

Max's Roman Numeral Challenge

Learning objective: To understand and convert Roman numerals to 100 (C) and solve problems involving Roman numeral calculations.

Read the passage about Max's historical discovery. Use your knowledge of Roman numerals to solve the puzzles below. Remember: I=1, V=5, X=10, L=50, C=100.

Max the monkey is exploring the ruins of an ancient library. He finds a collection of old scrolls, each marked with a Roman numeral to show its age. Max loves math, so he decides to organize them. He finds a scroll marked 'XLV' and another marked 'XXIX'. Max knows that to understand history, he must be able to convert these symbols accurately. He calculates the total value of the scrolls to help the museum curators catalogue them correctly.

Word bank: Numeral · Symbol · Value · Calculate · Roman · History · Addition · Subtraction

1. Max finds a scroll labelled 'LXXIV'. Convert this into Arabic numerals (our standard numbers). Explain your reasoning. (2 marks)

2. If Max has a scroll worth £48 and another worth £35, write both values in Roman numerals and calculate their total in Roman numerals. (3 marks)

3. Compare the number 89 and the Roman numeral 'XCI'. Which is larger? Justify your answer using mathematical terms. (2 marks)

4. Max discovers a scroll labelled 'XC'. He says it represents 110 because X is 10 and C is 100. Is Max correct? Explain why or why not. (2 marks)

5. If you were to write the current year in Roman numerals, what would it be? (e.g., 2024). Note: M = 1000. (2 marks)

Draw: Draw a set of three ancient stone tablets. On each tablet, design a unique Roman numeral between 50 and 100, and draw a border around them using an intricate pattern that Zara the zebra might admire.



Extension challenge: What might happen to the organisation of the library if the Romans had not used a subtractive system (like IV for 4 instead of IIII)? Write a short paragraph evaluating the efficiency of the Roman numbering system compared to our modern decimal system.