

Program:

Instructor: Greg Ennis

Course Title:

Date:	6/26/2010
Lesson Length:	50 min
Topics:	Energy conservation and transformation

**OVERVIEW / ANNOTATION:**

Identifying energy transformations such as electrical to heat and understanding how energy is transmitted will help students to conserve energy in their own homes.

**BACKGROUND / PREPARATION:**

Glencoe Science Gr. 8. Chapter 20, Notes taken while at Co-op.

**PRIMARY LEARNING OBJECTIVES:**

Student will determine methods of conserving energy. Students will identify methods of energy transformation within their environment.

**ESSENTIAL QUESTION(S):**

How can energy be conserved within our environment?

**MATERIALS, EQUIPMENT AND TECHNOLOGY RESOURCES**

<input checked="" type="checkbox"/>	Textbook		Lab Manual		Video		Other
	Adv. Committee		Posters		Multi-Media		
	Speaker	<input checked="" type="checkbox"/>	Supplemental Materials	<input checked="" type="checkbox"/>	Internet		

**CONTENT STANDARDS & TASKS:** *Alabama Course of Study*

AL Gr. 8 Science # 11, Explain the law of conservation of energy and its relationship to energy transformation.

**PROCEDURES, ACTIVITIES, AND LEARNING EXPERIENCES**

	Individual work		Group Work		Lecture		Skills USA
<input checked="" type="checkbox"/>	Class Discussion		Project		Speaker		Live Work
<input checked="" type="checkbox"/>	Visuals		Review	<input checked="" type="checkbox"/>	Video		
<input checked="" type="checkbox"/>	Homework		Handout		Field Trip		

**ASSESSMENT STRATEGIES**

<input checked="" type="checkbox"/>	Homework		Portfolio		Class Work		Test
<input checked="" type="checkbox"/>	Teacher Observation		Other:		Performance		Feedback from Discussion

**LESSON INSTRUCTION INCLUDES:**

<input checked="" type="checkbox"/>	Safety Instruction		Presentation	<input checked="" type="checkbox"/>	Higher Order Reasoning
	Project-Based Learning		Role Playing		Work Ethics
	Integrated Academics		Simulation		Integrated CTSO Experiences
	Employability Skills	<input checked="" type="checkbox"/>	Problem Solving Skills		Management Skills

**TEAMWORK ACTIVITIES:**

**PROVISIONS FOR INDIVIDUAL DIFFERENCES:**  
Spec. Ed students will have assignment shortened.

**AVAILABLE STUDENT INDUSTRY CREDENTIALS:**

**COURSE / PROGRAM CULMINATING PROJECT:**

Students will be given an assignment to calculate energy usage in their homes. They will determine savings and calculate payback period for replacement of incandescent bulbs with fluorescent bulbs.