

### Wave Behavior 101 Video Questions

**Learning Target:** I can describe the concepts of reflection, refraction, interference, and diffraction.

1. When does wave reflection occur? \_\_\_\_\_  
\_\_\_\_\_
2. What can you summarize about the angle of reflection? \_\_\_\_\_  
\_\_\_\_\_
3. Draw an example of wave reflection below and label:
4. What is wave refraction? \_\_\_\_\_  
\_\_\_\_\_
5. What causes a wave to refract? \_\_\_\_\_  
\_\_\_\_\_
6. Draw an example of wave refraction below and label:
7. Why does wave diffraction occur? \_\_\_\_\_  
\_\_\_\_\_
8. Draw 3 examples of wave diffraction below:
9. What is interference? \_\_\_\_\_
10. How are constructive and destructive interference different? \_\_\_\_\_  
\_\_\_\_\_
11. How can this be related to the people you choose to associate with in life? \_\_\_\_\_  
\_\_\_\_\_
12. Draw an example of Constructive Interference and Destructive Interference below and label each with crests and troughs.

13. What is a standing wave? \_\_\_\_\_  
\_\_\_\_\_

14. Give the definition of a node. \_\_\_\_\_  
\_\_\_\_\_

15. Give the definition of an antinode. \_\_\_\_\_  
\_\_\_\_\_

16. Draw an example of a standing wave below and label:

Check for Understanding: Answer the following questions based upon your knowledge of wave behavior.

1. How does reflection change a wave? \_\_\_\_\_  
\_\_\_\_\_

2. What causes refraction of a wave? \_\_\_\_\_  
\_\_\_\_\_

3. What determines how much a wave diffracts when it meets an obstacle or opening? \_\_\_\_\_  
\_\_\_\_\_

4. What is the difference between constructive and destructive interference? \_\_\_\_\_  
\_\_\_\_\_

5. What is a standing wave? \_\_\_\_\_  
\_\_\_\_\_

6. Give 2 examples of a standing wave. \_\_\_\_\_  
\_\_\_\_\_

7. What is the difference between a node and antinode of a standing wave? \_\_\_\_\_  
\_\_\_\_\_