

Max's Market Day Measurement Challenge

Learning objective: To assess understanding of measurement, including converting units, calculating perimeters, and solving problems involving money.

Read each question carefully. Max the monkey needs your help to organise his market stall. Show your working out clearly to gain full marks.

Max is setting up his market stall to sell fresh produce. He needs to measure the lengths of his wooden crates, calculate the perimeter of his display table, and ensure he has the correct change for his customers. The table is 2 metres long and 150 centimetres wide.

Word bank: millimetres · centimetres · metres · kilometres · perimeter · conversion · equivalent · calculate

1. Max's table is 2 metres long. How many centimetres is this in total? Explain the conversion method you used. (2 marks)

2. Calculate the perimeter of the table in centimetres. Show your calculation. (3 marks)

3. A small crate is 450 millimetres long. How many centimetres is this? (2 marks)

4. Max sells a basket of apples for £4.50 and a jar of honey for £3.75. If a customer pays with a £10 note, how much change should they receive? (3 marks)

5. Compare and contrast using millimetres and metres to measure the length of a pencil. Justify why one unit is more appropriate than the other. (4 marks)

6. Max wants to build a fence around his display area. The area is a rectangle with a width of 3m and a length of 5m. If the fencing costs £2 per metre, how much will it cost to fence the whole area? Show your working. (6 marks)

7. Extended Writing: Max is planning a much larger stall for next year. Write a short plan describing how you would measure the space required, the tools you would use, and how you would ensure your measurements are precise. Use at least three terms from the word bank. (5 marks)

Draw: Draw a diagram of Max's rectangular table, labelling the length and width in both metres and centimetres.



Extension challenge: Total: /25. Greater Depth Challenge: What might happen if Max measured his table using centimetres but calculated the perimeter using metres? Explain the necessity of using consistent units for mathematical accuracy.