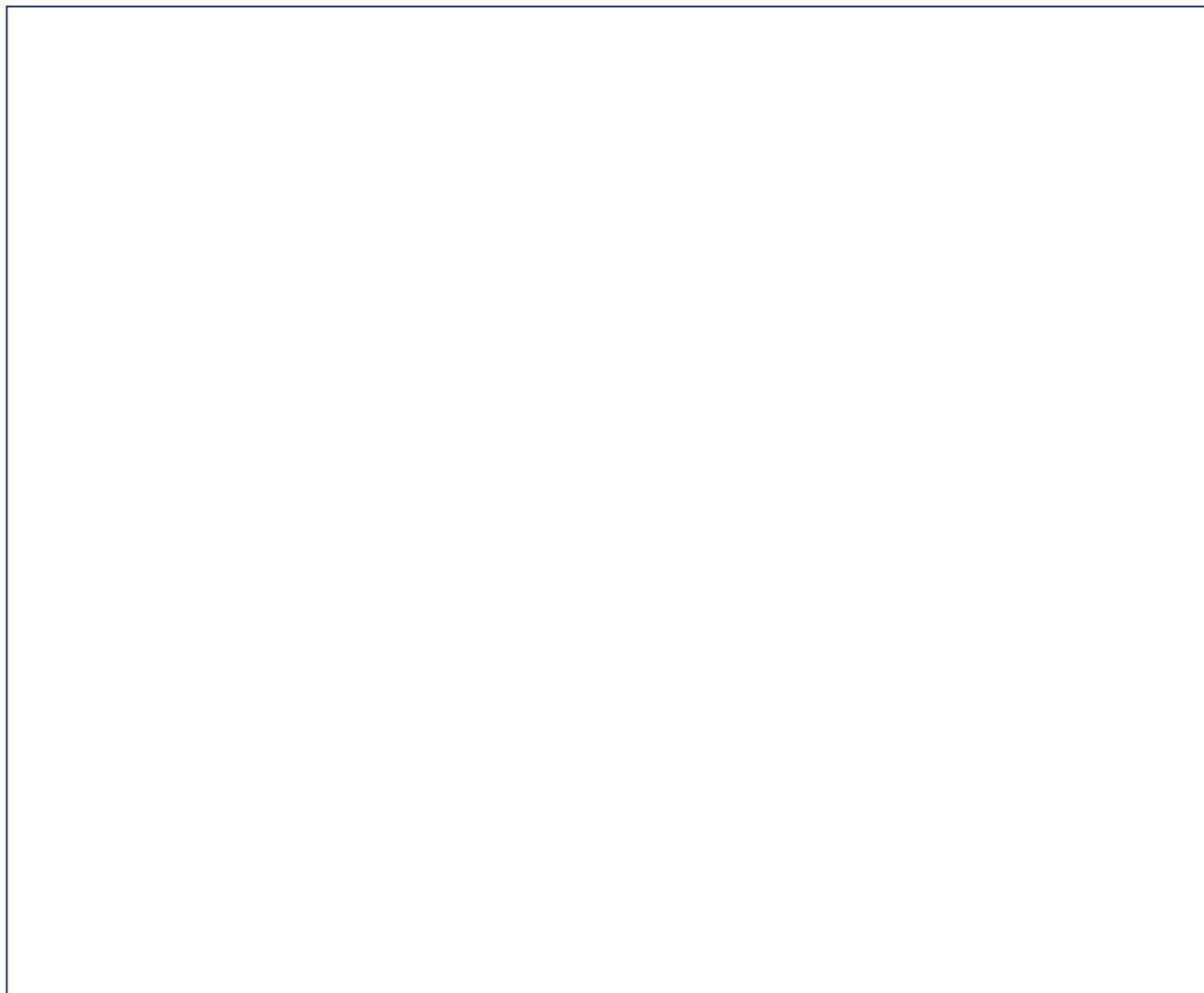


Max's Musical Mountain: Exploring Pitch

Learning objective: To understand and visually represent how pitch relates to frequency and the size of sound-producing instruments.

Max the monkey is building a musical mountain! Use your knowledge of pitch—how high or low a sound is—to complete the labels and the drawing. Remember: smaller objects usually vibrate faster to create higher pitches, while larger objects create lower pitches.

Draw: Draw a whimsical scene featuring Max the monkey conducting an orchestra of woodland items. On the left, draw a set of tiny, colourful chimes hanging from a branch (representing high pitch). In the centre, draw a medium-sized wooden xylophone. On the right, draw a massive, hollow log used as a drum (representing low pitch). Above each instrument, draw 'sound wave' lines: use tight, bunched-up curves for high-pitched sounds and long, stretched-out curves for low-pitched sounds. Add Max in the middle holding a conductor's baton.



Label words: High Pitch · Low Pitch · Frequency · Vibration · Sound Wave · Decrescendo · Crescendo

Steps:

1. Label the three musical instruments in your drawing as either 'High Pitch' or 'Low Pitch'. Explain why the size of the instrument affects the pitch it produces.

2. If you were to draw a visual representation of a 'High Pitch' sound wave compared to a 'Low Pitch' one, how would the wavelength differ? Justify your answer.
3. Compare and contrast the sound of a tiny bell with the sound of a large bass drum. Use the term 'vibration' in your answer.
4. Explain why a musician might choose to play a sequence of notes that gradually increase in pitch. What effect does this have on the listener?
5. What might happen to the pitch of a guitar string if you were to tighten it further? Explain your reasoning.
6. Create a musical 'pattern' in your drawing. Draw a series of shapes that represent a melody going from low to high and back to low again.