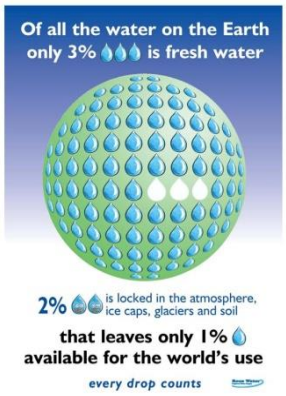
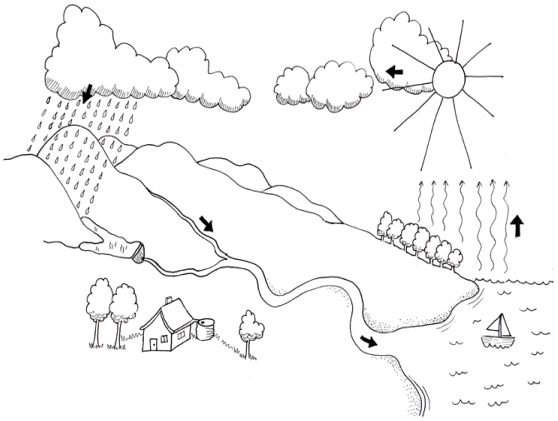
Cool Cubbies Project: Water teaching notes



Water – essential to all life

Without water there is no life. We live on a 'blue planet' as about three quarters of the earth's surface is covered in water. But of all the water in the world, only 3% is fresh, 2% of that is locked in the atmosphere, ice caps, glaciers and soil. That leaves only 1% available for the world's use. We don't get any new water, it just travels through time and space in the water cycle. Does that really mean we are still using dinosaur wee and Cleopatra's bath water? This natural recycling process works as long as we don't overuse (waste), overload (contaminate), or interfere (clearing land).



Our catchment and the water cycle: "Taking care of water, its use and its quality is everybody's responsibility".

When you save water you also save money and the environment. But sustainable water management is not just saving water; it is also about helping to keep it clean.

Everyone lives in a catchment

We all live in a catchment and depend on it for our survival. A catchment is an area of land that catches the water and drains it into a river and out to sea. The catchment is named after the major river. But a catchment is more than just an area marked on a map. It is a living area with homes, wetlands, wildlife, waste management centres, world heritage, farms, beaches, bush, business, factories, schools, sewerage systems, towns, transport and so much more.

Plants, animals and people share the land, vegetation, rivers and soil of the catchment. Healthy catchments provide clean water, productive soils, protective habitats, biodiversity, food, recreation and livelihoods. When it rains, water flows across the land, therefore it means that what happens in one part of a catchment will have an effect somewhere else. Our daily actions will affect the health of the catchment, water will collect soils, oils, detergents, fertilisers, pesticides, rubbish, lawn clippings, paints, etc. and take it down the drains to creeks, rivers and out to sea.

Sustainable water management actions

To use water wisely and care for your catchment, consider these action ideas:

- ✓ Empty the water trough onto the garden.
- ✓ Sweep rather than hose paths and paved areas.
- ✓ Water gardens only in the cool and still times of the day.
- ✓ Water the roots not the leaves.
- ✓ Use biodegradable cleaning products.
- ✓ Mark the half button on dual flush toilets to empower the children to make a 50% saving.
- ✓ Garden with native plants and mulch.
- ✓ Have an on/off nozzle on your garden hose.
- ✓ Have a rainwater tank for water play and garden use.
- ✓ Have a rainwater tank plumbed for toilet flushing.
- ✓ Put a large bucket in the sand pit to fill with water and have a no refill policy.
- ✓ Ask children to put left-over drinking water onto pot plants.
- ✓ Report and fix drips and leaks.

- ✓ Use a sink strainer to collect food scraps, glues, paints and small bits and pieces.
- ✓ Soak you paint pots in a bucket.
- ✓ Have a variety of surfaces in the playground, reducing the amount of lawn.
- ✓ Document what the children are learning and display this information to parents in daily sheets, newsletters and room displays.

Program ideas

Movement or music sessions – 'The water cycle'; 'A passing storm'.

Stories – Picture story books and poetry. Tell the story of a drop of water. Build up the chant "today I washed my hands, today I washed by hands, watered my garden", etc.

Creative arts – Draw a big house and yard (backdrop), ask the children to draw a picture of people, plants and animals using water. Cut out and paste into the back drop.

Centre walks – Search for water, e.g. pipes, taps, puddles, hoses, tanks, storm water drains, etc.

Interest table – A collection of labelled water samples; ask the children to bring some in, e.g. tank, creek, puddle, tap, swimming pool. Add pictures of water uses, e.g. washing the car, cleaning teeth. Include picture story books about water.

Water trough – Water and add ice cubes of different colours to melt and mix. Add polar or sea animals.

Sensory – Small water tray with corks and pebbles, wood, plastic trays, etc. for floating and sinking.

Dramatic play – Dolls clothes and equipment for washing. Clothesline for drying. Where did the water go?

Science – Put bowls of water in the sun to evaporate. Put plastic bags tightly over plant leaves to transpire. Blow a puff of breathe onto a mirror.

Teachable moments – Half flush, hands washing, rain, clouds, rainbows, puddles, condensation on mirrors, wet and dry paintings, garden watering, sweeping paved areas, bucket under tap to collect drip, etc.

Websites

- ➢ The Book Garden for picture story books about water and wise water use. thebookgarden.com.au
- ➢ Water Footprints: http://www.waterfootprint.org