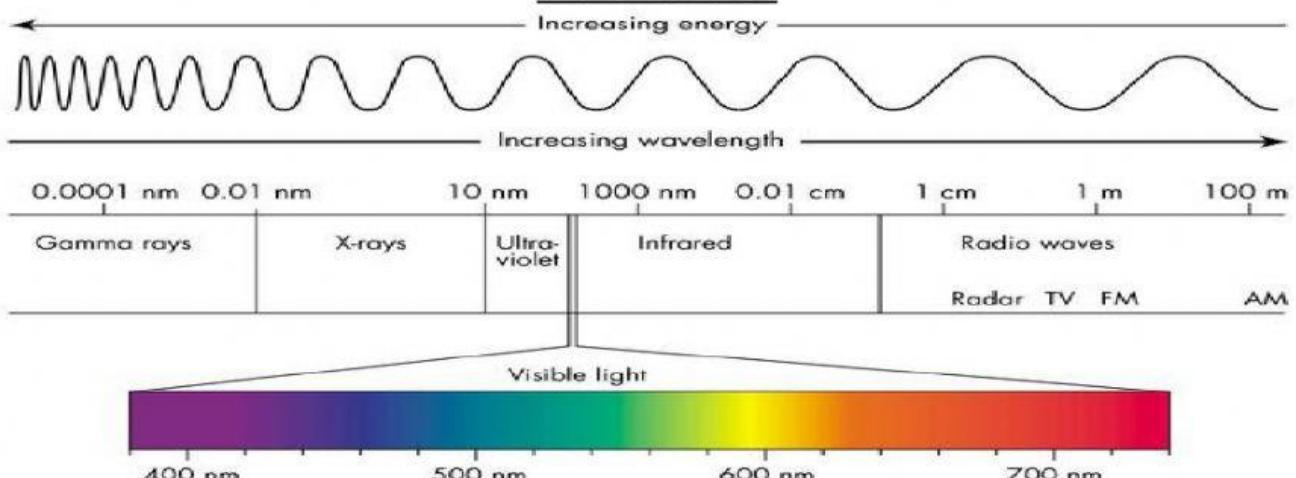
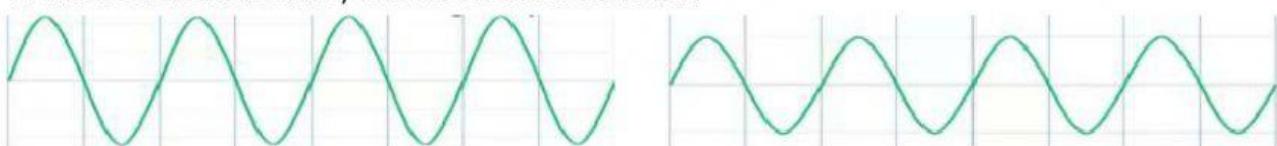


## Wave Revision

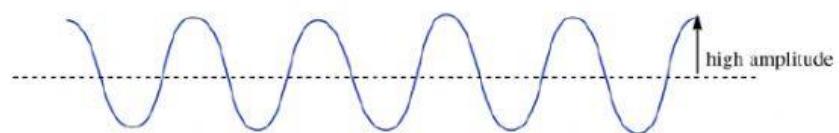
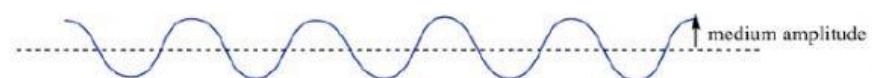


### I. Analyze the following questions below based on the Electromagnetic spectrum above:

1. Which statement accurately describe the two waves below?



2. Which wave is carrying the most energy?   
low amplitude  
medium amplitude  
high amplitude



3. What happens to the wavelength of a wave as frequency increases? \_\_\_\_\_

4. What two factors cause waves to carry more energy? \_\_\_\_\_

5. Fill in the blanks for the electromagnetic spectrum below:

On the electromagnetic spectrum as the wavelength decreases, frequency \_\_\_\_\_.

