

**TEST NAME: Credit Recovery - Sound (6.P.1.3)**  
**TEST ID: 699609**  
**GRADE: 06**  
**SUBJECT: Life and Physical Sciences**  
**TEST CATEGORY: My Classroom**

Student: \_\_\_\_\_

Class: \_\_\_\_\_

Date: \_\_\_\_\_

1. **A substance that carries sound waves is called**
  - A. a fulcrum.
  - B. a medium.
  - C. a spectrum.
  - D. an equilibrium.
  
2. **Sound waves travel the fastest through dense materials. Through which of these would sound waves travel the SLOWEST?**
  - A. air
  - B. glass
  - C. metal
  - D. water
  
3. **Margot learned that sound waves travel at different speeds through different materials. She also learned that sound waves cannot travel through outer space at all. Which best explains why sound waves cannot travel through space?**
  - A. Space is too cold.
  - B. Gravity is too strong.
  - C. Particles of matter are too far apart.
  - D. Energy from the Sun is too powerful.
  
4. **Bruce plays his violin every Friday night for the symphony. Before he plays, he plucks each string to see if his violin is in tune. Which is most responsible for the generation of sound waves from his violin?**
  - A. material of the violin
  - B. vibrations of the string
  - C. movement of the violin
  - D. composition of the string

5. In 1980, Mount St. Helens erupted with a tremendous force. The explosion was heard approximately 1,000 miles away in Saskatchewan, Canada.



Note: The figure is not drawn to scale.

Which best explains why the sound waves from the explosion would not be heard 1,000 miles away in outer space?

- A. The atmosphere in space is too thick.
  - B. The matter in space is too cold to vibrate.
  - C. The molecules in space are very far apart.
  - D. The radiation from space destroys energy waves.
6. The rate at which a wave passes through a medium is known as its
- A. speed.
  - B. amplitude.
  - C. acceleration.
  - D. wavelength.
7. A sound wave travels through the air and hits a glass of water. In what way will the sound wave change as it moves from the air into the glass?
- A. It will travel faster.
  - B. It will travel slower.
  - C. It will become louder.
  - D. It will become quieter.
8. Sound waves can pass through all of these except
- A. air.
  - B. steel.
  - C. water.
  - D. a vacuum.

9. A sound wave travels at different speeds through different substances. Through which substance would a sound wave travel faster?

- A. solid ground
- B. bright light
- C. outer space
- D. dry air

10. The speed of a sound wave depends on the medium through which it travels. The table shows the speed of sound waves through different media.

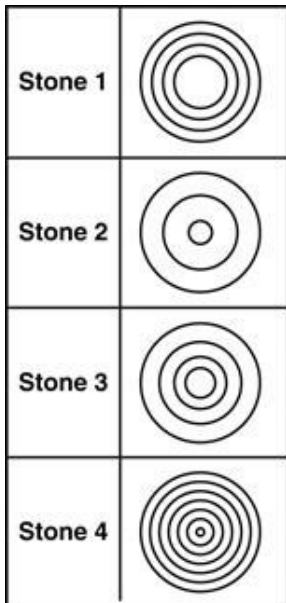
Sound Wave Speeds in Different Media

Media	Speed of Sound Wave (meters/seconds)
Air	343
Glass	5640
Aluminum	5100
Water	1493
Iron	5130

The greatest increase in the speed of a sound wave would result from the transition between which two media?

- A. the air into the glass
- B. the glass into the aluminum
- C. aluminum into the water
- D. water into the iron

11. A student tossed four different stones into a pond and photographed the wave produced by each stone.



Based on the pictures, which stone produced the wave with the greatest wavelength?

- A. Stone 1
- B. Stone 2
- C. Stone 3
- D. Stone 4

12. **Why does tapping a fork against a water glass produce a sound?**

- A. The air expands.
- B. The fork releases electrons.
- C. The particles in the objects vibrate.
- D. The water in the glass forms ripples.