 4. Line drawings or similar (able to be coloured in or decorated) to use on the healthy water counting wall chart – suggest four images on A4: drinking glass; toothbrush; hand washing/soap; water drop (or similar generic image).