

CALCULATE THE SAVINGS

Directions: Do the calculations to discover how making small changes can lead to big savings in energy and water. Solve each question. Then compare the yearly energy and water consumption for each choice. (Note: Numbers have been estimated.) When you are done, write a pledge with three things you can do to conserve.

What does kWh mean? Energy is measured in kilowatt-hours (kWh). This unit of measure equals 1,000 watts of energy in use for one hour.

1. A traditional (incandescent) 60-watt lightbulb left on for 3 hours per day uses 66 kWh of energy per year. A compact fluorescent lightbulb (CFL) uses 15 kWh for the same amount of time.

A. Which choice uses less energy? _____

B. How much energy can be saved by switching? _____

2. A 5-minute shower uses about 10 gallons of water. A bath uses about 36 gallons of water.

A. If you take a 5-minute shower each day, about how much water do you use in one year (365 days)? _____

B. If you take a bath each day, about how much water do you use in one year? _____

C. Which choice uses less water? _____

D. How much water can be saved by switching? _____

3. A window fan left on for 4 hours per day during the summer months uses about 74 kWh of energy per year. A room air conditioner left on for the same amount of time uses about 332 kWh.

A. Which choice uses less energy? _____

B. How much energy can be saved by switching? _____

4. You brush your teeth 2 times a day for 2 minutes each time. Assume water comes out of the faucet at 1 gallon per minute.

A. You leave the water running while brushing. How much water do you use each day? _____

How much water do you use in one year (365 days)? _____

B. You run the water for 1 minute to wet and rinse your toothbrush both times you brush.

How much water do you use each day? _____

How much water do you use in one year (365 days)? _____

C. Which choice uses less water? _____

D. How much water can be saved by switching? _____



REMEMBER:

Turn off the lights when you leave a room.