

Max's Measurement Mastery

Learning objective: To convert between units of measurement and solve problems involving length, mass, and volume.

Read the word bank to refresh your memory on units. Use the information provided in the passage to help Max solve his mathematical puzzles. Show your working out clearly.

Max the monkey is helping his friends prepare for a forest party. He has a 3-metre long piece of bunting to decorate the clearing. He also has a bowl filled with 1,500 millilitres of refreshing fruit punch. To make sure everyone gets a fair share, he has small cups that hold 200 millilitres each. Finally, Max needs to weigh the ingredients for a giant fruit salad. He has 2 kilograms of strawberries and 500 grams of blueberries.

Word bank: millimetre · centimetre · metre · kilometre · gram · kilogram · millilitre · litre · convert · equivalent · perimeter · capacity

1. Max wants to cut his 3-metre bunting into 50-centimetre strips. How many strips can he make in total? (2 marks)

2. If Max pours the 1,500 millilitres of punch into cups that hold 200 millilitres each, how many full cups can he fill? How much punch is left over? (2 marks)

3. What is the total mass of the strawberries and blueberries combined in grams? (2 marks)

4. Max decides to add another 500 grams of grapes to the fruit salad. What is the new total mass in kilograms? (2 marks)

5. If Max had 2 litres of juice instead of 1,500 millilitres, how many more millilitres would he have? (2 marks)

Draw: Draw a set of scales showing the 2 kilograms of strawberries on one side and the 500 grams of blueberries on the other. Label the difference in weight.



Extension challenge: Max finds a piece of ribbon that is 450 centimetres long. He says, 'This is exactly 4.5 metres long.' Is Max correct? Explain your reasoning using your knowledge of converting centimetres to metres.