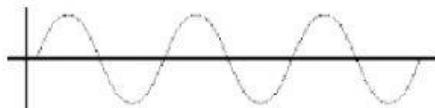
As the wavelength \_\_\_\_\_, frequency decreases. \_\_\_\_\_ and \_\_\_\_\_

determine the amount of energy a wave is carrying, so the higher and shorter a wave is then

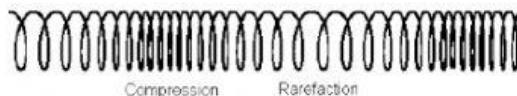
the \_\_\_\_\_ the amplitude and the \_\_\_\_\_ the frequency. As energy transfer

decreases, the amplitude \_\_\_\_\_ causing a sound to get \_\_\_\_\_.

6. The following wave is an example of a \_\_\_\_\_



7. The following wave is an example of a \_\_\_\_\_



8. No matter what type of wave, ALL WAVES TRANSFER \_\_\_\_\_ ! THEY DO NOT TRANSFER \_\_\_\_\_

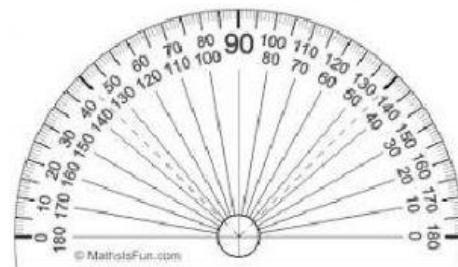
9. What is the difference between a mechanical wave and an electromagnetic wave?

10. Fill in the table using the terms and phrases that fit the column heads.

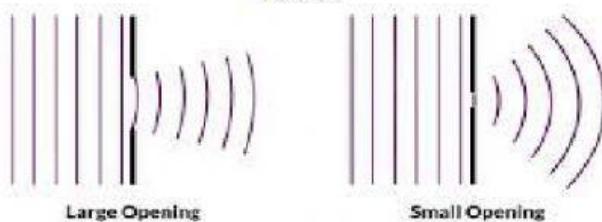
Mechanical Wave	Both	Electromagnetic Wave

Carries energy	Longitudinal waves	Transverse waves	Can travel in a vacuum
Has a frequency	Fastest in solids	Slowest in gases	Fastest in gases
Slowest in solids	Sound waves	Require a medium	Do not require a medium

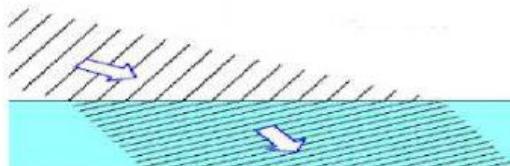
11. If a student points a light wave on the ground at a 50 degree angle, at what angle will the light wave reflect off of the ground?



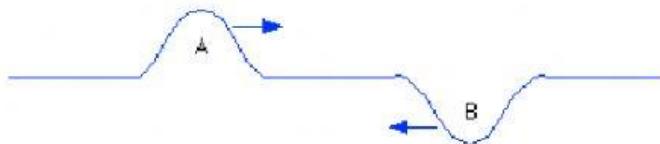
12. When a wave bends to get around or go between barriers like in the following example, it is this type of wave behavior....



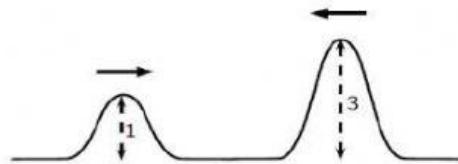
13. The following wave represents which wave behavior?



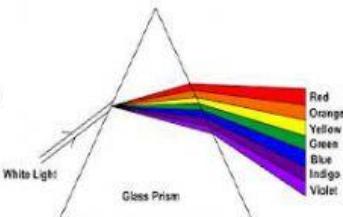
14. When the two following waves meet it would be \_\_\_\_\_



15. When the two following waves meet it would be \_\_\_\_\_ interference, and the resulting wave height would be \_\_\_\_\_.



16. This wave example represents which wave behavior?



17. When waves bend as they travel through a different medium it is called \_\_\_\_\_.

## II. Refer to video to answer the following questions below.

1. When does wave reflection occur?
2. What can you summarize about the angle of reflection?
3. What is wave refraction?
4. What causes a wave to refract?
5. Why does wave diffraction occur?
6. What is interference?
7. How are constructive and destructive interference different?
8. How can this be related to the people you choose to associate with in life?