Grade 3 Music Assessment: Understanding Pitch

Learning objective: To identify, describe, and compare high and low sounds, and understand how pitch is produced in musical instruments.

Read each question carefully. Use your musical vocabulary to explain your answers clearly. Write in full sentences where requested.

Max the monkey is exploring the jungle with his homemade musical instruments. He has a set of hollow bamboo pipes of different lengths, a drum made from a hollow log, and a harp made from elastic bands stretched over a wooden box. He notices that when he plucks the shortest elastic band, it makes a very sharp, thin sound, but when he plucks the longest, thickest band, it makes a deep, rumbling sound.

Word bank: High · Low · Vibration · Frequency · String · Interval · Melody · Pitch · Tension

1. Define the term 'pitch' in your own words. (2 marks)

2. Max plucks the shortest elastic band on his harp. Is the pitch high or low? Explain what is happening to the vibrations of the band to create this sound. (3 marks)

3. If Max wants to change the pitch of his drum to sound lower, what might he do? Justify your answer using your knowledge of how sound is produced. (4 marks)

4. Compare and contrast how pitch is created on a stringed instrument versus a wind instrument like a flute. (4 marks)

5. Explain why a larger, heavier bell might produce a lower pitch than a small, light bell. Use the word 'vibration' in your explanation. (3 marks)

6. Describe a melody you have heard recently. Identify if the pitch of the notes mostly moves up, down, or stays the same, and explain how this affects the 'mood' of the music. (4 marks)

7. Creative Writing Task: Imagine you are designing a new musical instrument for the BookFlik characters. Describe what it looks like, how you play it, and how you change the pitch. Why would this instrument be useful for a concert in the jungle? (5 marks)

Draw: Draw a diagram of Max’s stringed instrument. Label which strings would produce a 'high' pitch and which would produce a 'low' pitch, and explain why using arrows to show the length of the strings.

Extension challenge: Total: /25. Extension: If you were to double the length of a string on an instrument, how might that affect the frequency of the sound waves produced? Predict the result and justify your scientific reasoning.