

SOUND WAVES

Name: _____

Answer the following questions using the information in the reading passages and your prior knowledge.

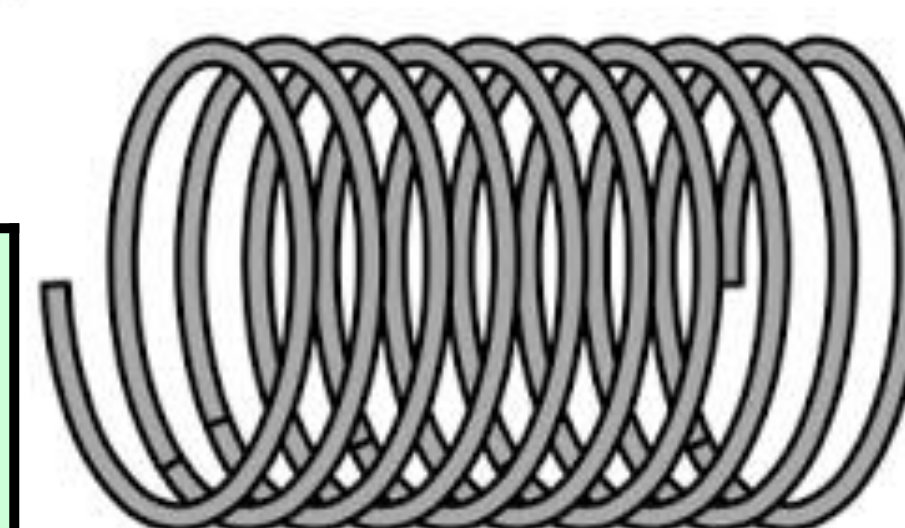
1. What defines a mechanical wave?

2. Though what medium does sound usually travel?

3. Can sound travel through empty space? Why or why not?

4. What is the difference between a transverse and a longitudinal wave?

5. Sam wants to demonstrate a longitudinal wave using the slinky seen at right. Describe in detail how he should move the toy to create a longitudinal wave.



6. Explain the difference between a high pitched sound and a low pitched sound based on what you have learned about sound and its properties.

7. Explain the difference between a loud sound and a quiet sound based on what you have learned about sound and its properties.

8. Lisa says that when a teacher talks students hear his voice because particles of air move from the mouth of the teacher to the ear of the student. Tim says that she is wrong. How can Lisa correct her statement about how sound travels?