



ABBEY PARK SCHOOL

Year 6-7

Maths

Transition Pack

This booklet is to help you prepare for year 7 at Abbey Park School.

Please choose one section either one, two or three chillies and use the base-line check to find any topics that you need to practice.

You can then find more practice in each section, in the mixed levels at the end or use this link: <https://www.abbeyparkschool.org.uk/admissions/year-6-transition> on our website for further support.

Please use the answers in the booklet to correct any work that you complete and bring it in to show us so you can start collecting reward points in September.

This work is all optional and there is no expectation to finish all of it however it will help you get off to a strong start in Maths at Abbey Park School.

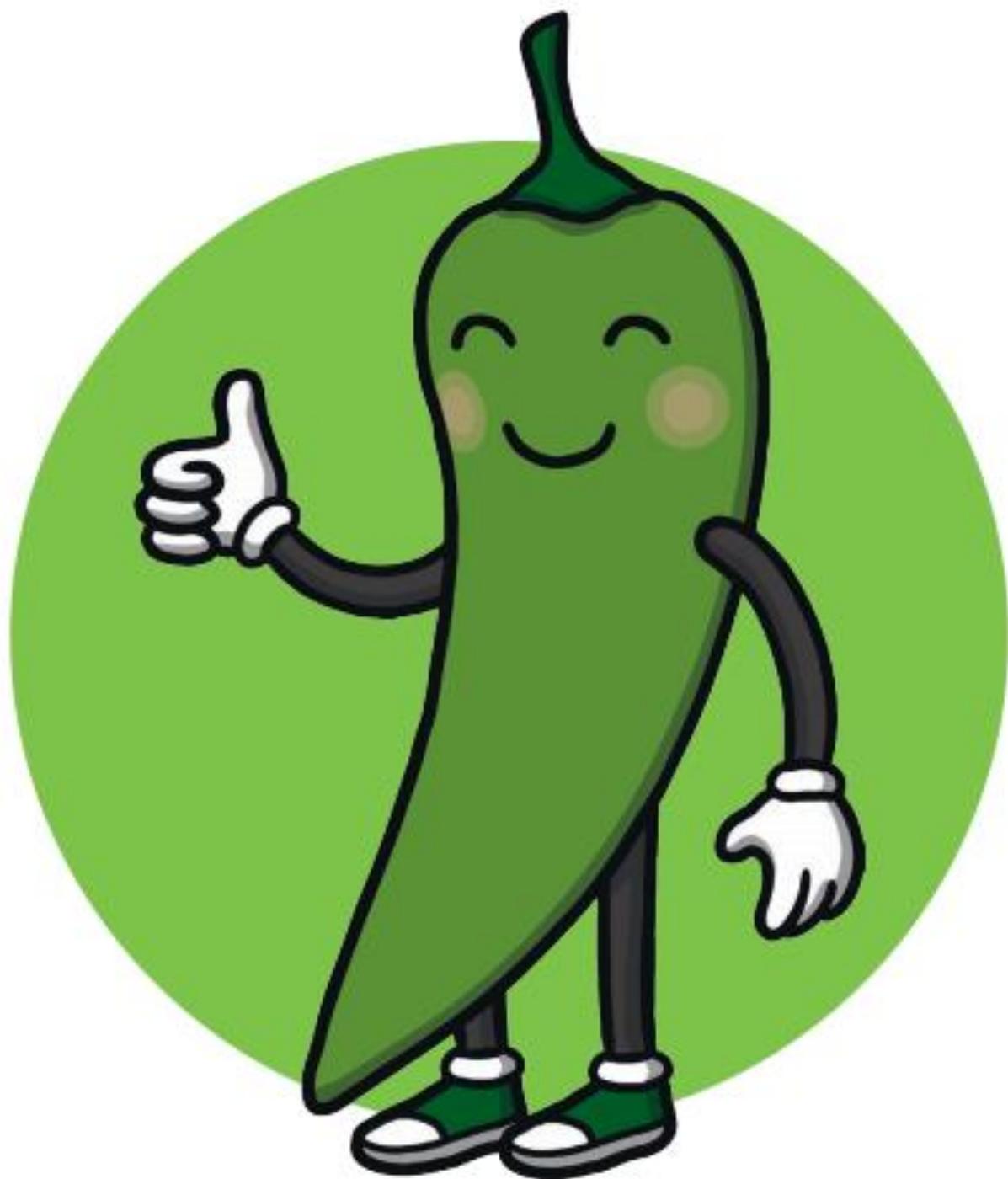


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Nice and
Spicy!



