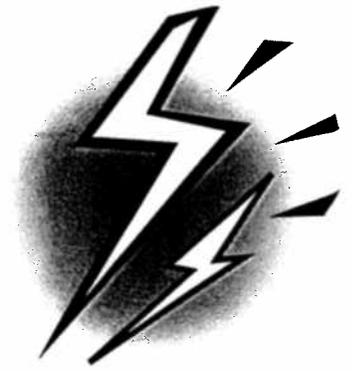


CORE ACTIVITIES

ENERGY ACTIVITY WORKSHEETS



1. SURVEY.

Take the Home Energy Survey to your house, and hang it where everyone in the house can see it. Over one day on a weekend, complete the survey. "Types of Energy" includes such things as electricity, gas, oil, coal, and wood.

Bring in your family's most recent heating and electricity bills.

- a) What is the total for your family's: Electricity Bill? _____
 Other Energy (Gas, Oil, Coal) Bill? _____
- b) Calculate the group's average for the: Electricity Bill? _____
 Other Energy (Gas, Oil, Coal) Bill? _____

2. QUESTIONS.

- a) What things in your house use energy all the time? _____
- b) What things did you say were necessary and why? What things were not necessary and why? Discuss this with your group. _____
- c) How many hours of electricity is your family using in one day? Go to the _____ **ENERGY POSTER** and find out how much energy the average Canadian uses in one year. Why do you think Canadians use more energy than people in other countries? _____
- d) How many hours of electricity does your group and their families use everyday? _____
- e) In the list below, which things could you replace with something that uses less or no energy? For example a vacuum cleaner could be replaced by a broom (for floors with no carpet). A broom wouldn't use any energy (except human!) and sweeping would take the same amount of time.

	Alternative	Benefits	Time Spent
Garbage Disposal	_____	_____	_____
Dishwasher	_____	_____	_____
Can Opener	_____	_____	_____
Electric Beater	_____	_____	_____
Food Processor	_____	_____	_____
Electric Juicer	_____	_____	_____
Coffee Maker	_____	_____	_____
Dryer	_____	_____	_____
Other	_____	_____	_____

Of all the energy-users you listed, which things could you turn off, or use less often?

- f) Refer back to your Student Sample Survey. Create a chart for all the home entertainment devices you use. List why you used the device, what other things you could have substituted for it, and whether your alternative would have saved energy.



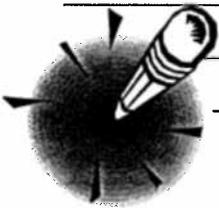
Home Energy Survey

ITEM	TYPE OF ENERGY	IS IT NECESSARY?	WHY ARE YOU USING IT?	TIME USED
Home Heating				
Home Cooling (A/C, Fan)				
Hot-water Heater				
Lights (total in house)				
Stove (cooking)				
Stove (heating)				
Microwave				
Toaster/Toaster Oven				
Garbage Disposal				
Dishwasher				
Refrigerator				
Other Kitchen Appliances				
Television				
Computer				
CD/tape player/stereo				
Computer Printer				
Fireplace				
Telephone				
Washing Machine				
Dryer				
Vacuum Cleaner				
Hair Dryer/Curling Iron				
Iron				
Other				

ENERGY ACTIVITY (CONTINUED)

3. a) List all the things that use energy in the comic strips for 100 years ago and now.

- b) We use more energy today than we did 100 years ago. In some cases it has made our life easier. But now we have an energy problem. We are damaging the earth and running out of safe energy sources. We have to use less energy. Rewrite the story and draw a comic strip that shows less energy use in your typical day.



4. Make a list of suggestions of ways in which you can reduce your Energy Footprint.



*Record them
in your portfolio.*

GRAPHING DATA ACTIVITIES

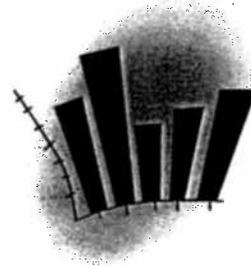
ORGANIZING ENERGY DATA ACTIVITY

CLASS ENERGY DATA FROM DATA ORGANIZER

HOME ENTERTAINMENT DEVICES AND HOURS USED

DEVICE	# OF ENTERTAINMENT DEVICES	TIME USED
CD player	_____	_____
Stereo	_____	_____
Radio	_____	_____
Cassette Player	_____	_____
Television	_____	_____
VCR	_____	_____
Computer	_____	_____
Other	_____	_____
TOTAL =		

Represent the class total hours used for each device from the energy data on a horizontal bar chart. Remember to label your axes and give your graph a title.



ANALYZING YOUR GRAPH

1. What device did the class as a total use the most? _____
2. What is the most common home entertainment device in your class data? _____

3. What home entertainment device used the most hours? _____
4. Using the television as an example, what is the average time spent watching television?

5. How does your choice of entertainment affect your Ecological Footprint?

6. 100 years ago, how do you think students your age entertained themselves? Do you think they had more or less fun? Why? Do you think their Ecological Footprint was larger or smaller than yours? Why? _____

