

The Orchestra Expedition with Max and Zara

Learning objective: To identify and classify musical instruments into the four main families: strings, woodwind, brass, and percussion.

Max the monkey has found a collection of musical instruments, but he needs Zara's help to sort them! Look at the list of instruments provided. Categorize each instrument into its correct family and explain how the sound is produced. For the final task, think like a composer to justify which instrument family would best represent a stormy day.

Word bank: Violin · Flute · Trumpet · Snare Drum · Cello · Clarinet · Trombone · Xylophone · Double Bass · French Horn

1. Sort the instruments into a table with four columns (Strings, Woodwind, Brass, Percussion). Explain how the sound is produced for each family. (4 marks)

2. Max thinks the flute belongs in the brass family because it is made of metal. Is he correct? Justify your answer using your knowledge of how woodwind instruments produce sound. (3 marks)

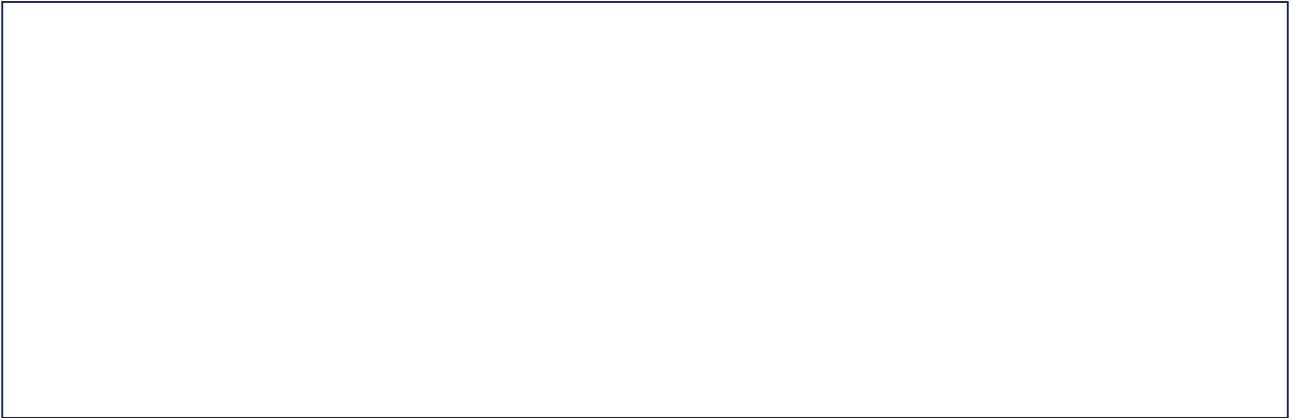
3. Compare and contrast the way a violinist produces sound compared to a percussionist playing a xylophone. (3 marks)

4. If you were writing a piece of music to represent a thunderstorm, which two instrument families would you choose to create the most dramatic effect? Explain why. (3 marks)

5. What might happen to the pitch of a string instrument if the string were made thicker or longer? Use scientific reasoning to explain your answer. (3 marks)

6. Zara wants to design a new instrument. If she wants it to be part of the woodwind family, what 'must-have' features does her design need to include? (2 marks)

Draw: Draw your own 'invented' instrument. Label which family it belongs to and clearly point out the part of the instrument that vibrates to create the sound.



Extension challenge: Research the 'Harp'. Write a short paragraph explaining why it is difficult to categorize and justify where you think it fits best in the orchestral families.