

Max's Measurement Mission: Area and Perimeter

Learning objective: Calculate and compare the area and perimeter of rectangles and rectilinear shapes in centimetres and metres.

Help Max the monkey solve his jungle construction puzzles! Use a ruler to measure the shapes you draw or use the dimensions provided to calculate the space inside and the distance around the edge. Remember: Perimeter is the distance around the outside, and Area is the total number of square units inside.

Word bank: perimeter · area · centimetres · square centimetres · length · width · rectilinear · calculate · dimensions

1. Shape Definition: Draw a rectangle with a width of 4cm and a length of 6cm. Label the sides clearly. (2 marks)

2. Perimeter Calculation: Calculate the perimeter of your rectangle. Show your working out using the formula (length + width) x 2. (2 marks)

3. Area Calculation: Calculate the area of your rectangle. Remember to use the correct unit of measurement (cm²). (2 marks)

4. Real-World Application: Max wants to build a play area that is 8m long and 5m wide. What is the total area of the space he needs? (2 marks)

5. Problem Solving: If Max has 20 metres of fencing, can he enclose a square garden with sides of 6 metres? Explain your answer. (3 marks)

Extension challenge: Design a rectilinear shape (a shape made of joined rectangles) on squared paper. Can you calculate its total perimeter and area by splitting it into two smaller rectangles?