

## STUDENT RESPONSE SHEET

### Activity #1.... An Investigation into Transverse Waves

- 1-4. In the box below, diagram a typical transverse wave and label the numbered components appropriately.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

5. In the box below, diagram a transverse wave that has twice the wavelength of the wave diagrammed above.

6. In the box below, diagram a transverse wave that has one-half the wavelength of the wave diagrammed in #1-4 above.

7. While producing about two waves per second, the length of our wave was approximately \_\_\_\_\_ cm.
8. While producing about four waves per second, the length of our wave was approximately \_\_\_\_\_ cm.
9. As the frequency of wave increases, its wavelength \_\_\_\_\_.
10. As the wave passes from one end of the spring to another, the string (attached to one coil) moves \_\_\_\_\_.
11. As the wave passes along the spring, the actual coils of the spring \_\_\_\_\_ (do, do not) move along the entire length of the spring.
12. To produce a wave in the spring with twice the amplitude of another, one must

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