



Going Green! MSOSW

Lesson One: Introduction

Basic information and Electricity Safety

Overview: Students will get a basic introduction to standby power and learn how to use electrical devices safely in their own homes.

Objectives:

The student will:

- Define standby power.
- Demonstrate safety when using electricity.

Standards Addressed (Grades 5-8)

- Life Science: Structure and Function in Living Systems
- Science in Personal and Social Perspectives: Personal Health; Natural Hazards; Risks and Benefits

Suggested Grade Levels: Middle School (6th - 8th)

Timeline: 1 – 2 class periods (2nd day will take only a few minutes; continue to Lesson Two)

Materials:

Day 1:	Student Project Folders Parent Consent Form	Student Consent Form Electrical Safety Presentation
Day 2:	Safety Quiz Safety Certificates	Computer Lab Access

Procedure:

Day 1: Introduction and Electricity Safety

- Introduce the project to students, giving them a basic outline of what they'll be doing. Define standby power and discuss briefly.
- If desired, hand out student project folders (simple braded folders). The students will be keeping track of several different handouts and worksheets during the project and it will be helpful to keep them all in one place. Also, the folder can be turned in periodically during the project for grading purposes. Alternatively, students can just keep all materials with their normal science materials.
- Explain to students that since the materials used in this project will be used in an actual scientific study, we need their consent and the consent of their parent or guardian to use the information they gather.

- Show *Electrical Safety Presentation*, including the video clips at the end:
 - What If...A New Global Option Part 1 (~8 min)
 - <http://www.youtube.com/watch?v=PH2NHRtpZ1M>
 - There Is No Energy Crisis, There is a Crisis of Ignorance (~6 min)
 - <http://www.youtube.com/watch?v=-fVI3BRBC6o>
 - After each clip, discuss the topics included as a class.
- Go over *Safety First* sheet and let students know there will be a short quiz tomorrow over the guidelines.
- Homework: Send home *Student* and *Parental Consent Forms*.

Day 2: Safety Assessment

- Take *Safety Quiz*.
- Hand out Safety Certificates to all students who scored a 90% or better on the Safety Quiz. Students who scored lower will need to retake the quiz or discuss the ones they missed with their teacher one-on-one to earn their certificate and begin using the devices at home.

Assessment Options for this Lesson:

- Safety Quiz
- The Safety Quiz can also be completed in *Whyville*. The students will be able to earn clams for completing the quiz in *Whyville*. While *Whyville* is not introduced formally until Lesson 4, you may wish to get the students started there if you wish to use the Safety Quiz in *Whyville*.