



ENERGY

Grade Levels	Program Length
4, 5, 6, 7, 8 th	Approximately 45 minutes

Science Presentations

Science Presentations are designed to help illustrate and elaborate science concepts taught in the classroom and to stimulate student interest in the subject matter.

Description

Students participate in a series of fun demonstrations designed to help them understand the six basic forms of energy. They will generate electricity, fire a cannon, and produce an eerie chemical light. Energy transformation & conservation (including technologies such as LED) will be demonstrated.

North Carolina Essential Standards Correlation

4th Grade	4.P.3.1
7th Grade	7.P.2.1, .2, .3

Objectives

- 1) Define energy and work.
- 2) Explore the different types of energy.
- 3) Explain the difference between potential and kinetic forms of energy.
- 4) Demonstrate how energy can be transformed from one form to another.
- 5) Discover how and why energy is "lost" from a system.

Vocabulary

chemiluminescence
 combustion
 electron
 electric generator
 electric motor
 energy
 fission
 fluorescence
 fossil fuels

friction
 fusion
 incandescence
 kinetic energy
 L.E.D.
 luminescence
 metabolize
 meter
 nucleus

oxidation
 photosynthesis
 photovoltaic cell
 potential energy
 thermodynamics (1st law of...)
 watt
 work