BASELINE CHECK

1. Work out:

a. $143 + 241$

_____ [1]

b. $239 + 48$

_____ [1]

2. Calculate the following:

a. $589 - 23$

_____ [1]

b. $721 - 199$

_____ [1]

3. Calculate 24×47

_____ [2]

4. Divide 5876 by 5, giving your answer as a decimal.

_____ [2]

5. Convert the following decimals into fractions. Fully simplify your answers.

a. 0.5

_____ [1]

b. 0.3

_____ [1]

6. Convert the following decimals into percentages:

a. 0.65

_____ [1]

b. 0.7

_____ [1]

7. a. Draw an angle of 50° .

[1]

b. An angle measures 50° . Name this type of angle.

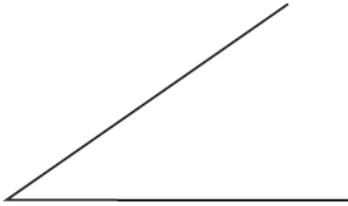
_____ [1]

8. a. Measure the line and state the units you used to measure it.



_____ [2]

b. Measure the angle and state the units you used to measure it.



_____ [1]

9. a. Convert 50cm into m.

_____ m [1]

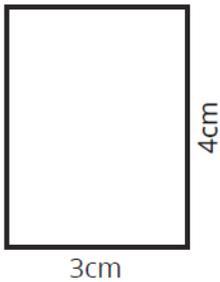
b. Convert 2kg into g.

_____ g [1]

10. Complete the missing numbers in the sequence:

-5, ____, -3, -2, ____, 0, 1, ____, 3, ... [2]

11. Calculate the area of the rectangle. State the units in your answer.



_____ [3]

12. From the list of numbers below, state:

4 6 10 16 40 88

a. all the factors of 20.

_____ [1]

b. all the multiples of 5.

_____ [1]

13. Round the following to one decimal place.

a. 15.72

_____ [1]

b. 0.089

_____ [1]

14. Calculate the following:

a. $\frac{3}{5} + \frac{1}{5}$

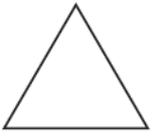
_____ [2]

b. $\frac{5}{7} - \frac{3}{7}$

_____ [2]

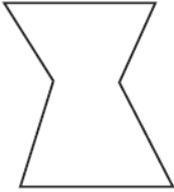
15. Name the following shapes:

a.



_____ [1]

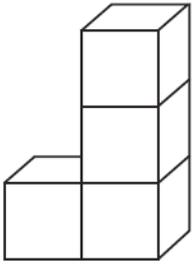
b.



_____ [1]

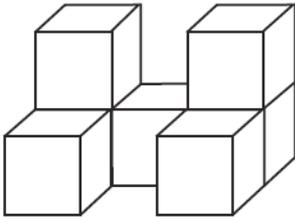
16. Calculate the volume of the stacked cubes. Each cube is 1cm^3 .

a.



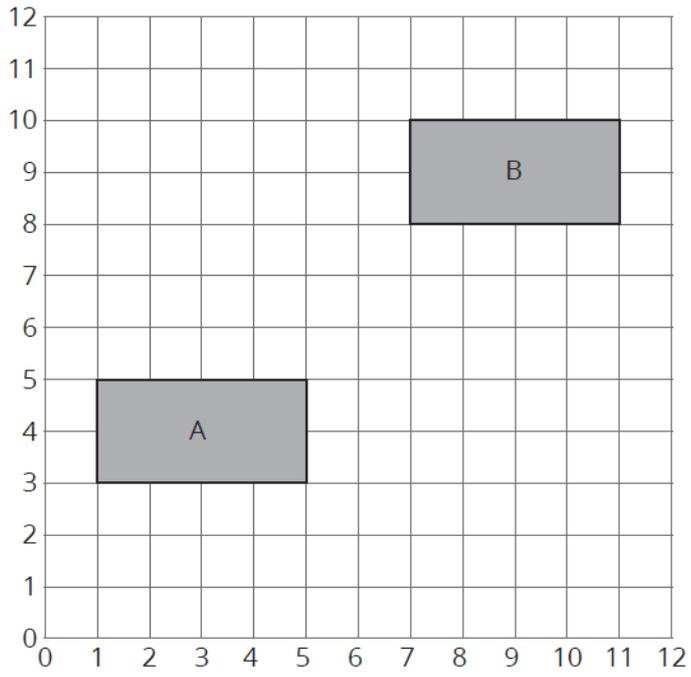
_____ cm^3 [1]

