

Home Connections



There are many simple ways that you can save energy and money at home, including adjusting the heating or air conditioning thermostat, using compact fluorescent bulbs, caulking doors and windows to minimize drafts, lowering the setting of the water heater, turning off lights and appliances that are not in use and many more ideas! This Home Connection helps your family analyze energy usage practices in your home.

Family Name: _____ Student: _____ Teacher: _____

Heating and Cooling	Yes	No
Can the temperature of your thermostat be adjusted to conserve energy?		
Is your thermostat programmable so it can automatically adjust to day and night setting?		
If you have an outdoor air conditioning unit, is it in shade most of the day to help save energy?		
Are trees planted around the south side of the house to provide shade and a cooling effect in the summer?		
Are evergreen trees planted on the north and west sides of the house to serve as a windbreak and to prevent heat loss from the house in cooler months?		

General Thermostat Operation- Energy.gov

You can easily save energy in the **winter by setting the thermostat to 68°F while you're awake** and setting it lower while you're asleep or away from home. By turning your thermostat back 10° to 15° for 8 hours, you can save 5% to 15% a year on your heating bill.

In the summer, you can follow the same strategy with central air conditioning by keeping your house warmer than normal when you are away, and lowering the thermostat setting to 78°F (26°C) only when you are at home and need cooling.

A common misconception associated with thermostats is that a furnace works harder than normal to warm the space back to a comfortable temperature after the thermostat has been set back, resulting in little or no savings. In fact, as soon as your house drops below its normal temperature, it will lose energy to the surrounding environment more slowly. The lower the interior temperature, the slower the heat loss. So the longer your house remains at the lower temperature, the more energy you save, because your house has lost less energy than it would have at the higher temperature. The same concept applies to raising your thermostat setting in the summer -- a higher interior temperature will slow the flow of heat into your house, saving energy on air conditioning.

Lights

Are there light fixtures where you could install compact fluorescent light bulbs to save energy?		
Do you turn off lights when you leave a room?		

Compact fluorescent light bulbs can save more than \$40 in electricity costs over its lifetime. CFL's use about 75% less energy than standard incandescent bulbs and last up to 10 times longer. They also produce about 75% less heat, so it's safer to operate and can cut energy costs associated with cooling.

*****Fluorescent light bulbs must be disposed of properly because they contain very small amounts of mercury. For more information go to [http:// www.epa.gov/bulbrecycling](http://www.epa.gov/bulbrecycling).**

Appliances		
Are radios, TVs, DVD players, computers and so forth turned off when not in use?		
Many appliances, such as TVs and DVD players that use remote controls are not really turned off when they are standby mode. They continue to use energy in the standby mode. Are those appliances plugged into a power strip or smart strip so they can easily be turned off?		
Phantom Loads- Energy.gov		
<p>Many appliances carry a "phantom load." A phantom load is any appliance or electronic device that uses energy even when it is turned off. The "off" button on many appliances may not really mean "off," instead, it means "standby."</p> <p>Appliances with phantom loads are appliances with remote controls, such as TVs, DVDs, and audio equipment. They may have a continuous digital display, such as a clock. Other appliances with phantom loads include computers and printers.</p> <p>Phantom energy load loss can be minimized by using a power strip. Plug all components of a computer, TV, and so forth into the strip. Turn off the power strip with a single switch. Anything plugged into the strip now is truly turned off. Another option is using a Smart Strip. Smart power strips work to reduce your power usage by shutting down power to products that go into standby mode. They are a convenient option because when you powered off your TV via remote, it would turn everything truly off instead of in standby mode and you don't have to go turn off a power strip. Using these practices saves money for your home. Statistics vary, but experts say standby power consumption in average homes ranges from 5 percent to 10 percent of your household energy consumption. It can also account for about 1 percent of worldwide carbon dioxide emissions [source: Lawrence Berkley Nation Laboratory]. You can also unplug rarely used appliances.</p>		
Windows and Doors		
Do you use weather stripping and caulking to reduce drafts around windows and doors?		
Water		
Is the hot water heater set at a temperature that is warm enough to provide hot water, but not set so high that it wastes energy or could burn a child? (120 degrees is the recommended setting for home hot water heaters).		
Does the hot water heater have an insulated cover to help save energy?		
Do you wash clothes in cold water to save energy?		
Other Energy Saving Practices		
Do you clean the lint trap on the clothes dryer before using it to help it run more efficiently and save energy?		
Do you run the drying cycle on the dishwasher or let dishes air dry?		
Do you wait for a full load before running the dishwasher?		
Do you regularly service the heating and cooling units so they run more efficiently and save energy?		
Do you routinely clean or replace furnace and ventilation filters to increase efficiency and to reduce allergens in the air?		

For more Home Energy Savings Tips, visit: energy.gov and search the **Energy Savers Guide**. (<http://energy.gov/energysaver/articles/energy-savers-guide-tips-saving-money-and-energy-home>).