

## Max's Musical Math: Mastering Rhythm

*Learning objective: To understand and apply musical notation by exploring note values, rests, and time signatures in 4/4 time.*

Max the monkey is busy organising a jungle concert! Help him arrange his beats by calculating note values and completing the rhythmic patterns below.

*Word bank: Semibreve · Minim · Crotchet · Quaver · Time Signature · Bar Line · Pulse · Rest*

**1. Max has a bar in 4/4 time. He has already used one minim (2 beats) and one crotchet (1 beat). How many beats are remaining in the bar, and which single note value could he use to fill the space perfectly? (2 marks)**

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**2. Explain why a semibreve is equivalent to four crotchets. Use your knowledge of mathematical fractions to justify your answer. (3 marks)**

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**3. If a quaver is worth half a beat, calculate the total number of quavers needed to fill one full bar of 4/4 time. Show your working out. (2 marks)**

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**4. Compare and contrast a 'rest' in music to a 'note'. Why is it essential for a musician to understand the value of a rest when playing in an ensemble? (3 marks)**

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**5. What might happen to the overall sound of a piece of music if the pulse suddenly changed from a steady beat to an irregular, disjointed pattern? (2 marks)**

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**Draw:** Draw a rhythmic sequence for a percussion instrument using at least two different note types (e.g., crotchets and minims) that adds up to exactly 8 beats across two bars.



*Extension challenge: Compose your own 4-bar rhythm using a variety of notes and rests. Write the beat count (1, 2, 3, 4) underneath each bar. Then, perform your rhythm by clapping and tapping your feet—can you keep a consistent tempo without speeding up or slowing down?*