b.



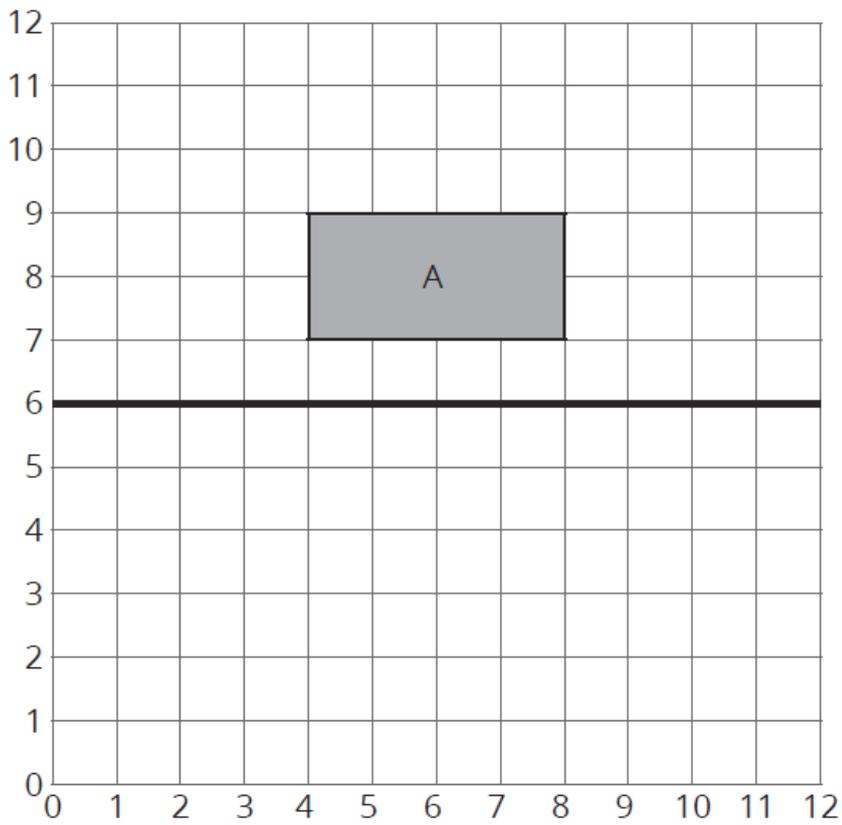
_____ cm^3 [1]

