

Saving Energy Lesson Plan

Consumers Energy's Saving Energy Lesson Supports the Michigan Grade Level Content Expectations and Common Core State Standards

Kindergarten SCIENCE Inquiry Analysis and Communication S.IA.00.12 Share ideas about science through purposeful conversation 0 S.IA.00.13 Communicate and present findings of observations 0 Inquiry Process S.IP.00.11 Make purposeful observation of the natural world using the appropriate senses 0 • S.IP.00.12 Generate questions based on observations SOCIAL STUDIES Geography **Environment and Society** K-G5.0.1—Describe ways people use the environment to meet human needs and wants ENGLISH LANGUAGE ARTS Writing Standards (W) Research to Build and Present Knowledge W.K.8—With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question Speaking and Listening Standards (SL) **Comprehension and Collaboration** SL.K.2—Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood • SL.K.3—Ask and answer questions in order to seek help, get information, or clarify something that is not understood o SL.K.6–Speak audibly and express thoughts, feelings, and ideas clearly

Language (L)

Conventions of Standard English

 $\,\circ\,$ L.K.1 – Demonstrate command of the conventions of standard English grammar and usage when writing or speaking



| First Grade | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|
| SCIEN | CE | | | | | | | | |
| Inquiry Analysis a ° ° | and Communication S.IA.01.12 Share ideas about science through purposeful conversation S.IA.01.13 Communicate and present findings of observations | | | | | | | | |
| Inquiry Process o o | S.IP.01.11 Make purposeful observation of the natural world using the appropriate senses S.IP.01.12 Generate questions based on observations | | | | | | | | |
| | L STUDIES | | | | | | | | |
| P4.2 Citizen Invo | , Decision Making, and Citizens Involvement Ivement P4.2.2 Participate in projects to help or inform others | | | | | | | | |
| ENGLI | SH LANGUAGE ARTS | | | | | | | | |
| o W.1. | Is (W) d and Present Knowledge .8—With guidance and support from adults, recall information from experiences or gather information from ed sources to answer a question | | | | | | | | |
| Comprehension o SL.1 | stening Standards (SL) and Collaboration 3—Ask and answer questions about what a speaker says in order to gather additional information or something that is not understood | | | | | | | | |
| Language (L) Conventions of S o L.1.: speakir | 1 – Demonstrate command of the conventions of standard English grammar and usage when writing or | | | | | | | | |



Second Grade

SCIENCE

Inquiry Analysis and Communication

- o S.IA.02.12 Share ideas about science through purposeful conversation
- S.IA.02.13 Communicate and present findings of observations

Inquiry Process

- S.IP.02.11 Make purposeful observation of the natural world using the appropriate senses
- S.IP.02.11 Make purposeful observation of the natural
 S.IP.02.12 Generate questions based on observations

SOCIAL STUDIES

Public Discourse, Decision Making, and Citizens Involvement

P4.2 Citizen Involvement

 $\circ~$ 2 – P4.2.2 Participate in projects to help or inform others

ENGLISH LANGUAGE ARTS

Writing Standards (W)

Research to Build and Present Knowledge

o W.2.8-Recall information from experiences or gather information from provided sources to answer a question

Speaking and Listening Standards (SL)

Comprehension and Collaboration

• SL.2.3—Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue

Language (L)

Conventions of Standard English

 $\,\circ\,$ L.2.1 – Demonstrate command of the conventions of standard English grammar and usage when writing or speaking



Lesson Outcome

Students will identify how they can save energy around their home. They will use simple observations to help them understand how much electricity they use every day. They will discuss the steps they can take to conserve energy by reducing wasteful energy uses.

Rationale / Purpose for Lesson

This lesson will provide students an opportunity to investigate how energy in the form of electricity is used in their home. Students will gain an appreciation of how often they use electricity and why it is such an important resource. This lesson will allow students to think critically about the way they use electricity and identify habits that are wasteful.

Resources / Materials Required

• Print off one energy observation spreadsheet per student

Anticipatory Set

Start the lesson by discussing the fact that electricity is something that comes to our houses and schools and must be paid for based on how much we use. Allow students to share their existing knowledge about electricity, especially things in their homes that are powered by electricity. Give students 2-3 minutes to list different things that use electricity around their homes and their school. Spend time explaining that some things they use everyday use energy but not necessarily electricity (Batteries, natural gas, etc).



Procedures

- 1. Provide each student with a copy of the attached handout.
- 2. Instruct students over the course of 1-2 days, to record when they use an electric appliance, including light switches.
- 3. Once students have completed the recording process spend a day in class discussing closure questions.

Closure

- 1. How many times each day did you use electricity?
- 2. Which appliance did you turn on most frequently?
- 3. Which appliance ran for the longest amount of time? (Highest amount of hours)
- 4. What are some ways we can help save and conserve energy in our homes?
- 5. How many of these appliances didn't exist when your grandparents were children? Do you think they used more or less electricity than you do and why is that important?



For more great energy resources visit: <u>www.consumersenergy.com/kids</u>

Directions:

Remember: Light switches and anything that plugs into the wall run on electricity. Record any time you use something that runs on electricity.

| What did you use that runs on electricity? Was this appliance already plugged in? How long did you use turned on? Did you use the appliance? Did you use the appliance? Example: Television Yes No 2 hours Yes Yes Image: Television Yes No 2 hours Yes Yes Image: Television Yes Image: Television Yes Yes Yes Image: Television Yes Image: Television Yes Yes Yes Image: Television Image: Television Image: Television Yes Yes Yes Image: Television Image: Television Image: Television Yes Yes Yes Image: Television Image: Television Image: Television Image: Television Yes Yes Image: Television Image: Television Image: Television Image: Television Yes Yes Image: Television Image: Television Image: Television Image: Television Image: Television Image: Television Image: Television Image: Television Imag | | | | | | | |
|--|------|------|------|------|------|---------------------|---|
| How long did you use the appliance? 2 hours | | | | | | Example: Television | What did you use that runs on electricity? |
| How long did you use the appliance? 2 hours | | | | | | Yes | Was this appliance already plugged in? |
| pliance? | | | | | | No | Was this appliance already turned on? |
| Did you turn the appliance off once you were finished Yes | | | | | | 2 hours | How long did you use the appliance? |
| | | | | | | Yes | Did you turn the appliance off once you were finished using it? |

② 2013 Consumers Energy. All rights reserved.