

HOME ENERGY SURVEY

**SAVING ENERGY
SAVES MONEY AND
THE ENVIRONMENT!**

**STEPS TO SAVE
ENERGY IN
YOUR HOME.**

ENERGY QUEST

To learn more about energy, visit
the Energy Quest website at:
www.energyquest.ca.gov

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HOW MUCH ENERGY DOES YOUR HOME NEED?

Did you know saving energy at home can help the environment and save your family money all at the same time? The less energy we use to heat, cool, and light our homes, the less pollution is put into the air and water by power plants, which make the electricity for our homes. And the less energy we use, the less we have to pay for our energy bills.

So how can you save energy at home? Do a home energy survey and find out what is costing more money and using more energy than it should. Below is a simple survey you can start with. Once you've practiced, you can go to Web sites listed at the end of this activity to find more thorough surveys.

BEFORE YOU START

Before you start your survey, it is helpful to go over what you do each day that uses energy in your home. Look at the sample schedule below and then make a schedule for yourself to show when you need energy throughout the day.

Time	Activity	Time	Activity
7:00	Turn off alarm clock, turn on bedroom light. Turn on bathroom light, take shower, brush teeth, turn off bathroom light. Get dressed, turn off bedroom light. <i>Note:</i> Is the heat or air conditioning on?	4:15	Turn on bedroom light, do homework on computer while listening to music.
7:30	Turn on kitchen lights, drink orange juice, make toast. Turn off lights.	6:00	Eat dinner and help clean up kitchen. Turn off kitchen lights.
8:00	Ride bus to school.	7:30	Do more homework on computer, listen to music.
3:15	Arrive home. Turn on lights and TV in living room. Turn on kitchen lights, get snack from fridge.	9:30	Turn on bathroom light, brush teeth, wash face. Turn off bathroom light, get in bed, turn off bedroom light. <i>Note:</i> Is the heat or air conditioning on?

NEXT STEPS

1 Now that you know how you use energy in your home, you can make a plan to save energy. The Energy Commission's Consumer Energy Center (www.consumerenergycenter.org/) can help you with energy-saving tips as you make your plan. Make sure everyone in your home is aware of the plan and will follow it. You can check your utility bills each month to see how your plan is working. How will you have to change your plan as the weather changes? Most important—what can you do with the money you save?

2 You can take the energy survey one step further by doing a more detailed energy audit using online energy calculators. The Web sites listed here will help you:

- Lawrence Berkeley Laboratory's Home Energy Saver lets you do your survey online and calculate actual energy costs based on your local power company's rates. hes.lbl.gov/
- Thirteen Ed Online will help you create your own home energy survey. www.thirteen.org/edonline/wue/energy2_procedures.html
- The Alliance to Save Energy can help you save energy, and you can learn about energy-saving superheroes. www.ase.org/section/_audience/consumers/kids/
- Energy Star at Home, an interactive program by Energy Star®, has many great ideas for saving energy. www.energystar.gov

3 Ask your teacher or your group leader to see how you can help other people in your community, such as the elderly, to do energy audits in their homes to help them save money, energy and the environment. Check your local utility's Web site to see if it has more information on home energy audits.

4 Audit your school. Earth Team can show you how. www.earthteam.net/projects/action_projects/energy/school_audits.html

You can also start an Energy Patrol at your school. The California Energy Commission's Energy Quest Web site has more information. www.energyquest.ca.gov

High school students can use the Environmental Protection Agency's Climate Change Emission Calculator Kit to study the link between everyday actions at school and greenhouse gases. www.epa.gov/climatechange/wycd/school.html

Note: This activity has been adapted from Earth Care's Home Energy Audit for Kids, which is available at www.earthcarecanada.com/, and the "Inspiring Change" lesson plan developed by Climate Change North, www.climatechangenorth.ca

HOME ENERGY SURVEY

Now that you have an idea of when and where you use energy in your home, it's time to work with your family and complete the home energy survey. This survey will help you find out where your family already saves on energy and what it can do to save more energy. Ask an adult for help with anything you don't understand.

SAFETY FIRST!

Be sure an adult helps you to check appliances.

Ways to save energy in my home

	Always	Sometimes	Never
We turn off lights, computers, televisions, radios, games, etc. when they are not in use. We turn off the lights when we leave a room.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We turn down the heat or air conditioning when we are not home or at night.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We use Energy Star® appliances (refrigerator, dishwasher, washer, clothes dryer, etc.) and electronics (cordless phone, DVD player, computer printer, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We run the washer, dryer and dishwasher only when we have a full load.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When possible we hang clothes outside to dry.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Our water heater is set low (close to 120° F).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We take 5-minute showers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We use fluorescent light bulbs or lighting rated by Energy Star®.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We use a microwave or toaster oven for cooking small amounts of food.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We use rechargeable batteries.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We check the furnace and the air conditioner to be sure they work well and the filters are clean.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The faucets are in working order (no drips or leaks).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TOTAL	_____	_____	_____

See the back of this sheet for an evaluation.

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EVALUATION

When you are done with the survey, answer the following questions:

- How often is energy in your home wasted? (For example, the computer is on when no one is using it, or the heat is on when no one is home.)
- How can you reduce your energy use for these energy wasters? Does it seem difficult or easy to make this change?
- Will everyone in the home help to make this change?
- What things can't be changed? (For example, you shouldn't turn off the refrigerator.)
- Can you buy something now that will save money in the future? (For example, replacing an old air conditioner with a new, Energy Star® rated air conditioner will save a lot of energy—and money.)
- If you can, take a look at the household utility bill for the last year.
 - What did you find out about your energy use from these bills?
 - How do the bills change throughout the year?
 - Which month had the highest bill? Why was this so?
- Would it be better to save energy in just one area or in several different ways?
- Besides reducing our energy use, how can you save energy? For example, if windows and doors are sealed with caulk or weather stripping, less energy will be needed for heating and cooling. Also, furnaces and air conditioners run better if the filters are changed regularly.

Note: Energy Star® is a voluntary labeling program that identifies and promotes energy-efficient products. It is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy. For more information, visit www.energystar.gov.

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