

Max's Musical Pitch Adventure

Learning objective: To understand how pitch is created and how it can be represented using musical notation and terminology.

Read each question carefully and use your knowledge of sound, vibration, and musical pitch to answer. Max the monkey is ready to help you solve these musical puzzles!

Max the monkey is experimenting with a set of tuned percussion bars. He discovers that when he strikes a short, thin bar, it produces a different sound than when he strikes a long, thick bar. He wants to know why these sounds vary and how he can write them down to share with his friends.

Word bank: Frequency · Vibration · High · Low · Stave · Treble Clef · Interval · Pitch

1. Max strikes a long metal bar and a short metal bar. Explain why the short bar produces a higher pitch than the long bar in terms of vibration. (2 marks)

2. If you were to draw a musical note on a stave to represent a very high sound, would you place it near the top or the bottom of the five lines? Explain your reasoning. (2 marks)

3. Define the term 'pitch' in your own words. How does it differ from 'volume'? (2 marks)

4. Max finds a set of glass bottles filled with different amounts of water. If he blows across the tops, which bottle will produce the lowest pitch: the one full of water or the one nearly empty? Why? (2 marks)

5. Look at a standard Treble Clef. Why is it important for musicians to use this symbol when writing down melodies? (2 marks)

Draw: Draw a set of five pan pipes (flutes) of different lengths. Label which pipe would produce the highest pitch and which would produce the lowest pitch.



Extension challenge: Research how string instruments like a violin or cello change their pitch. Write a short paragraph explaining the role of the player's fingers on the strings.