

LESSON PLAN: Energy Information

Michigan Curriculum Framework

Middle School

- **Benchmark SCL.1.1.MS.1** – Generate scientific questions about the world based on observation.
- **Benchmark ELA.11.MS.1** – Generate questions about important issues that affect them or topics about which they are curious; narrow the questions to a clear focus; and create a thesis or a hypothesis.
- **Benchmark ELA.11.MS.4** – Use different means of developing and presenting conclusions based on the investigation of an issue or problem to an identified audience.

High School

- **Benchmark SCL.1.1.HS.1** – Ask questions that can be investigated empirically.
- **Benchmark SCL.1.1.HS.5** – Discuss topics in groups by making clear presentations, restating or summarizing what others have said, asking for clarification or elaboration, taking alternative perspectives and defending a position.
- **Benchmark ELA.11.HS.1** – Generate questions about important issues that affect them or society, or topics about which they are curious; narrow the questions to a clear focus; and create a thesis or a hypothesis.
- **Benchmark ELA.11.HS.4** – Research and select the medium and format to be used to present conclusions based on the investigation of an issue or problem.

Lesson Outcome

The student will conduct research using Consumers Energy’s Web site to gather energy information for a class presentation.

Rationale/Purpose for Lesson

Consumers Energy’s Web site contains valuable information on various energy-related topics. This lesson allows students to explore the Web site and gather helpful information that is applicable to their everyday life. Students will explore topics such as safety, energy efficiency, renewables and Michigan’s energy use. They will practice using the Internet as a research tool and have experience processing information and conveying important information by presenting in front of the class.

Resources/Materials Required

- Access to the Internet, specifically www.consumersenergy.com.
- Copies of “Energy Information” student instruction sheet.

- Materials for presentations, such as computer use for slideshow presentations, poster board, markers or paper for brochures and posters.

Introduction

- Ask students where they go when they need to find information; where do they go to research topics? Discuss various research materials such as encyclopedias, libraries, the Internet, etc. Explain that although using Internet search engines may be helpful, other Web sites such as company pages related to the research topic can provide a great deal of information.
- Next, ask students what questions they have about energy. Discuss what they already know about energy and generate a list of what else they want to know about energy. Explain that they will have an opportunity to explore some of the questions they have.

Procedures

- Distribute the “Energy Information” student instruction sheet. Break the students up into groups of three or four. Instruct each group to select a research topic from the list of questions generated in the introduction. (Some suggested topics are listed on the student instruction sheet.)
- Provide students with computer time to complete steps 1-3 on their instruction sheet.
- After students have conducted research on the Internet, allow the groups time to prepare presentation materials.
- Have students give a presentation to the class about what they learned from their research.

Closure

After all of the presentations have been given, ask students how their groups worked and what they learned.

- How did the groups tackle their assignment? Who did the research? Who prepared the presentation materials? Etc.
- What did they learn about the research activity? Do they have any new ideas about conducting research in the future?
- What did they learn about energy from their own research and from other presentations?

Extension

- Have students present to other grades or classes in the school.
- Have a “Learn About Energy” display available during lunch or for a special evening event where students present their findings and presentation materials.

Energy Information

A Consumers Energy Web site exploration

Whether at home or school, we use electricity and natural gas every day. The Consumers Energy Web site is filled with all sorts of useful information about energy, and it probably covers some things you *didn't* know.

In this activity you will conduct research on an energy-related topic and present your findings to your classmates. The following steps will help guide your research and presentation.

1. Select a topic to research. What do you want to learn about energy? Suggested topics include safety, renewable energy, energy efficiency, Michigan's energy use and what to do in case of emergencies.
2. Visit www.consumersenergy.com to begin your research. From the home page, click on the tabs "for home" or "for business" and let the exploration begin. The Web pages listed under each tab contain valuable information for an energy consumer. Many brochures also are available on the Web site.
3. Compile all data and information related to your research topic. Form a main idea or theme that you would like to communicate with your findings.
4. Prepare presentation materials to present your findings to the rest of the class. Presentation ideas include creating a computer slideshow, a poster, a brochure, a newspaper article, etc. Each presentation should include the following information:
 - a. Topic researched, including your initial question
 - b. Steps you took to conduct your research
 - c. What information you found
 - d. The importance of your research topic and how it applies to all energy users
 - e. What you learned from your research, both from the process of conducting research using Consumers Energy's Web site and by the contents offered by the Web site.
5. Rehearse your presentation.
6. Present to the class!