Wave Properties Exercise

1. Short-wavelength waves have _____ energy than long-wavelength waves. (more/less/same)
2. High-frequency waves have _____ energy than low-frequency waves. (more/less/same)
3. Wave speed is equal to wavelength multiplied by _____.
4. The highest parts of a transverse wave are called _____.
5. The parts of a longitudinal wave where particles of the medium are closest together are called _____.
6. A disturbance in matter that transfers energy from place to place is called _____
7. The part of a longitudinal wave where particles of the medium are spread farthest apart is the _____
8. A wave in which particles of the medium vibrate at right angles to the direction that the wave travels is called _____
9. The part of a transverse wave where particles of the medium are lowest is the _____
10. A wave in which particles of the medium vibrate in the same direction that the wave travels is called _____
11. The term for matter through which a mechanical wave travels: _____
12. What is the speed of a wave that has a wavelength of 0.5 meters and a frequency of 2 waves per second?_____
13. Assume that a wave has a fixed speed. If the frequency of the wave increases, its wavelength _____ (increases/decreases/stays the same)
14. When one wave passes a point every second, the frequency of the waves is _____ Hz
15. The _____ of a transverse wave is the distance between a crest and the resting position.