

# STANDARDS-BASED LESSON PLAN

Grade Level: 8 Subject Area(s): Physical Science

Time: 3<sup>rd</sup> Advisory Jan 29-April 15

## UNIT FOCUS: **Conversation of Energy**

Day \_\_\_\_ of \_\_\_\_

### CONTENT STANDARD:

**#3: Observe, investigate, describe, and explain the forms of energy, its transfer actions, interaction and conservation with matter.**

**Learning expectations for this standard appear in the state standards. They have been translated into outcomes-based language in the new lesson objectives listed below**

### PERFORMANCE STANDARD:

Describes and compares energy and the many forms it takes (mechanical, heat, light, sound, electrical, magnetic, and chemical).

Describes how common forms of energy can be converted from one to another (e.g., changes between potential and kinetic energy; electrical energy to light a lamp; Construct circuits to show the flow of electrons, electrical conductivity, electrical appliances. Relates heat to energy transfer.

### ESSENTIAL SKILL(S):

- **Introduction/Stating the Standard and Objectives:**

State standards above.

Students will understand the principle of conservation of energy. They will learn several forms of conservation of energy and how forms can be converted from one form to another.

**These objectives will serve no use in curriculum management. They do not tell us what students are expected to do as an outcome of the lesson. The teacher cannot use them to evaluate students' work. Although the selected standard has the same topic as the objectives, this simple alignment does not make the lesson a more powerful tool for learning.**

- **Materials:**

Text reading pp. 120 -127 describing conservation of energy, forms of conservation of energy and how forms can be converted from one form to another.

- **Activities:**

Students will be expected to read the passage as homework (Physical Science, Prentice Hall. ) the night before. During class, students will respond to questions about the reading assignment., being able to identify forms of energy and provide information on how each can be produced with an example.

- **Summary, Assessment, and Closing:**

Completed worksheets will be evaluated for accuracy. Students will be expected to describe forms of energy and provide information on how each can be produced with an example.