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Curriculum Units by Fellows of the National Initiative
2013 Volume V: Energy Sciences

Energy Usage and Conservation: My Impact on the World

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In spite of alarms and warnings, the era of fossil fuels seems to still have a long life ahead. However, our environment keeps paying the price for our constant reliance upon them to power our world. The overall goal of this unit is to help students at the elementary level be aware and proactive about energy usage and conservation. We measure energy consumption at home and use a variety of resources -fiction and non-fiction texts, videos, hands-on experiences, and guest speakers- to enhance students' awareness, understanding and mastery of the concepts. The unit is organized sequentially to initially studying the definition of energy, its sources and ways of storage, and later energy consumption in the US, and rising concerns. More specific objectives include learning about the process of photosynthesis, petroleum, natural gas and coal as nonrenewable sources of energy, and finishing with solar and wind power as renewable sources. We also explore the consequences of our overdependence on fossil fuels both in discussions and through hands-on activities. Towards the end we return to energy consumption at home and progress to concluding with a look at how to commit to energy conservation right now.

(Developed for Science Integrated with Mathematics and Language Arts, grade 5; recommended for Self-Contained Science/Mathematics/Language Arts, grade 5, and Science, grade 6)

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