

9 Science (10FI)

Learning Opportunities

May 18 – 22

Reducing Energy Consumption

There are many ways to reduce energy consumption. Appliances that have a lower power rating will use less energy. Decreasing the amount of time an appliance is used will also reduce the amount of energy being used.

Sometimes electricity is being used and we may not realize it. Many electrical devices stay in standby mode when they are not being used otherwise, it takes a significant amount of time for them to become operational when turned on. Other devices have clocks that are always on or must be ready to receive a signal (eg. cordless phone or answering machine).

Some people choose to be self-sufficient. This means that they do not get electricity from the power company.

- What are some ways that they could still get some electricity to use in their homes?
- What are the benefits and drawbacks of choosing to be self-sufficient?

How could you reduce your energy consumption?

In some locations, electricity is either not available or is available in limited amounts. We can also experience power outages that can affect how we do things based on the length of the outage and whether we have access to another source of electricity.

- Make a list of all your uses of electricity throughout the day and note where savings can be made.
- If you did not have electricity, how could you complete these tasks?
- Is there another way to complete any of these tasks that uses less or no electricity? (Think: How are your tasks completed in other parts of the world or what was done before electricity was as common as it is now?)

Textbook activities

Look at the Sample power bill and answer the questions provided. The sample is from 1999, but power bills still contain the same basic information.

Look at the sheet called Making energy conservation choices. If you could have only 10 appliances/items beyond heat and light sources which 10 would you choose? You can add some items to the list to make it more up to date, but still limit yourself to 10. Ask someone else to choose 10 as well. Are their choices the same as yours?