

Name: _____
Mr. Willis
Conceptual Physics: _____
Date: _____

Unit V
Energy
Need extra help?
Check out <http://www.bayhicoach.com>



Portfolio Directions and Unit Syllabus

Objective: Assemble the assignments for the unit into a booklet. Then use the booklet to complete review questions and prepare for the test.

The following items should be put in the following order in the portfolio:

- ___ Portfolio Directions and Unit Syllabus (this sheet)
- ___ Vocabulary _____
- ___ Classwork/Daily Log _____
- ___ Video: Work and Energy _____
- ___ Reading Assignment Chapter 15, Sections 1, 2, 3 _____
- ___ Calculating Potential Energy _____
- ___ Exploring Energy Conversions _____
- ___ Reading Assignment Chapter 16, Sections 1, 2, 3 _____
- ___ Thermal Energy Lab _____
- ___ Problem Solving Exercise _____
- ___ Coal Chain Activity _____
- ___ Unit Review _____

Portfolio Grade

- cover (out of 5) _____ (Neatness, effort, and color are important.)
- objectives (out of 5) _____
- concepts (out of 5) _____ (You may use words, symbols, diagrams on each.)
- contents (out of 5) _____ (All assignments must be included and in order.)
- total (out of 20) _____

Test Grade

The Front Cover

Write the unit title on the cover. "Unit V – Energy"

Decorate the front cover with drawings of concepts from the chapter.

The Inside Front Cover

Write "Objectives" at the top of the page. List the following unit objectives:

Describe and distinguish between examples of objects with kinetic and potential energy.

Be able to describe the kinetic and potential energy of a pendulum.

Know how a roller coaster demonstrates the Law of Conservation of Energy.

Calculate potential energy ($PE = mgh$) and kinetic energy ($KE = \frac{1}{2}mv^2$)

Explain the relationship between energy and work.

Compare and contrast heat and temperature.

Describe how energy is transformed as it moves through a system.

Explain the First and Second Laws of Thermodynamics.

Diagram the path that energy follows as it moves through the Coal Chain from sunlight to electric light.

Inside Back Cover

Write "Concepts" at the top of the page. Divide the page into nine squares.

Explain the answers to the unit objectives with words and diagrams.

Name: _____
Mr. Willis
Conceptual Physics: _____
Date: _____

Unit V
Energy
Need extra help?
Check out <http://www.bayhicoach.com>



Back Cover Write your name – last name, first name and class in the lower right hand corner.