

Max's Market Maths: Mastering Decimals

Learning objective: To identify the value of each digit in numbers given to three decimal places and to multiply and divide numbers by 10, 100, and 1000.

Max the monkey is helping at the local village market. Read the passage about his market stall and use your knowledge of place value to solve the challenges below.

Max is selling bags of organic fruit at the market. He carefully labels his produce using decimals. A bag of golden apples weighs 1.250kg, while a smaller punnet of berries weighs exactly 0.375kg. Max notices that when he buys supplies in bulk, the price of one item is £2.45. If he buys 100 items, he has to shift his decimal point two places to the right to calculate the total cost. He loves how the numbers dance across the page whenever he uses his maths skills!

Word bank: thousandths · hundredths · tenths · decimal point · place value · multiply · divide

1. In the weight of the berries (0.375kg), what is the value of the digit 7? (2 marks)

2. Max has a box of oranges weighing 4.82kg. If he divides the total weight equally into 10 smaller bags, what will be the weight of one bag? (2 marks)

3. The price of one jar of honey is £3.15. If Max sells 100 jars, what is the total amount of money he makes? (2 marks)

4. Write the number 0.009 in words and explain what the digit 9 represents in terms of place value. (2 marks)

5. Max has 7.5kg of flour. He needs to divide this into 1000 small sample packets. Calculate the weight of one sample packet. (2 marks)

Draw: Draw a market stall scene with Max the monkey holding a sign that shows a decimal number. Include three different items for sale with labels showing weights or prices in decimals.



Extension challenge: Max finds a mystery bag. If you multiply the weight of the berries (0.375kg) by 1000, what is the new total? Describe what happens to the decimal point when you multiply by 1000.