

HOME/SCHOOL CONNECTION

Investigation 5: Water Planet

People can use different energy sources to heat water for their homes. Often they use gas or electric water heaters. Some people use solar-energy collectors on their roofs to heat water for their home use.

What energy source does your family use to heat water?

The chart below shows the estimated cost per month for heating water for a home, depending on the number of people who live in the home.

| Cost of a water heater, 160 liter, with insulation blanket | | |
|--|-----------------------|------------------|
| Number of people in household | Electric water heater | Gas water heater |
| 1 | \$17.71 | \$ 7.06 |
| 2 | \$28.93 | \$10.21 |
| 3 | \$40.15 | \$13.36 |
| 4 | \$51.37 | \$16.51 |
| 5 | \$62.59 | \$19.66 |
| 6 | \$73.81 | \$22.81 |
| 7 | \$85.03 | \$25.86 |
| 8 | \$96.03 | \$29.11 |

Ask to look at a copy of the utility bill for your home. Find the amount of gas and/or electricity your family used for a month and how much it cost. How do these amounts compare with the figures in the chart? How can you tell how much of the total utility cost is for heating water? If your family uses a solar water heater, how does the total bill compare?

Here are some ways your family might reduce hot-water use and conserve water in your home.

- Install low-flow showerheads and put aerators on the faucets.
- Put an insulating blanket on the water heater.
- Lower the thermostat on the water heater to 49°C.
- Wash clothes in warm or cold water, not hot.
- Fix leaky faucets and showerheads.

Check with your local utility company for more energy-saving tips and information about energy sources. List three more ideas for saving energy by cutting down on hot-water use. Write your ideas on the back of this sheet.