17. Fully describe the single transformation of shape A to shape B.

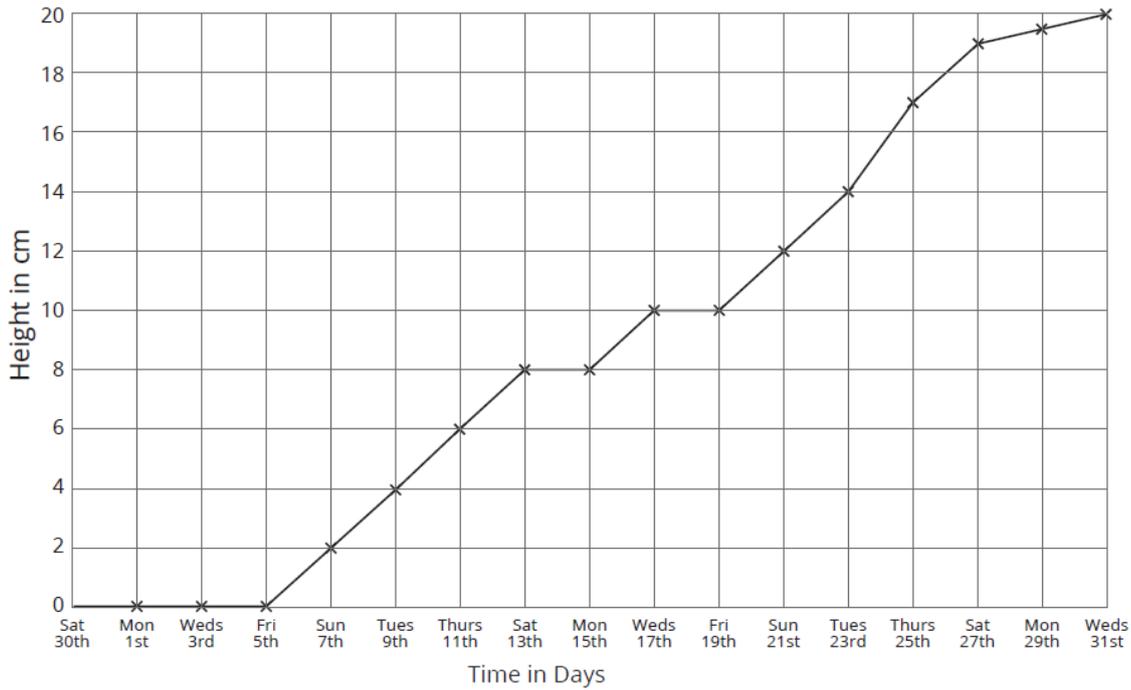


_____ [3]

18. Reflect shape A in the mirror line shown and label it B.



19. Here is a line graph showing a sunflower's growth. It was planted on Saturday 30th and its height was measured every 2 days.



- a. On which day was the sunflower 6cm in height?
- _____ [1]
- b. Between which two dates was the sunflower exactly half the height of its final recorded measurement?
- _____
- _____ [2]
- c. What was the difference in height between Thursday 11th and Wednesday 31st? Show your working.

_____ [2]

20. Ross and Rachel watch a film which is 150 minutes long. The film finishes at 7:00 p.m and has played all the way through without breaks.

a. Convert 150 minutes into hours and minutes.

_____ [1]

b. At what time did the film start?

_____ [1]

ANSWERS

1.		2 marks
a.	384	1 mark
b.	287	1 mark
2.		2 marks
a.	566	1 mark
b.	522	1 mark
3.		2 marks
	168 or 960 seen or implied 1128	1 mark or 2 marks
4.		2 marks
	1175 r 1 1175.2	1 mark or 2 marks
5.		2 marks
a.	$\frac{1}{2}$	1 mark
b.	$\frac{3}{10}$	1 mark
6.		2 marks
a.	65%	1 mark
b.	70%	1 mark
7.		2 marks
a.	Check student's angle is $50^\circ \pm 2$	1 mark
b.	acute	1 mark
8.		3 marks
a.	65mm \pm 1 or 6.5cm \pm 0.1 (or 1 mark if given without units)	2 marks
b.	$35^\circ \pm 2$	1 mark
9.		2 marks
a.	0.5m	1 mark
b.	2000g	1 mark
10.		2 marks
	4, -1, 2 (or 1 mark for any two correct)	2 marks

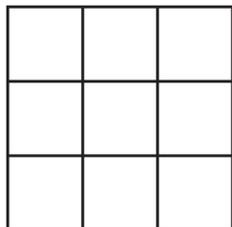
11.		3 marks
	3 × 4 12 12cm ²	1 mark or 2 marks or 3 marks
12.		2 marks
a.	4 and 10	1 mark
b.	10 and 40	1 mark
13.		2 marks
a.	15.7	1 mark
b.	0.1	1 mark
14.		4 marks
a.	$\frac{x}{5}$ or $\frac{4}{x}$ $\frac{4}{5}$	1 mark or 2 marks
b.	$\frac{x}{7}$ or $\frac{2}{x}$ $\frac{2}{7}$	1 mark or 2 marks
15.		2 marks
a.	(Equilateral) triangle	1 mark
b.	(Irregular) hexagon	1 mark
16.		2 marks
a.	4cm ³	1 mark
b.	7cm ³	1 mark
17.		3 marks
	translation (1 mark) of 6 to the right (1 mark) and 5 upwards (1 mark)	3 marks
18.		3 marks
	Co-ordinates for shape B: (4, 5), (4, 3), (8, 3), (8, 5). (or 1 mark) for correct x-coordinates only.	2 marks
19.		5 marks
a.	Thursday (11th)	1 mark
b.	17th and 19th	2 marks
c.	20 - 6 14	1 mark or 2 marks
20.		3 marks
a.	2 hours 30 minutes	1 mark
b.	4:30 pm or 16:30	1 mark

