

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

Unit VII
Mechanical Waves & Sound
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VII

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 Review Sheet
- ___ Classwork/Daily Log
- ___ Video: Sound and Electromagnetic Waves
- ___ Reading – Chap 17 Sec 1, 2, 3 & 4
- ___ Calculating Wave Properties/Wordwise
- ___ Velocity of a Wave Lab
- ___ Sound Waves and Pitch Lab
- ___ MAP Practice Quiz
- ___ The Doppler Effect
- ___ Study Guide

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 VII – Mechanical Waves & Sound”
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:

- Distinguish between transverse and compression waves.
- Identify wave properties (amplitude, wavelength, rarefaction, compression, frequency).
- Describe how wave properties determine the pitch and intensity of waves.
- Calculate wavelength, period or frequency of waves.
- Give examples of transverse and compression waves and explain how waves transfer energy.
- Explain the interaction of forces and motion in generating waves.
- Illustrate how waves interact with each other and describe the consequences of that interaction.
- Demonstrate how the Doppler Effect changes the pitch of a sound wave.
- Use a wave graph to determine the wavelength and amplitude of a wave.

Inside Back Cover

Write “Concepts” at the top of the page. Divide the page into nine equal squares (like tic tac toe).
Explain, in words or pictures, the answers to the unit objectives.

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