

Max's Musical Pitch Patterns

Learning objective: To understand and identify the difference between high and low pitch, and how pitch relates to the length and size of musical instruments.

Max the monkey has discovered a collection of musical instruments in the jungle. He wants to know if they make high or low sounds. Look at the description of each instrument below and decide whether it creates a high pitch or a low pitch sound. Write your answer in the space provided, and explain why you think so, using the word bank to help you.

Word bank: vibration · frequency · long · short · thick · thin · high · low · sound wave

1. 1. A tiny, thin metal bell is struck with a small hammer. Does this produce a high or low pitch? Explain your answer using the word bank. (2 marks)

2. 2. A very large, thick drum is hit with a padded mallet. Does this produce a high or low pitch? Explain your answer. (2 marks)

3. 3. If a musician cuts a guitar string to make it shorter, will the pitch become higher or lower? Why? (2 marks)

4. 4. Compare a tuba (large, long metal tube) and a flute (small, short metal tube). Which instrument creates a higher pitch and why? (2 marks)

5. 5. Think about a xylophone. If you hit a long metal bar versus a short metal bar, which one vibrates at a higher frequency? (2 marks)

Draw: Draw two musical instruments side-by-side: one that produces a very high pitch and one that produces a very low pitch. Label them 'High' and 'Low' and show the size difference clearly.



Extension challenge: Find three items around your classroom or home that make a sound when tapped (like a glass, a ruler, or a box). Predict which one will have the highest pitch and which will have the lowest. Test your theory and write a sentence explaining your results to Max.