

Savvy Energy Consumers: Evaluating Our Energy Costs and Determining Alternative Resources

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Synopsis

The objectives for this curriculum incorporate math and science goals while exposing sixth grade students to real world problems using scientific processes and mathematical practices. Students will determine the costs and proportion of their school's energy bill to the total operating costs of their school. The objective is for students to decrease the cost or proportion of energy used on a daily basis to decrease operating costs. Students will explore and learn that our local energy source is fossil fuels. Lessons will teach students how energy in fossil fuels is transformed into electrical energy for consumer use. Students will build models and simulations to discover how energy costs can fluctuate based on turbine sizes and speeds in power plant generators in the transformation process. Finally students will research and defend alternative sources of energy to decrease their school's energy supply. Benefits and disadvantages of alternative sources will be explored and students will defend their theories through persuasive class presentations.