

Name: \_\_\_\_\_

Homework from the book: Ch 5 Multiple Choice: 1, 4, 9-13, 18, 20, 24, 26, 27, 30

Exercises: 37, 39, 69

Ch 6: Multiple Choice: 4, 6-9, 14-16, 18, 30-32, 43

From the study guide: Ch 5 Multiple Choice 1-10 Solved Problems 5-1

Ch 3: Multiple Choice 1-5 Solved Problems 6-2

Take home quiz: (Show work for 5 & 6)

1) A positive electric charge

A) attracts other positive charges. B) repels other positive charges C) does not interact with other positive charges but only with negative ones D) consists of an excess of electrons

2) The property of a sound wave that governs its loudness is its

A) frequency B) wavelength C) speed D) amplitude

3) Of the following kinds of waves, the only ones that cannot travel through a vacuum are

A) X-rays B) radio waves C) light waves D) sound waves

4) Light of which of the following colors has the longest wavelength?

A) red B) blue C) yellow D) green

5) Which of the following correctly lists electromagnetic waves in order from longest to shortest wavelength?

A) microwaves, ultraviolet, visible light, gamma rays

B) gamma rays, ultraviolet, infrared, microwaves

C) radio waves, infrared, gamma rays, ultraviolet

D) radio waves, infrared, visible light, X-rays

6) a) What is the current in a 24-W, 12-V light bulb?

b) What is the resistance in a 24-W, 12-V light bulb?

7) What is the wavelength of a radio wave with a frequency of 89.9 MHz?