

Max's Garden Geometry

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

Help Max the monkey design his garden patches. Read each question carefully and show your working out. Remember to use the correct units (cm or cm²).

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

1. Max has a rectangular vegetable patch that is 6cm long and 4cm wide. Calculate the perimeter of the patch. (2 marks)

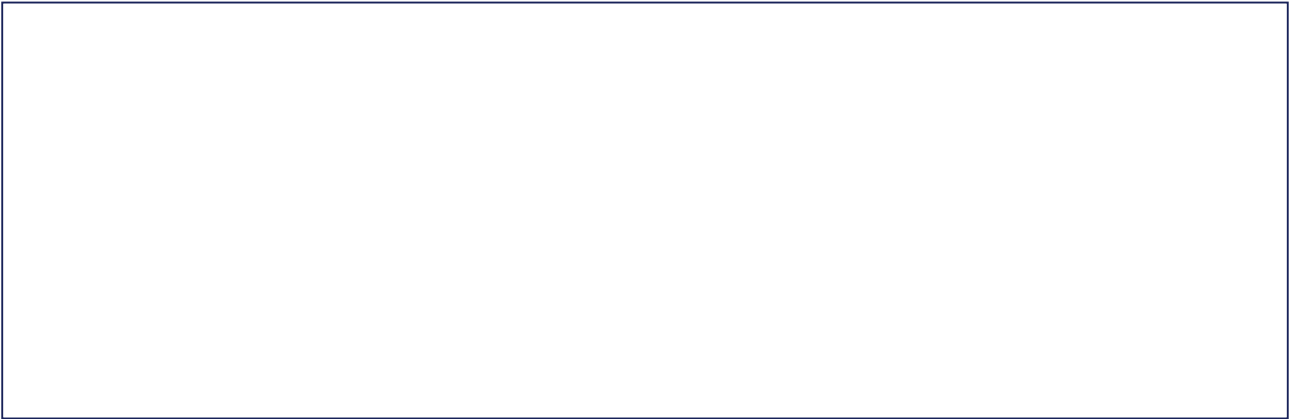
2. A flower bed is shaped like a rectilinear polygon. It has a length of 8cm, a width of 3cm, and two smaller sides of 2cm and 2cm. What is the total perimeter? (2 marks)

3. Max draws a square garden plot on grid paper. Each side is 5cm long. How many 1cm squares (cm²) will fit inside the plot to find the total area? (2 marks)

4. If Max wants to build a fence around a square plot with a perimeter of 20cm, what is the length of one side of the square? (2 marks)

5. Compare these two shapes: Shape A is 4cm by 3cm. Shape B is 2cm by 6cm. Do they have the same area? Explain your reasoning. (3 marks)

Draw: Draw a rectilinear shape on squared paper that has an area of exactly 10cm^2 . Label the lengths of all sides.



Extension challenge: Max wants to buy fencing that costs £2 per centimetre. If his garden patch has a perimeter of 12cm, how much will it cost him to buy enough fencing to go all the way around?