

**Sample Course Material from The University of Texas at Austin Continuing Education –
Migrant Student Graduation Enhancement Program**

PHY - Physics 09352, Period 1

Table of Contents	Unit 6: Waves: Light and Sound > Activity 3 Wave Behavior
Course Home	Introduction
Unit 1: Review of Scientific Techniques	In this activity, we will look at how waves behave when they reach a boundary and how we can predict how they will react. TEKS: 112.47(c) 7(A)(B) TAKS™ objective: 5
Unit 2: Motion	Directions
Unit 3: Force and Momentum	<ol style="list-style-type: none"> 1. Complete the Review Exercises. Use these practice items to prepare for the TAKS™ test. 2. Watch each tutorial. Click the image in the tutorial box to learn new material. 3. Answer each Guided Practice Question. <ul style="list-style-type: none"> ○ Click Show Hint below each question for help. ○ Click Save This Item to save each of your answers. ○ Click Show Explanation to check your answer. ○ Revise your answer based on what you learned in the explanation.
Unit 4: Energy	
Unit 5: Heat	
Unit 6: Waves: Light and Sound	
Unit 7: Electricity and Magnetism	
Unit 8: Elements of Quantum Physics	
Checklist	
TEKS and TAKS	
Credits	

Sample Practice Question

Besides the photoelectric effect, what other physical phenomena can be explained by the existence of photons and the quanta of light energy?

Review Exercises

Use the Review Exercises to practice problems that cover material you have already learned in this course or in previous courses. These exercises will help you prepare for the TAKS™ test.

Question 1. If you want to claim that mass is a form of energy, and energy is a form of mass, which equation would you use?

- A. $E=hf$
- B. $F= c /\lambda$
- C. $E=mc^2$
- D. $P= h/\lambda$

Question 2. If you want to show how energy is quantized, which variable would you need?

- A. E
- B. h
- C. c^2
- D. λ

Question 3. Shorter wavelengths have smaller _____.

- A. frequencies
- B. momentums
- C. amplitudes
- D. none of the above