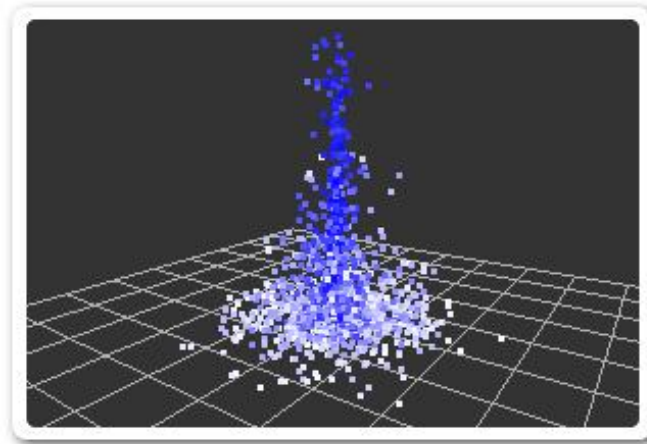


DUNMAN HIGH SCHOOL

SECONDARY TWO MATHEMATICS PROJECT 2006

Auditing Your Water Use



Water Conservation is important for several reasons. The more water we conserve, the more we have for other uses and the less money we spend on treatment and treatment facilities. The following project is designed to increase your awareness of the water you use, how water is wasted and how you can conserve water.

This project should be done in groups of 3 or 4 pupils, the objective is to be more aware of usage of water and to enable each pupil develop a good habit to conserve water. Each member of the group is to go to the website: <http://www.sec.org.sg/10litrechallenge/> and complete the 10 litre challenge and print out the result. Each member is then to select one of the 4 areas (Shower, Laundry, Flushing and Sink) to verify the result by doing simple measurements. The group should brainstorm how to go about it and write a brief description of the way you go about verifying the result.

For example if you use a bath tub every day to bath, use $\frac{2}{3}$ of the tub and if the tub capacity is 159 litres then $\frac{2}{3}$ of the tub is 106 litres.

1. Volume of water used : $\frac{2}{3}$ of tub = 106 liters
2. Number of baths taken daily: 1 per day.
3. Daily water usage for: $(1) \times (2) = 106$ litres.

Shared your results with the group and compiled them, then decide what measures to be taken to reduce on the amount of water use. Each member is to write down a pledge to reduce water consumption and the whole group to carry out the pledge for at least a week. After which each member to carry the 10 litre challenge again and print out the new result. Finally each member to reflect on the project and in particular mention how the

project has helped you to be more aware of your own usage of water and what impact it has on your daily habit of water consumption.

Suggested templates for presenting the various component of the project:

Name of member	Daily consumption of water	Daily consumption of water
	1st result	2nd result

Name of member	Description of Verification of result

Name of member	Pledges to reduce consumption of water

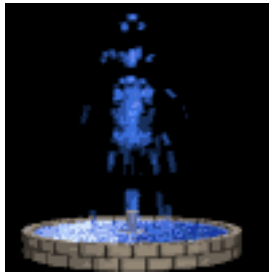
Reflections on project

Name _____

Name _____

Name _____

Name _____



Evaluation

The project will be assessed and marks to be included in Continued Assessment.

Submission of print out of results and pledges will be accorded full marks.

Components of Project	Marks
Descriptions of verification of result	12 or 16 (3 marks for each member)
Print Out of result	3 or 4 (1mark for each member)
Pledges	3 or 4 (1mark for each member)
Reflections	6 or 8 (2 marks for each member)
Creative presentation of project	5
Total	29 or 37 (to be converted to 100%)

Resources

<http://www.pub.gov.sg/home/index.aspx>

<http://www.sec.org.sg/10litreachallenge/>

<http://www.und.nodak.edu/instruct/eng/fkarner/pages/cycle.htm>