Investigating Perimeter and Area 1

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

There is only one rectilinear shape using 1 whole square.

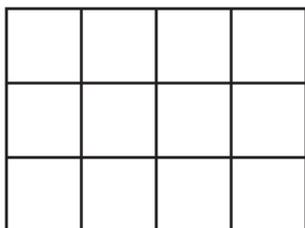
Draw it and then write the area and perimeter.



Area: _____ cm^2 Perimeter: _____ cm

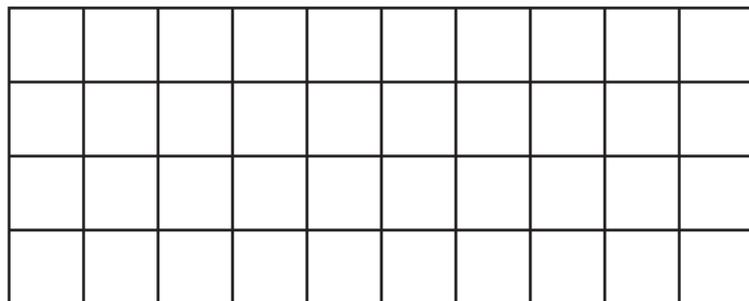
There is only one rectilinear shape using 2 whole squares.

Draw it and then write the area and perimeter.



Area: _____ cm^2 Perimeter: _____ cm

Draw the 2 different shapes with 3 whole squares and write the area and perimeter.



Area: _____ cm^2

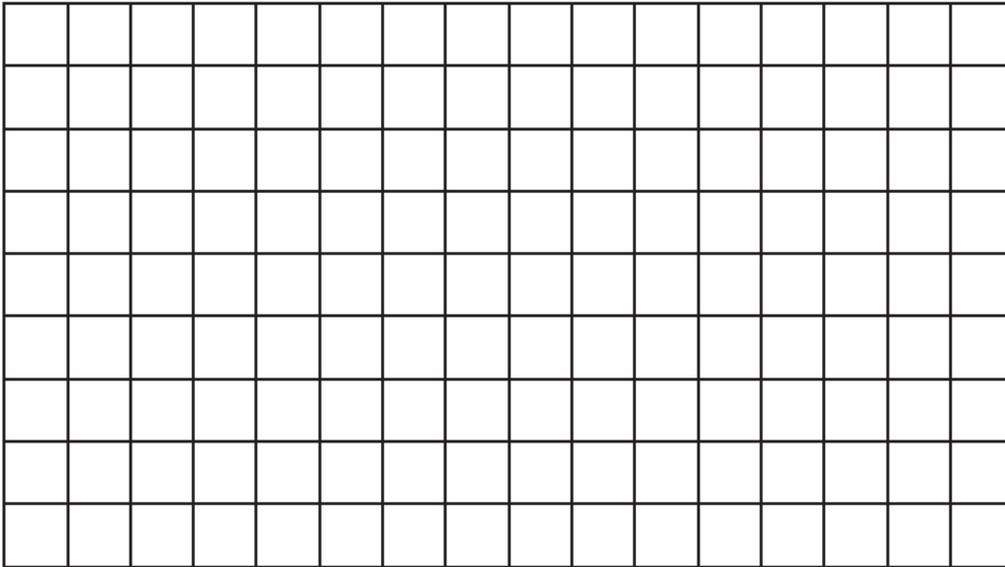
Perimeter: _____ cm

Area: _____ cm^2

Perimeter: _____ cm

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

Draw different shapes with 4 whole squares and write the area and perimeter in the table below.



Shape	Area	Perimeter

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

Can you explain why?

