

A Million Whys Book 14: Science Quiz

The Sound Expedition, by Crafty Clover.

Name: _____ Date: _____ Score: _____ / 10

The questions

- A.** Why Does Every Sound Begin with Something Shaking?
- B.** Why Do Wood, Metal, and Glass Sound Different When You Tap Them?
- C.** Why Do Mosquitoes Whine High While Bumblebees Buzz Low?
- D.** Why Does a Sound Seem Softer When You Are Farther Away?
- E.** Why Does a Clap Make a Sharp Crack?
- F.** Why Does a Jar Lid Pop When You Open It?
- G.** Why Can a Long Tube Carry a Whisper?
- H.** How Can You Use an Echo to Measure Distance?
- I.** Why Does Your Voice Sound Hollow Inside a Bucket or a Big Pipe?
- J.** Why Shouldn't You Poke Anything Into Your Ears?

Write the letter of the matching question next to each fact.

1. Long pipes can add a clear echo as well. _____
2. People tap melons, walls, and wheels to find out what is inside. _____
3. Many jars have a button on top that pops up when the seal breaks. _____
4. If you stop the shaking, the sound stops too. _____
5. The sound is not a voice, it is wing noise. _____
6. Sound in a tube loses less strength than sound in the open air. _____
7. The saying goes: nothing smaller than your elbow in your ear. _____
8. Clapping with cupped hands makes a lower, hollow pop. _____
9. If you double the distance, the sound energy is spread over four times the area. _____
10. Ships, bats, and dolphins all use this trick. _____

Watch a short video answer for every question at xdme.com

Answer key

1. **I** (Long pipes can add a clear echo as well. Book 14, Question 119)
2. **B** (People tap melons, walls, and wheels to find out what is inside. Book 14, Question 15)
3. **F** (Many jars have a button on top that pops up when the seal breaks. Book 14, Question 75)
4. **A** (If you stop the shaking, the sound stops too. Book 14, Question 1)
5. **C** (The sound is not a voice, it is wing noise. Book 14, Question 29)
6. **G** (Sound in a tube loses less strength than sound in the open air. Book 14, Question 90)
7. **J** (The saying goes: nothing smaller than your elbow in your ear. Book 14, Question 136)
8. **E** (Clapping with cupped hands makes a lower, hollow pop. Book 14, Question 61)
9. **D** (If you double the distance, the sound energy is spread over four times the area. Book 14, Question 46)
10. **H** (Ships, bats, and dolphins all use this trick. Book 14, Question 104)