

Kit's Computing Challenge: Mastering the Spreadsheet

Learning objective: To understand how spreadsheets use cells, rows, columns, and formulas to organise data and perform calculations.

Kit the fox is helping the Forest School café track their weekly shop. Imagine the grid below is a spreadsheet. Each square is a 'cell'. Columns are labelled with letters (A, B, C) and rows with numbers (1, 2, 3). Use the provided data to solve the café's inventory puzzles. Remember: a cell reference is the column letter followed by the row number (e.g., B2).

Word bank: Cell · Column · Row · Formula · Data · Cell Reference · Total · Value

1. If apples cost £2.00 (in cell B2) and we buy 3 bags, write the formula Kit should type into cell B3 to calculate the total price. (2 marks)

2. Explain why it is more efficient to use a formula (e.g., =B2*3) rather than typing the answer '£6.00' directly into the cell. (3 marks)

3. If cell C1 contains the word 'Quantity' and cell C2 contains the number '5', what is the cell reference for the number 5? (1 mark)

4. Compare and contrast a 'row' and a 'column'. How can you tell them apart in a spreadsheet application? (3 marks)

5. Justify your answer: If we change the price of apples in cell B2, what happens to the result in cell B3 if we used a formula? Why is this useful? (3 marks)

6. What might happen if you typed text into a cell where you intended to perform a mathematical calculation? Explain the potential error. (2 marks)

Draw: Draw a 4x4 grid. Label the columns A, B, C, D and the rows 1, 2, 3, 4. In cell A1, draw a small icon of a carrot. In cell B1, write the price '£1.50'. In cell C1, write '3'. In cell D1, write a label for a formula that would calculate the total cost.

Extension challenge: Design a spreadsheet plan for a 'Class Party Budget'. Create a list of five items you want to buy, estimate their costs, and write down the cell references you would use to calculate the 'Grand Total' of all items. Explain why you chose those specific cells.