PUD/ESD Energy Education Program

Second Grade Teacher Guide

We have provided your class with a presentation on energy transformations and conservation, as well as, an in-class energy transformation assessment handout with take home handouts. These materials are provided to you on behalf of your county's Public Utility District (PUD) in efforts to instill basic energy conservation and energy education to students at an early age. The *All About Energy* handout is meant to be completed in class following the presentation to check for student understanding of energy transformations. Your students will benefit from completing the *Energy Saver Survey* with your assistance during class time as well. The word search and secret message conservation handout is for fun interaction and assisting with basic math skills; it can be used in the classroom or as a take home activity.

Science Connections

*Crosscutting Concepts*

* **Systems and Systems Models**: systems in the natural and designed world have parts that work together.
* **Cause and Effect**: Events have causes that generate observable patterns; simple tests can be designed to gather evidence to support or refute ideas about causes

*Science and Engineering Practices*

* **Planning and Carrying Out Investigations:** Make observations (firsthand and from media) to collect data which can be used to make comparisons. Make predictions based on prior experiences.

Listed below are ways the Common Core Speaking and Listening standards can be touched upon based on the presentation:

* CCSS.ELA-LITERACY.SL.2.1

Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.

* CCSS.ELA-LITERACY.SL.2.1.A

Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).

* CCSS.ELA-LITERACY.SL.2.1.B

Build on others' talk in conversations by linking their comments to the remarks of others.

* CCSS.ELA-LITERACY.SL.2.1.C

Ask for clarification and further explanation as needed about the topics and texts under discussion.

* CCSS.ELA-LITERACY.SL.2.2

Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

* CCSS.ELA-LITERACY.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.

We thank you for being a part of the PUD/ESD Energy Education Program. If there are any questions regarding these materials or teaching instruction, do not hesitate to call.

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