

Grade 3 Math Assessment: Area and Perimeter

Learning objective: To calculate the perimeter of rectilinear shapes and find the area of shapes by counting squares.

Read each question carefully. Max the monkey needs your help to solve these puzzles! Show your working out clearly to earn full marks.

Max the monkey is helping his friends build a new playground. He needs to measure the edges of the flower beds to buy fencing (perimeter) and count the grass tiles needed to cover the ground (area).

Word bank: Perimeter · Area · Centimetres · Square centimetres · Rectilinear · Total · Length · Width

1. Max has a rectangular flower bed that is 5cm long and 3cm wide. What is the perimeter of the flower bed? Show your calculation. (2 marks)

2. Zara the zebra draws a shape on squared paper. It covers exactly 12 full squares. What is the area of this shape in square centimetres (cm²)? (2 marks)

3. A square garden has a side length of 4m. Explain how you find the perimeter and state the final answer. (3 marks)

4. Kit the fox has a rectilinear shape made of two joined rectangles. One rectangle is 2cm by 4cm, and the other is 3cm by 2cm. What is the total area of the shape? (4 marks)

5. Max wants to build a new sandpit. He has 20 metres of wood to use for the perimeter. Draw and label a rectangle that uses exactly 20 metres of wood. What is the area of the rectangle you have drawn? (4 marks)

6. Ellie the elephant is building a brick path. Each brick is 1 square meter. If she wants to build a path that is 6 metres long and 4 metres wide, how many bricks will she need? If each brick costs £2, how much will the path cost in total? Show your working out. (5 marks)

Draw: Draw a rectilinear shape on a grid where each square represents 1cm^2 . The shape must have a perimeter of 12cm.



Extension challenge: Total: /25. Challenge: If Max doubled the length and width of his 5cm by 3cm flower bed, would the area also double? Explain your reasoning.