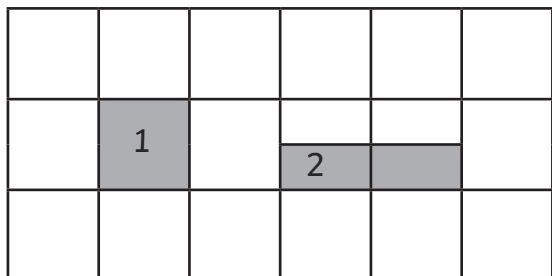# Investigating Perimeter and Area 2

Recognise that shapes with the same areas can have different perimeters and vice versa.

Using whole squares and half cm squares (rectangles), there are 2 rectilinear shapes that use 1 square:
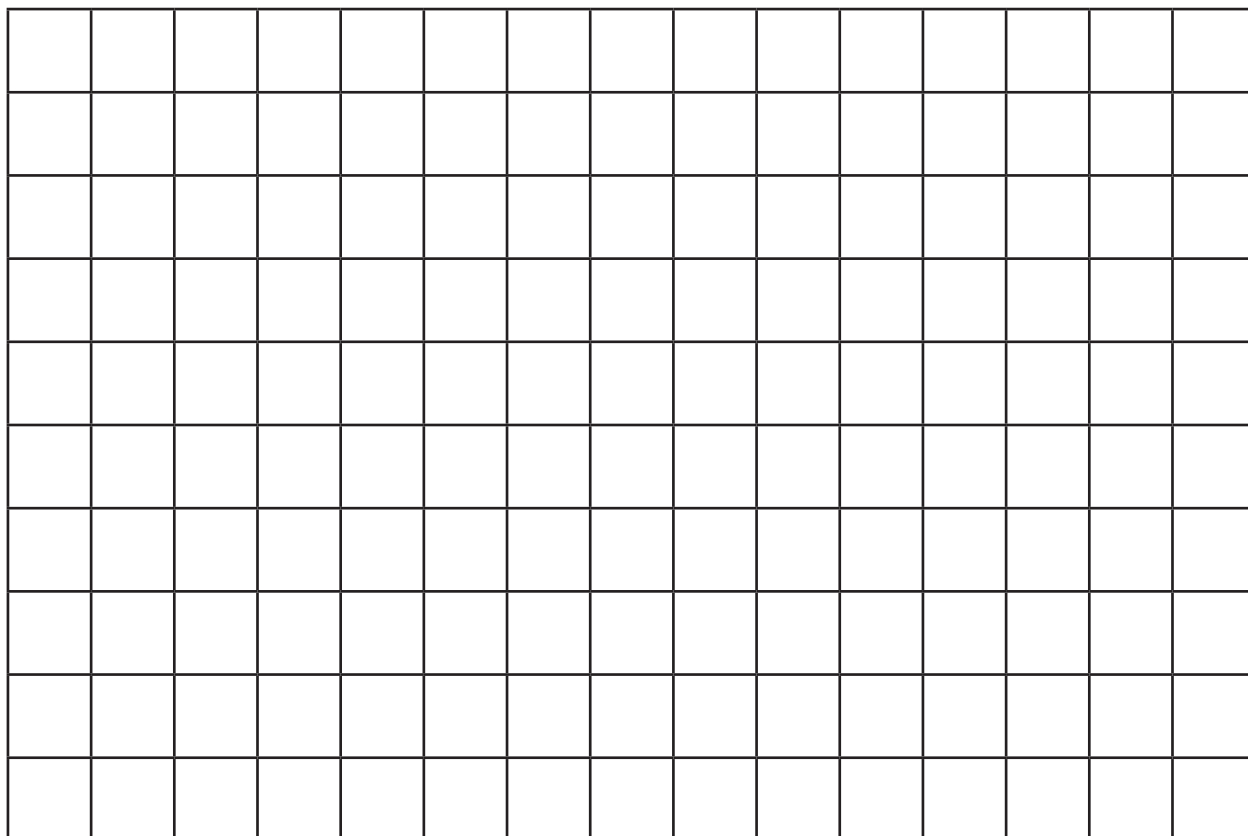
Shape 1: Area _____ cm²

Perimeter _____ cm

Shape 2: Area _____ cm²

Perimeter _____ cm

What do you notice about the area and perimeter of these 2 shapes?

_____

_____

Draw the different shapes that use 2 squares and write the area and perimeter in the table on the next page.

Investigating Perimeter and Area 2

Shape	Area	Perimeter

What do you notice about the area and perimeter of these shapes?

_____

_____

What reasons can you give for this?

_____

_____

Investigating Perimeter and Area 2

Draw different shapes with 3 squares and write the area and perimeter in the table on the next page.

Investigating Perimeter and Area 2

Shape	Area	Perimeter
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		

What have you found out?

_____

_____

_____

Perimeter and Area 2 **Answers**

Recognise that shapes with the same areas can have different perimeters and vice versa.

