WATER LOG

PURPOSE:

PROCEDURE:

Water is a precious renewable resource. For the next 24 hours, log your family's use of water. Mathematically calculate a seven-day estimate as well as an annual estimate for your family's water use. You will get water rates from Mrs. Ramos. Be sure to include both outdoor and indoor activities. Do your best to average "seasonal" water activities. 1 liter = 0.264 gallons

1) Look at water reduction techniques that seem feasible. Apply them to your family's use of water and recalculate your family's more sustainable use of water. Again, mathematically calculate a seven-day and an annual estimate for your family's water use.
2) Discuss with your family the implications and feasibility of your suggestions.

DATA: FAMILY USE WATER LOG

Activity and amount of usage(usually measured in time)	# People #Units	Subtotal	Water Usage Rate	Daily Total	Weekly Total	Annual Total
i.e. Shower 10 minutes	X3	30minutes	19L/min	19L/min	3990L/week	3990L/week
			Total			

DATA ANALYSIS

1) Graph your family water usage for seven days and one year.
2) Graph your family water usage for seven days and one year with more sustainable water practices are put in place.
3) Calculate an approximate water bill for your family for a month. Assume that a billing month has 4 weeks. The total bill is a combination of the monthly meter base fee and the amount of water used. For billing purposes, the Water Department measures water used by hundred cubic feet or HCF. Each HCF equals 748.05 gallons. The monthly charges for a typical single-family domestic customer are: Base fee: $15.32 + First seven HCF used are billed at $2.352 per HCF + Second seven HCF used are billed at $2.551 per HCF + Each HCF used after the initial 14 HCF is billed at $2.865 per HCF. Show your work!!!!
4) Calculate the approximate water bill for your family for a year. Show your work!!! Compare to your actual water bill.

CONCLUSION

1) What insights were gained with the initial estimate, actual estimate, and sustainable estimate of your family's water use.
2) Were there any activities that consumed water that you didn't account for? Using a global perspective, what do you think the implications are of this?
3) What factors other than family size and utilization of water can increase water usage?????
4) What recommendations do you think are most realistic for you and your family?
5) Describe the legislation that protects our waters currently.
6) What is San Diego doing to encourage water conservation?
7) Do you believe that water use should be more regulated in order to protect it? Explain your answer.
8) What is xeriscaping? How does this apply to this activity?