

**Science 2 ~ Ch. 9 Waves Study Guide ~ Test: Tuesday 10/4/16 and Wednesday 10/5/16**

1. What is a wave?	
2. Distinguish between a Mechanical Wave and an Electromagnetic Wave	
3. In what direction do particles move in a Transverse Wave versus a Longitudinal Wave?	
4. What are the highest point and lowest point of a Transverse Wave called?	
5. What are the areas of Compression and Rarefaction in a Longitudinal Wave?	
6. How is wavelength measured?	
7. How is the frequency of a wave determined?	
8. If amplitude increases, then the _____ of the wave _____.	
9. What formula is used to calculate the speed of a wave?	
10. In what 6 ways do waves interact with matter and each other?	
11. What are the 3 different types of wave interference?	
12. What does the Law of Reflection state?	
<b>Matching</b>	
<p>Match each item with the correct statement below.</p> <ul style="list-style-type: none"> <li>a. amplitude</li> <li>b. electromagnetic wave</li> <li>c. diffraction</li> <li>d. reflection</li> <li>e. refraction</li> </ul> <ul style="list-style-type: none"> <li>1. does not require a medium to travel through</li> <li>2. why light shines off a mirror</li> <li>3. related to the energy of a wave</li> <li>4. the changing of the speed of a wave</li> <li>5. the spreading out of waves around a barrier</li> </ul>	