

Post Secondary Lesson Plan

Are you an Energy Saver STAR?

Overview	<p>Students will learn how to use energy more efficiently at home.</p> <p>Students will become aware of all the items in the home that use energy, and compare to items their parents or grandparents used as children.</p>
Objectives	<p>After completing the activity, students will be able to:</p> <ul style="list-style-type: none">• Observe, record, and interpret data.• Use charts, tables, and graphs. <p>Identify how energy is measured, and read a power meter.</p> <ul style="list-style-type: none">• Communicate ways that changes in behaviors can affect energy consumption.
Standards	<p>Students are assigned to an Energy Team in the classroom. Students collect data in their own homes. They meet in their Energy Teams to work on science and math problems directly related to the project, and to share their findings from their home energy survey. Students will create tables, graphs, charts and summaries of this data to be shared in a classroom presentation. Students will evaluate other Energy Teams for valid data and effective presentation.</p>
Materials	<p>Materials needed for this lesson are a computer with internet access, possibly PowerPoint, as well as creative minds, a poster-board with tables, graphs, and charts.</p>
Procedures	<ol style="list-style-type: none">1. Before beginning, students should have be familiar with 'Chartle.net'.2. The class brainstorms a list of product categories that use electrical energy. Volunteers will check the yellow pages for the number and variety of sub-headings under the heading electrical? They discuss and define terms such as Energy Hog, energy efficiency, and vampire devices---items that are always plugged in using a small amount of current. Students then each make a list of all items which use energy in their home with items listed under the category by room where it

	<p>is found (i.e. KITCHEN: toaster, microwave, stove BATH: hair dryer, curling iron, electric toothbrush LIVING: TV, stereo, overhead light, lamps).</p> <ol style="list-style-type: none"> 3. Students are asked to complete a chart by using 'Chartle.net' covering 7 days of electric usage in 1 room at home. Name the room at the top of the chart, and then make a list of all energy-using items in that room. Show whether item is plugged or unplugged during non-use, and an approximate amount of time the item is used each day for one 7-day period. Make one column for vampire devices. 4. Students ask their parents or grandparents which of these items were used and not used in the home when they were the student age. Students compare the differences and put P by items parents had and G by items grandparents had. Each compares differences and determine how home energy use has changed over time. 5. Students chart individual findings, and share this information with their Energy Team members.
<p style="text-align: center;">Evaluation</p>	<p>Students will be required to give a presentation of their Energy Saving Plans to the class on an assigned date and it must include a chart from Chartle.net, and another visual aid.</p>