HU-GK 12 Program 12-6-07

Activity

Title:

"Energy!"

Prepared By:

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DCPS Standards:

(ChaLC Goal):
8.5.2.
Describe kinetic energy as the energy of motion (e.g., a rolling ball) and potential energy as the energy of position
or configuration (e.g., a raised object or a compressed spring).

8.5.3.
Investigate and explain how kinetic energy can be transformed into potential energy, and vice versa (e.g., in a bouncing ball).

8.5.4.
Recognize and describe that energy is a property of many systems and can take the forms of mechanical
motion, gravitational energy, the energy of electrostatic and magnetostatic fields, sound, heat, and light (electromagnetic
field energy).

8.5.8.
Investigate and explain that heat energy is a common product of an energy transformation, for example, in biological growth, the operation of machines, the operation of a lightbulb, and the motion of people.

Goals:

1) The students will gain knowledge of all the forms of energy through a classroom presentation.

Objectives:

1) Given prior knowledge of all forms of energy, students will be able to identify each specific type of energy and give an intellectual explanation of each.

Prerequisite Knowledge:

The students should have a fair amount of knowledge of most forms of energy.

Set up:

Should have images saved to the computer of all forms of energy from kinetic to mechanical. Also, the teacher/fellow should make sure an overhead projector is available for the presentation.

Evaluation and assesement:

During the slide show, there should be an open discussion. The teacher/fellow should engage the students, asking them what types of energies are being displayed and their relationship to other energies. The teacher/fellow should also have pictures that not only display energy, but slides that catch their attention and create excitement (i.e. pictures that use sports, music and even pop culture). This will keep the students entertained and will allow you to have their attention for a bit longer. Lastly, have slides displayed of energies where the exact type of energy is unclear. This will challenge the students to think outside the box.

After the presentation the students should be assigned three types of energies. The students should explain each energy and give an example of how the energy effects them daily (Homework- Teacher's discretion).