Name _____ Period _____ Date _____

Chapter 13 & 14 Sound and Light
Review Worksheet

1. Wave height is also known as the _____ of a wave.

2. The number of waves per unit of time is the _____ of a wave.

3. The wavelength of a wave measures from one crest to another crest or from one _____ to another _____.

4. Identify the following properties of sound and light.

	Sound	Light
a) wave type? **longitudinal** or **transverse**	_____	_____
b) travels how? **straight line** or **spherical**	_____	_____
c) wave energy? **compresses and expands its medium** or **wave, particle, or both**	_____	_____
d) fastest in what medium? **solid** or **liquid** or **gas** or **vacuum**	_____	_____
e) doesn't travel through which medium? **solid** or **liquid** or **gas** or **vacuum**	_____	_____

5. After the energy of a wave moves through a medium, the molecules of the medium return to their _____ position.

6. Sound is received by the ear. What part of the ear is first moved by the energy of a sound wave? Moved second?

7. The retinas at the back of the eye receive light. What are the three main colors detected by the retina?

8. What is the speed of sound? Light?

9. What absorbs sound? Light?

10. For the oscilloscope screens, the height of the wave determines the (pitch or loudness) and the number of waves indicates the (pitch or loudness) of the sound.

11. A larger amplitude equals a (louder or softer) sound and a (brighter or dimmer) light.

12. You are sitting in the front row of a concert. The band is playing with a very loud amplitude. Without changing how the band is playing their musical instruments, how can you change the amplitude you hear?

13. You are sitting at a desk illuminated by a lamp with a 100 W bulb. It appears too bright. Without changing the bulb, how can you change the intensity of the light?