



The Galaxy Experiment

Student name _____

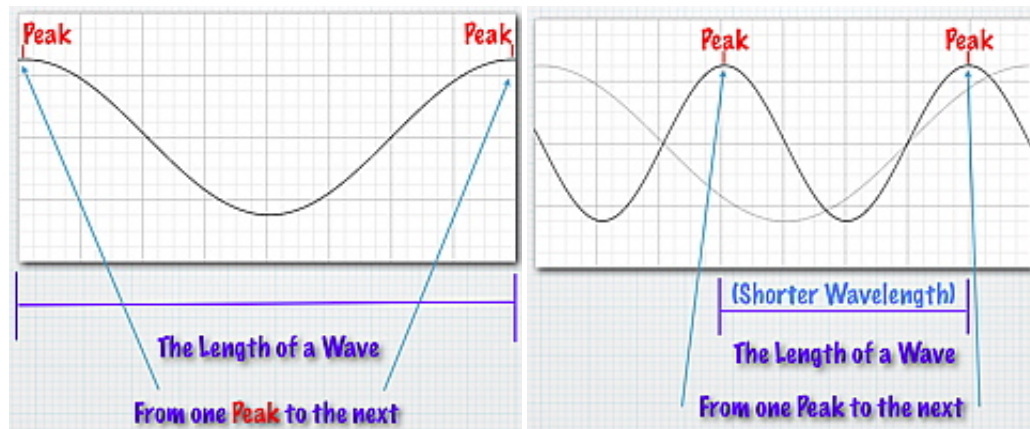
Period _____ Date _____

1. Multiple Choice Questions:

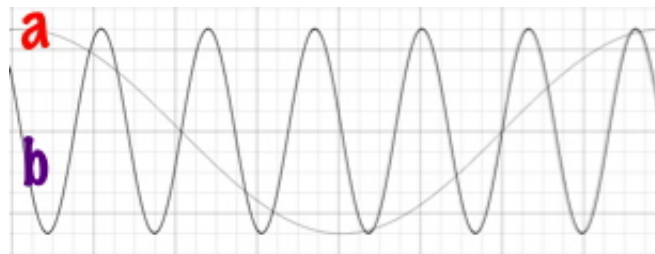
1. Which of the following waves has the greatest amount of energy? (a) infrared (b) ultraviolet (c) microwave (d) x-ray
2. Which waves travels the fastest? (a) radio (b) infrared (c) ultraviolet (d) all of these waves travel at the same speed
3. Which of the following waves has the longest wavelength? (a) infrared (b) ultraviolet (c) radio (d) microwave
4. Which of the following waves has the highest frequency? (a) microwave (b) x-ray (c) ultraviolet (d) infrared

If you are having trouble with these questions, review the PSI Sim Methods section.

2. Examine the diagrams to understand how wavelength is measured:



Consider the following waves a and b:



Write a brief analysis of the waves. Which one has the longest wave length? If they are traveling at the same speed, which has the highest frequency? If they both represent light waves, how are frequency are wavelength related?



Personal Study Instrument