

Year 6 Mathematics Assessment: Place Value Mastery

Learning objective: To demonstrate understanding of place value in numbers up to 10,000,000, including ordering, rounding, and negative numbers.

Read each question carefully. Show your working out where necessary. Max the monkey is counting large amounts for the BookFlik library project—help him solve these mathematical puzzles!

Max the monkey is organising the BookFlik central archive. He has 4,520,385 fiction books and 3,195,470 non-fiction books. He needs to label shelves, calculate total stock, and track temperature changes in the archive basement.

Word bank: ten million · place value · partition · integer · round · digit · ascending · descending · negative

1. Write the number 4,520,385 in words. (1 mark)

2. What is the value of the digit '5' in the number 4,520,385? Explain your answer. (2 marks)

3. Max finds a box of 1,250,000 bookmarks. Round this number to the nearest 100,000 and the nearest 1,000,000. (2 marks)

4. The temperature in the archive basement starts at 4°C. During the night, it drops by 7°C. What is the new temperature? (2 marks)

5. Order these archive shelf codes from smallest to largest: 2,050,400; 2,050,040; 2,500,400; 2,005,400. (3 marks)

If Max adds 10,000 to 9,995,000, what is the total? (3 marks)

--

Extension challenge: Total: /25. Challenge: If the library budget was £10,000,000 and Max spent half, then spent a further £2,500,500, how much would he have left? Express your answer in pounds and pence.