

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

## Answer Key: Wrangle the Wonders of Sound and Light: 1st Grade Science Quiz

Can you hear a whisper or see through a glass of water? Investigate how vibrations make noise and how light travels to our eyes.

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**1. If you touch a large drum while it is making a loud 'boom,' what will your fingers feel?**

**Answer:** B) Small shaking moves called vibrations

Sound is created by vibrations, which are fast back-and-forth movements you can often feel with your hands.

**2. True or False: Light can pass through a dark wooden door.**

**Answer:** B) False

Wood is opaque, which means it blocks light from passing through it.

**3. In a dark room with no windows, you need a \_\_\_\_\_ to help your eyes see the toys on the floor.**

**Answer:** C) Light source

Eyes need light to see; without a light source like a lamp or flashlight, a room stays dark.

**4. You put a straw in a glass of water and it looks like it is broken or bent. Why does this happen?**

**Answer:** C) Light bends when it moves through water

When light moves from air into water, it changes direction (refracts), making objects look bent.

**5. True or False: A high-pitched sound, like a bird chirping, comes from something vibrating very slowly.**

**Answer:** B) False

High sounds come from fast vibrations, while low sounds come from slow vibrations.

**6. When you stand in the sun, your body blocks the light and creates a dark \_\_\_\_\_ on the ground.**

**Answer:** B) Shadow

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Shadows are formed when an object gets in the way of light rays.

**7. Which of these objects would be the best at reflecting light so you can see your face?**

**Answer:** C) A shiny metal spoon

Smooth, shiny surfaces reflect light well, allowing us to see reflections.

**8. To make a sound quieter, you should vibrate an object with \_\_\_\_ energy.**

**Answer:** A) Less

Volume depends on energy; pushing or hitting something softly uses less energy and makes a quieter sound.

**9. True or False: We can hear sound even if we are underwater in a swimming pool.**

**Answer:** A) True

Sound can travel through solids, gases (air), and liquids (water).

**10. What happens when you speak into a long plastic tube or pipe?**

**Answer:** B) The sound waves travel through the tube to the other end

Sound waves can be guided through tubes, which is how simple 'tin can' telephones or stethoscopes work.