

Nova's Night-Time Sound Safari

Learning objective: To understand how sound is made, how it travels through different mediums, and how we hear sounds using our ears.

Join Nova the barn owl on a nocturnal adventure! Read the questions carefully and use your knowledge of sound to help Nova identify the forest noises. Each question is worth 1 mark.

Answer Key: 1. A (vibration), 2. True, 3. False (sound travels best through solids), 4. B (pitch), 5. Volume, 6. True, 7. B (eardrum), 8. False, 9. Medium, 10. A (faster).

Word bank: vibration · medium · pitch · volume · ear canal · eardrum · solid · liquid · gas · decibels

1. 1. What do we call the rapid back-and-forth movement that creates sound? A) Vibration* B) Reflection C) Friction D) Rotation (1 mark)

2. 2. True or False: Sound needs a material to travel through, such as air, water, or a solid object. (1 mark)

3. 3. True or False: Sound travels slowest through solids. (1 mark)

4. 4. If a sound is very high-pitched, like a whistle, what are we describing? A) Volume B) Pitch* C) Echo D) Silence (1 mark)

5. 5. What word describes how loud or quiet a sound is? (1 mark)

6. 6. True or False: When a sound wave reaches our ear, it causes the eardrum to vibrate. (1 mark)

7. 7. Which part of the ear acts like a stretched skin on a drum to detect sound waves? A) Pinna B) Eardrum* C) Cochlea D) Hammer (1 mark)

8. 8. True or False: Sound can travel through a vacuum (a space with no air or particles). (1 mark)

9. 9. A substance that sound travels through is known as a _____. (1 mark)

10. 10. Does sound travel faster in water or in air? A) Water* B) Air (1 mark)

Draw: Draw a diagram of a sound wave travelling from a ringing bell towards an owl's ear, showing the vibrations moving through the air.



Extension challenge: Nova wants to know how distance affects sound. Write a short paragraph explaining why a sound gets quieter the further away you are from the source.