**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Wave Interaction Practice**

1. What is meant by the term reflection?
2. Draw a picture showing FREE reflection.
3. Draw a picture showing ATTACHED reflection.
4. Draw a picture of what happens to light as it passes through a window based on diffraction.
5. What is refraction?
6. Where can you see refraction?
7. Where does light travel faster: through a liquid or gas? EXPLAIN!
8. What is the difference between a constructive and destructive interference?
9. What variable has to be the same for waves to interfere?
10. Draw a picture of a standing wave and label the nodes and antinodes.
11. Where on a standing wave is there complete constructive interference or the maximum point of vibration?

**For the following questions draw the resulting interference and identify what type of interference is shown. (REMEMBER constructive is like adding, destructive is like subtracting)**

1. Type of interference\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Resulting Amplitude\_\_\_\_\_\_ Draw Picture Below





1. Type of interference\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Resulting Amplitude\_\_\_\_\_\_ Draw Picture Below



1. Type of interference\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Resulting Amplitude\_\_\_\_\_\_ Draw Picture Below



1. Type of interference\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Resulting Amplitude\_\_\_\_\_\_ Draw Picture Below



1. Type of interference\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Resulting Amplitude\_\_\_\_\_\_ Draw Picture Below



1. Type of interference\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Resulting Amplitude\_\_\_\_\_\_ Draw Picture Below

