

Representing Data

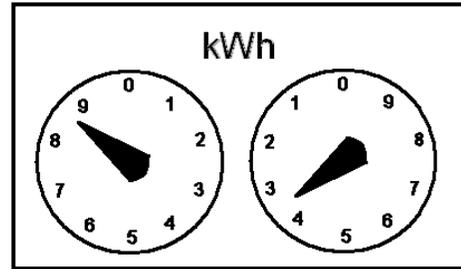
1. Select 5 to 7 categories of activities that show how you spend your time each week. Keep track of your activities for a week, and how much time you spend on each one. Present your findings using a table and a circle graph.

Activities	Time Spent						
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

To learn more about creating circle graphs, follow the Web Links on the same page where you found this file on the *MathLinks 8 Adapted* Online Learning Centre.



2. Find the electric meter that tracks how much electric energy your home uses. Use the Internet to learn how to read your meter or ask someone to help you. To learn how to read different types of electric meters, follow the Web Links on the same page where you found this file on the *MathLinks 8 Adapted* Online Learning Centre.



a) Record the reading in kilowatt hours (kWh). Take a second reading after 1 week. Subtract to determine your family's use of electric energy for the week.

First reading: _____ Second reading: _____

Electric energy used:

b) Select 6 electric devices that you think are important users of electricity in your household.

- Find the power rating of each electric device. This is measured in watts (W) and should be printed on the device. If you need to move a device to see its power rating, ask an adult for help.
- Estimate how many hours each device is used per week.
- To find the electrical energy used for each device, in kWh, use the formula

$$\frac{\text{Power (W)}}{1000} \times \text{number of hours}$$

- Record the data for your 6 devices in the table.

Electric Device	Power Rating (W)	Hours Used	Electric Energy $\left(\frac{\text{Power (W)}}{1000} \times \text{number of hours} \right)$

c) Draw a graph to show the energy use for the devices you listed compared to the total electric energy use for the week.

For information about which type of graph to use for displaying data, follow the Web Links on the same page where you found this file on the *MathLinks 8 Adapted* Online Learning Centre.

d) Make a realistic plan for how you might reduce electric energy consumption in your home. Present your suggestions in the form of a report.



3. Compare your sleep patterns when you have a structured schedule, such as attending school, to those when you have an unstructured schedule, such as during vacation.

a) Record the time you spend sleeping during a school week, in relation to a 24 h day. Be sure to include any naps.

Days	Hours Sleeping
Sunday	
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	

b) Record the time you spend sleeping during a week of vacation. Be sure to include any naps.

Days	Hours Sleeping
Sunday	
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Sunday	

c) Using grid paper, create an appropriate graph or graphs to display your results. Give 1 reason why you chose the type of graph that you did.

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d) Make a list of the similarities and the differences of the 2 sleep patterns.

