



## Energy Audit Activity

**Grade:** 7<sup>th</sup>

**Objective:**

The purpose of this activity is to educate students on the efficiency appliances and the energy usage of daily items.

**Materials:**

Handout

Pen/Pencil

Household

**Terms:**

Efficiency

Watts

Energy

Audit

**Introduction:**

How energy efficient is your home? Do this energy audit with your family and find out if what you already know about and find out new ways to save energy. Check the answer box that best matches you and your home. There are no wrong answers, so be honest. As each home is different, only answer the questions that apply to your household.

**Procedure:**

1. *Insulation:* If you have an attic, is it insulated?

\_\_\_ Yes

\_\_\_ No

2. *Filters:* Air Conditioning and Heating Furnaces have filters. Check your filters:

Are they dirty or clean? Ask your parents when they were last changed. Changed in the last...

\_\_\_ 3 months

\_\_\_ 6 months

\_\_\_ Last Year

\_\_\_ Never Changed Before

3. *Thermostat:* Check your thermostat and record what temperature it is at here: \_\_\_\_\_

What temperature is your thermostat set at when you are home?

In the winter (cool months):

\_\_\_ 73 or more

- ☐ 70-72 degrees
- ☐ 69 or less
- ☐ We have no furnace or heater

In the summer (warm months):

- ☐ 74 degrees or less ☐ 75-77 degrees ☐ 78 degrees or more (5pts)
- ☐ We have no air conditioner

4. *Electricity*: Search your house for appliances and electronics with the Energy Star® symbol. How many did you find?

- ☐ No Energy Star® labels found
- ☐ 1-2 Energy Star® labels found
- ☐ 3 or more Energy Star® labels found

5. *Thermostat*: When you get too cold or too hot at home you...

- ☐ Turn the heat up when you are cold or the air conditioning up when you are hot
- ☐ Put on a sweater when you are cold or wear less clothing when you are hot

6. *Laundry*: At what temperature setting do you wash your clothes?

- ☐ Mostly HOT water
- ☐ Mostly WARM water
- ☐ Mostly COLD water

7. *Laundry*: How often do you use your dryer?

- ☐ Always dry clothing in the dryer
- ☐ Sometimes dry clothes in dryer but most days hang clothes to dry
- ☐ Never, always hang clothes on clothing line to dry

8. *Hot water use*: Time your next shower- how much time did you spend in the shower?

- ☐ 20 minutes
- ☐ 10 minutes
- ☐ 5 minutes

9. *Lighting*: Count the number of compact fluorescent light (CFL) bulbs in your house.

- ☐ None ☐ 1-3 CFL bulbs ☐ 4 or more CFL bulbs

10. *Weather-stripping*: Open your front door and check the condition of the weather-stripping between the door and the doorframe.

- ☐ None ☐ Worn out ☐ Good condition

11. *Phantom Loads*: Check your house for appliances plugged in that are not in use

(cell phone chargers plugged in and not charging a phone, VCR that is plugged in and not being used, toaster oven plugged in while not in use etc.)

- ☐ Appliances plugged in when not in use

- ☐ 1-4 appliances unplugged in when not in use  
☐ No appliances plugged in when not in use and/or power bar being used

12. *Dishwasher*: Check your dishwasher after it has been run. Is it....

- ☐ Partially empty  
☐ Mostly Full  
☐ Full  
☐ No dishwasher

13. *Cooking*: How often does your family keep lids on pot and pans when cooking?

- ☐ Almost never ☐ Sometimes ☐ Always

14. *Water Heater*: Find the Energy Guide label on your water heater and look at the efficiency rating. How much energy does it use compared to similar models?

- ☐ Uses the most energy ☐ Uses average energy ☐ Uses the least energy