Using whole squares and half cm squares (rectangles), there are 2 rectilinear shapes that use 1 square:
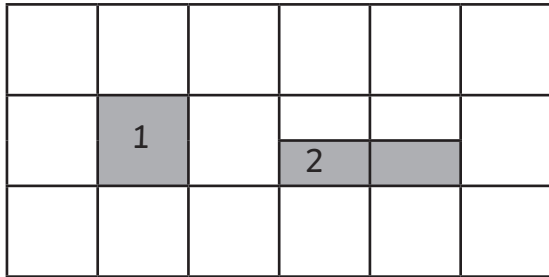
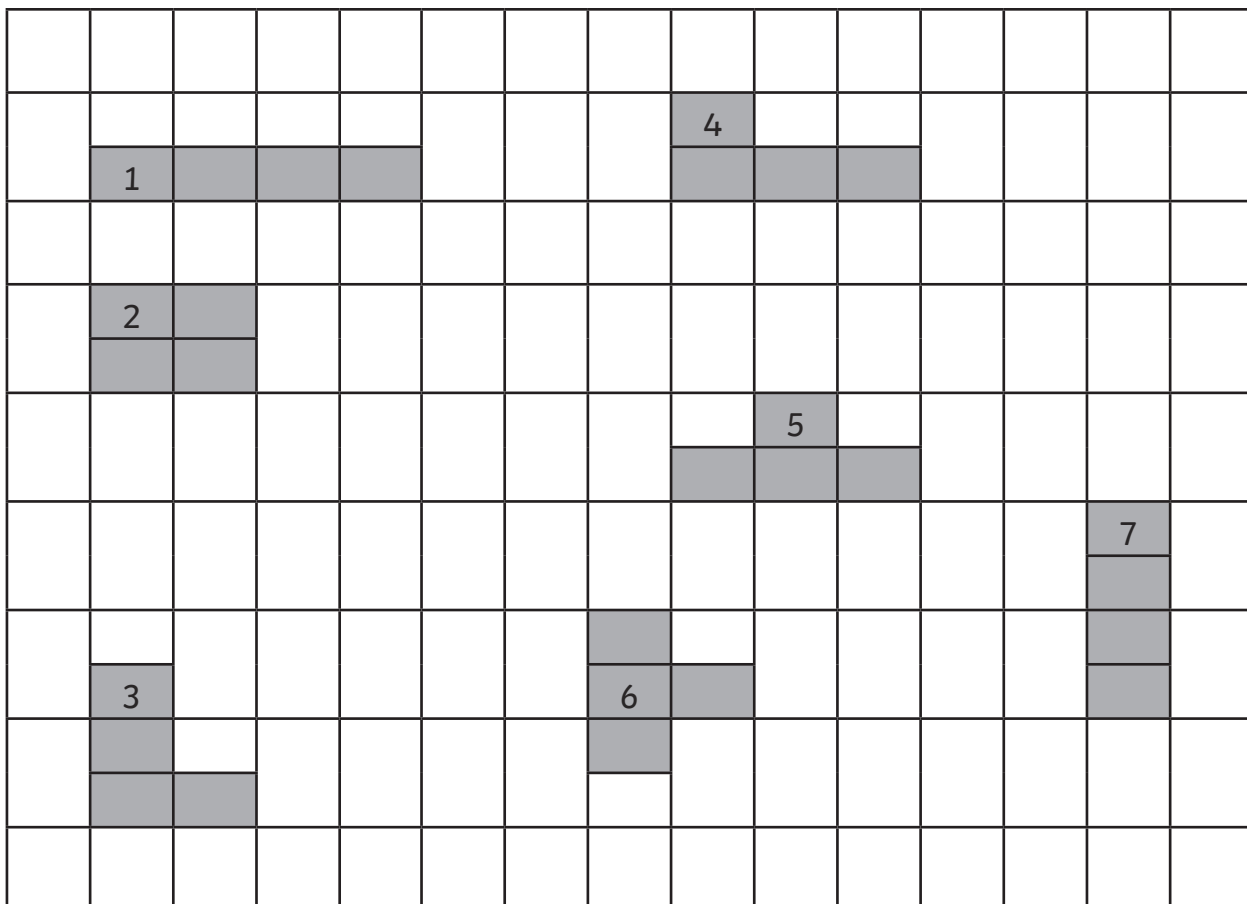Shape 1: Area: **1** cm²

Perimeter: **4** cm

Shape 2: Area: **1** cm²

Perimeter: **5** cm

What do you notice about the area and perimeter of these 2 shapes?

The area of both shapes is the same, but the perimeters are different.

Draw the different shapes that use 2 squares and write the area and perimeter in the table on the next page.

Perimeter and Area 2 **Answers**

Shape	Area	Perimeter
1	2cm²	9cm
2	2cm²	6cm
3	2cm²	7cm
4	2cm²	8cm
5	2cm²	8cm
6	2cm²	7cm
7	2cm²	6cm

What do you notice about the area and perimeter of these shapes?

The area is always the same, but there are 4 different perimeters.

What reasons can you give for this?

The use of rectangles gives different shapes. The more the shape resembles a square, the smaller the perimeter.

Perimeter and Area 2 **Answers**

Draw different shapes with 3 squares and write the area and perimeter in the table on the next page.

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Perimeter and Area 2 Answers

Shape	Area	Perimeter
1	3cm²	8cm
2	3cm²	8cm
3	3cm²	10cm
4	3cm²	11cm
5	3cm²	10cm
6	3cm²	13cm
7	3cm²	11cm
8	3cm²	12cm
9	3cm²	10cm
10	3cm²	13cm
11	3cm²	12cm
12	3cm²	12cm
13	3cm²	11cm
14	3cm²	12cm
15	3cm²	13cm
16	3cm²	10cm
17	3cm²	12cm
18	3cm²	8cm

What have you found out?

They all have the same area, but the perimeter varies. The more whole squares the lower the perimeter.