

Max's Measurement Mission: Planning a Party

Learning objective: To solve problems involving the conversion of units of measurement, calculating perimeter and area, and managing a budget using decimal notation.

Max the monkey is organising a jungle celebration! Help him prepare by calculating the dimensions of the party area, converting ingredients for his famous fruit punch, and ensuring the total cost stays within his budget of £50.00. Fill in each section below to help Max get everything ready in time.

Word bank: millimetres · centimetres · metres · kilometres · millilitres · litres · grams · kilograms · perimeter · area · conversion

1. Max needs to rope off a rectangular dance floor that is 8.5 metres long and 4 metres wide. Calculate the total perimeter of the dance floor and explain how you found your answer. (3 marks)

2. The party decorations involve ribbons that are 250 centimetres long. Convert this length into metres and explain the calculation you performed to change the units. (2 marks)

3. Max is mixing a punch. He needs 1.5 litres of orange juice and 750 millilitres of sparkling water. What is the total volume of the punch in litres? (2 marks)

4. The snacks cost £12.45, the music hire is £25.50, and the balloons are £8.25. Calculate the total cost and determine if Max has stayed under his £50.00 budget. (3 marks)

5. If Max decides to double the recipe for his fruit punch (currently 2.25 litres total), how many millilitres will he have in total? Show your working out. (2 marks)

Extension challenge: Max wants to add a square refreshment table with a side length of 1.2 metres. Calculate the area of this table in square metres and suggest what the cost might be if the tablecloth costs £4.50 per square metre.