

Kit's Computing Challenge: Designing a Spreadsheet

Learning objective: To understand how to organise, calculate, and present data using spreadsheet software.

Kit the Fox is organising a supply shop for our forest friends. Before you open your computer software, use this template to plan your digital spreadsheet. Think about how you can use formulas to make calculations easier.

Word bank: Cell · Column · Row · Formula · Data · Total · Value · Calculate · Format

1. Identify your Column Headers: What categories of information (e.g., Item Name, Price in £, Quantity) will you need to track your shop's inventory? (2 marks)

2. Data Entry Plan: List three example items you would include in your spreadsheet, including their cost in £. How will you ensure your currency formatting is consistent? (3 marks)

3. The Formula Logic: Explain how you would write a formula to calculate the 'Total Cost' of an item if a customer buys more than one. Why is it better to use a cell reference (e.g., B2*C2) rather than typing the numbers directly? (4 marks)

4. Compare and Contrast: Compare a digital spreadsheet to a handwritten list. Justify why a spreadsheet is more efficient for a shopkeeper like Kit. (3 marks)

5. What might happen if you entered a text word into a cell that is supposed to contain a numerical value for a calculation? Explain the consequence. (2 marks)

6. Creative Extension: Imagine you need to calculate the total value of all items in the shop. Describe the steps you would take to create a 'Grand Total' at the bottom of your data set. (3 marks)

Extension challenge: Challenge: If your spreadsheet was tracking 50 different items, how could you use the 'Sort' or 'Filter' functions to help Kit find the most expensive items quickly? Explain the benefit of these tools in a real-world scenario.