

Year 1

Lesson 3

What we drink comes back

www.logan.qld.gov.au

Learning objectives

Students will be able to:

- recognise how water is vital for human health
- understand how water is a precious resource and should be used wisely.

Learning outcomes

Subject	Strand & content descriptors
Science	<p>Science understanding:</p> <ul style="list-style-type: none"> • Living things have a variety of external features. (ACSSU017) <p>Science as a human endeavour</p> <ul style="list-style-type: none"> • Science involves asking questions about and describing changes in objects and events. (ACSHE021) • People use science in their daily lives, including when caring for their environment and living things. (ACSHE022) <p>Science inquiry skills</p> <ul style="list-style-type: none"> • Respond to and pose questions, and make predictions about familiar objects and events. (ACSIS024)
Geography	<p>Geographical knowledge & understanding</p> <ul style="list-style-type: none"> • Place: Places are named areas of the earth's surface. • Place: Places have characteristics that can change over time. • Environment: Environmental features of places can be observed, described and classified in different ways. • Environment: People affect the environments in which they live. <p>Geographical skills & inquiry</p> <ul style="list-style-type: none"> • Observing and questioning: Pose and respond to several questions for an inquiry; based on a variety of questions stems and stimulus. • Processing, analysing, interpreting and concluding: Sort information and identify patterns.
English	<p>Literacy</p> <ul style="list-style-type: none"> • Make short presentations using some introduced text structure and language, for example opening statements. (ACELY1657)

Important questions

- How much water on earth can be used for drinking and washing?
- How do people contribute to the water cycle?
- Why is water important to people?



www.logan.qld.gov.au

Background information – how our water cares for us

More than 70 percent of the earth's surface is covered by water. Of this, almost 97 percent is salt water, two percent is ice leaving only one percent suitable for human needs. Planet earth could be renamed planet ocean!

A person can survive for up to two months without food, but less than a week without water. The human brain is 75 percent water, while the rest of the body is made up of 50-65 per cent water. On average, the human body loses three litres of water per day as perspiration, urine, and saliva. Some of this water goes back into the water cycle.

We rely on water to help dispose of waste, as a coolant or solvent in various industries, to wash our bodies and possessions, and to irrigate our crops.

Lesson plan – how our water cares for us

Review and reinforce knowledge of the water cycle. Use Activity sheet 1 'The water cycle' if necessary. Use 'think, pair, share' to have students contribute to a class list of ways water is used – in the home and at school.

Students investigate their lunchbox, or view other food items, and identify how water is used to produce food. For example, water required for growing fruit and vegetables; water for drinking by chickens or other animals, water used to grow wheat or other grain for snacks and crackers.

Using a globe, map or Google maps/earth illustrate how planet Earth is mostly water and that most of it is salt water.

Ask the students how they feel if they do not drink regularly. Reinforce the need to regularly drink water, particularly during exercise. Keep a class tally of how much water each student drinks during the day.

Discuss the importance of water for human health and how water is removed from the body.

Reinforce the limited amount of water available to people and discuss ways to reduce consumption without affecting our health.

Additional activities

Using globes, maps, or Google maps/earth ask students to identify water places such as oceans, rivers, and label or plot their locations or details. Use appropriate ICT to present images of water features and use (such as irrigation; horticulture and recreation).

English: Describe a favourite water place or activity (a rock pool, bath or beach) using terminology associated with the water cycle or other relevant water words.



www.logan.qld.gov.au

Alternatively, research how much water people in other parts of the world use each day. Find out how they conserve water. Present this information in a short speech or play.

Science: Observe plants and identify how they use water; identify features such as roots, leaves and stems. Discuss how some plants save water in their bodies (cactus) or have tough leaves that reduce transpiration (many native plants).

Visualising transpiration: Place cut carnation flowers with a stem or a celery stick with leaves attached in a jar or vase. Fill the jar or vase with water until it is approximately $\frac{1}{2}$ way up the stems. Place a few drops of food colouring in the water and stir. Observe what happens to the celery or carnation over a few days.

Catching transpiration: Place a clear plastic bag over the leaves on the end of a plant. Tie the opening of the plastic bag with a piece of string. Monitor the bag throughout the day (in 1 or 2 hourly intervals) to see evidence of transpiration trapped in the bag. It is best to set up this experiment first thing in the morning. The results will vary depending on the heat of the day and the plant chosen.

Resource requirements

- Activity sheet 1 'The water cycle'
- Student self evaluation sheet 1