

## Water Audit

<b><i>Theme</i></b>	Consumption of water
<b><i>Level</i></b>	Middle or Higher
<b><i>Topics covered in syllabus</i></b>	How much water do we use? How much water do we need? Quantity of water required to do our daily activities
<b><i>Academic Objective</i></b>	<ul style="list-style-type: none"> <li>• To understand water as a resource.</li> <li>• To learn to quantify the amount of water required for our daily needs.</li> <li>• Mathematical concepts of fractions and measurements will be exposed to them, through certain activities.</li> </ul>
<b><i>Attitudinal Objective</i></b>	<ul style="list-style-type: none"> <li>• To understand water as a finite resource.</li> <li>• To enable the child to understand the difference between need and want.</li> <li>• To learn to live within the means and respecting the available resources.</li> <li>• To identify ones responsibility in the loop of natures cycle.</li> </ul>
<b><i>Action Objective</i></b>	<p>Awareness of: Water usage by the children . Where does the school get water from? Awareness on the role of trees and availability of water to physically quantify the consumption of water Inferring from data and discussion.</p>
<b><i>Items/ Resources needed</i></b>	<p>Paper x no. of children 5 mugs - medium sized A 100 liters can 5 x 20 liters bucket black board and chalk children have to bring colour pencils to the class</p>
<b><i>Links</i></b>	<p><a href="http://www.rainharvest.co.za/2012/11/five-tips-for-saving-water-at-school/">http://www.rainharvest.co.za/2012/11/five-tips-for-saving-water-at-school/</a> <a href="https://www.dnaindia.com/node/2197814%27">https://www.dnaindia.com/node/2197814%27</a></p>
<b><i>Learnings/ outcome</i></b>	<ul style="list-style-type: none"> <li>• To understand water as a resource.</li> <li>• To learn to quantify the amount of water required for our daily needs.</li> <li>• Mathematical concepts of fractions and measurements will be exposed to them, through certain activities.</li> <li>• To understand water as a finite resource.</li> <li>• To enable the child to understand the difference between need and want.</li> <li>• To learn to live within the means. respecting the</li> </ul>

	available resources, to identify ones responsibility in the loop of natures cycle.
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### **Activity 1:**

*1 hour=( 30 + 30)*

*At the end of the day, 15 minutes per day for a week will be given to document the reading ( i.e. = 15 x 5= 75 minutes)*

*1 hour for the presentation of each on consumption of water in school.*

*Math classes can vary form 20 minutes to unextended time.*

- A story will be shared -

“There was village near Bangalore. That village had a beautiful lake. The villagers loved the lake and they used it for everyday activities. One day Bhotlu, the village cow took her calf to the lake to drink water. When she bent down to drink water, she found a fish in her mouth. The fish was sad because he did not have enough water to swim. Bhotlu ran to tell the villagers about this. The villagers came running. They all wanted to know where the water has gone. How did the lake dry up?”

- This question will be opened up to the children for further discussion. Their thoughts will be put up on the board in the form of a mind map. The discussion will be taken further and connected to themselves and their school.
- To enable them to calculate and find out how much of water they consume on a daily basis in school, they will be asked to a water audit.
- In this activity the children will be provided with a standard measured mug. They will be asked to use this mug to perform all their activities. They will be given a sheet wherein they will document the total number of mugs of water used. After a week, children will present their findings about their consumption of water in school. This will be presented to the class. They will also discuss suggestions and ideas to reduce the consumption.
- The extension of data collection and water audit can be done with the canteen, different wings of the school and at home. This activity can be extended to the middle and high-school through a project.
- Children can divided in to groups. They will be given the survey form with units of measurement instead of mugs. They will be asked to collect data on the chores done at home example washing clothes, utensils, homes and cars. They will consolidate the data and present it to the school. They will be also asked to give suggestions and ideas to work on ways to reduce the consumption of water.
- They will also make posters educating the residents of the colonies they are researching. The high-school children can also be given a project to study the concept of rainwater harvesting. They can be asked to look at ways to implement them in their school and give ideas and plans to do so.
- Activity to integrate with Math: The data collected can be used to reinforce mathematical concepts of different operations namely addition, subtraction,

- fractions, division and data handling. eg.
- Measurement of water in the mugs can be extensively used to learn fractions. Part to whole of a fraction can be explained by looking at my part of the water consumption vis-a-vis whole.

*(Anupama and Geetha Nadarajan, Facilitators, Prakriya Green Wisdom School)*