

Energy Conservation Project

Get Involved in a Win-Win Activity For Your Household!

We, as teachers, students, and parents, can help reduce the effects of global warming and at the same time, promote sustainability of resources on our earth. Many small choices made daily can reduce our use of fossil fuels and therefore the production of greenhouse gases, conserve our energy resources, and lower our energy costs.

Directions:

First step review and do the home energy survey in order to bring a greater awareness of our individual/family energy consumption. Step two, follow this four week project very carefully.

“Normal” Energy Use

Part I (the 1st 2-week period):

- 1) Ask your parents where the gas and electric meters are located, and that they help you learn how to read the meters.
- 2) Record your starting point by reading gas and electric meters and writing down the numbers. (Use the guide on how to read your meters and the chart for recording numbers that are attached.) Gas is recorded in “Therms” and electricity is recorded in “Kilowatt-hours.” Insert the important dates into the chart.
- 3) Go about your two weeks as usual monitoring what fixtures and appliances your family uses over the course of 2 weeks.
- 4) During these two weeks think about and talk with your parents about ways your home could be more energy efficient, but make no changes during these two weeks. Refer to the list at the end of this packet. Just plan the changes, gather any necessary materials and be prepared to make the changes on the exact day two weeks from your start day.
- 5) Be sure to record the gas and electric use a 2nd time on **the exact day two weeks from the start**.
- 6) Subtract the 1st readings from the 2nd readings to find out how many Therms (for gas) and Kwh (for electricity) that you and your family used over these 1st 2 weeks. (This second reading and recording is also the start point for the next two weeks.)

Energy Use after Making Energy Efficient Changes

Part II (the 2nd 2-week period):

- 1) On **that very day, two weeks from the start day**, immediately make the changes that you and your family have agreed on in order to be more energy efficient. If it's a change in behavior, begin the changes and maintain these over the two-week period.
- 2) Monitor what fixtures and appliances your family has used over the course of the next 2 weeks.
- 3) On the **exact day that marks 4 weeks of the project**, the end of the 2nd two-week period, record the gas and electric meter reading a third time.
- 4) Subtract the 2nd readings from the 3rd readings to find out how many Therms (for gas) and Kwh (for electricity) that you and your family used over these 2nd 2 weeks.
- 5) Reflect on your energy consumption:
Use the attached pages to write down your thoughts. This can be done as a family.

Meter Readings

1 st <u>2-Week Period</u>	Gas		Electric	
	Date	Therms	Date	Kwh
1 st reading:	Start date:		Start date:	
2 nd reading:	Two-week date:		Two-week date:	
Difference:				
2nd <u>2-Week Period</u>				
2 nd reading:	Same two-week date:		Same two-week date:	
3 rd reading:	Final Date (end of 4 weeks):		Final Date (end of 4 weeks):	
Difference:				

Reflection of Energy Consumption

1) Was there a change in how much energy was consumed from the 1st two weeks to the 2nd two weeks? If so, how was there a change?

2) What changed in how you used energy?

3) If you could do this survey again in order to improve the reduction of energy use, what would you do and why?

4) What have you learned about your and your family's energy use?

5) Do you think that through your study of Global Warming that you will make any steps towards reducing energy? If yes, what would they be? If no, why not?

Some things to check for:

1. Light bulbs: replace all your bulbs with the new energy efficient. Being sold for very little at: Wall Mart, PW Foods, and other places.
2. Drafts: around doors, windows
3. Water Heater setting: can be lowered 15 degrees
4. Keep the thermostat a little lower than use to and wear warmer clothes while indoors
5. Insulation in the home
6. Hang dry clothing
7. limited use of dishwasher
8. regulating use of lights in rooms and outside spaces
9. limit use of tv, technology
10. Solar heat pools
10. Stop electrical "leaks" by unplugging appliances when possible.