

Max's Mathematical Market Adventure

Learning objective: To solve multi-step addition problems involving decimal money and whole numbers, applying formal written methods to real-world contexts.

Max the Monkey is visiting the local market to buy supplies for his friends. Use your knowledge of column addition to help him calculate the totals. Ensure you line up your decimal points carefully and remember to include the £ symbol in your final answers. Show your working out clearly in the space provided.

Word bank: column addition · decimal point · place value · exchange · total · sum · pounds · pence

1. Max buys a bunch of bananas for £2.45 and a bag of apples for £3.78. Calculate the total cost of his fruit. Explain why it is important to align the decimal points before adding. (3 marks)

2. Ellie needs 12.5 kilograms of hay and 8.75 kilograms of oats for her breakfast. What is the total mass of her supplies? Justify your method for adding these two different decimal lengths. (3 marks)

3. Kit wants to buy a digital tablet for £145.50 and a protective case for £29.99. Calculate the total. If Kit has £200.00, how much change will he have? Show your addition first. (4 marks)

4. Compare and contrast the process of adding whole numbers with the process of adding decimal numbers. What is the main difference you must account for? (3 marks)

5. Max finds three items costing £4.56, £12.09, and £7.35. Calculate the sum. What might happen if you forgot to carry over a value when adding the tenths column? (3 marks)

6. Create your own addition word problem involving three items costing between £10.00 and £50.00. Challenge a partner to solve it and check their work. (4 marks)

Extension challenge: Imagine Max is shopping for a party for all the BookFlik characters. Create a receipt for five items with varying prices (including pence). Calculate the grand total and write a short explanation of how you checked your calculation for accuracy using inverse operations.