

Nova's Guide to Sound Vibrations

Learning objective: To explain how sounds are made and how they travel to our ears.

Use this writing frame to help Nova the owl explain the science of sound. Remember to use scientific vocabulary to describe how vibrations move through the air.

Everything that makes a sound starts with a movement called a vibration.

Word bank: vibration · sound source · travel · medium · particles · eardrum · pitch · volume · therefore · consequently · as a result

1. How is a sound created? Start by explaining what happens to an object when it makes a noise, such as when Max the monkey bangs a drum: When an object vibrates, it... (2 marks)

2. How does sound travel to our ears? Describe the journey of sound waves through the air: Sound travels through the air by... (2 marks)

3. What happens when the sound reaches our ears? Explain the role of the eardrum: When the vibrations reach the ear, they cause the eardrum to... (2 marks)

4. How can we change the pitch of a sound? Use an example like a string instrument: To make a sound higher or lower in pitch, you must... (2 marks)

5. Conclusion: Summarise why sound is important in our daily lives using a scientific observation: In conclusion, sound is vital because... (2 marks)

Extension challenge: Research how sound travels through different materials. Do you think sound travels faster through water or air? Write a short prediction explaining your reasoning.