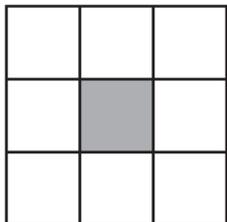
One chilli ANSWERS

Perimeter and Area Answers

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

There is only one rectilinear shape using 1 whole square.

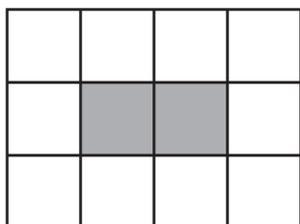
Draw it and then write the area and perimeter.



Area: 1 cm^2 Perimeter: 4 cm

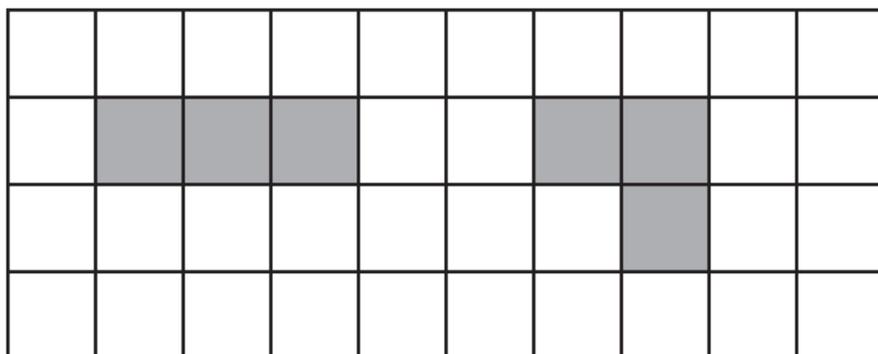
There is only one rectilinear shape using 2 whole squares.

Draw it and then write the area and perimeter.



Area: 2 cm^2 Perimeter: 6 cm

Draw the 2 different shapes with 3 whole squares and write the area and perimeter.



Area: 3 cm^2

Perimeter: 8 cm

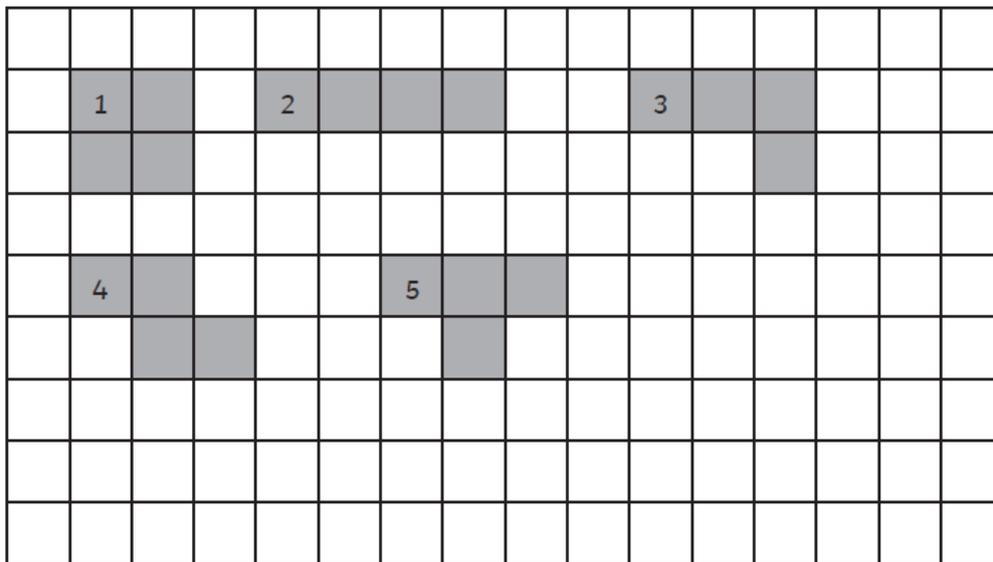
Area: 3 cm^2

Perimeter: 8 cm

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

They both have the same area and perimeter.

Draw different shapes with 4 whole squares and write the area and perimeter in the table below.



Shape	Area	Perimeter
1	4cm ²	8cm
2	4cm ²	10cm
3	4cm ²	10cm
4	4cm ²	10cm
5	4cm ²	10cm

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

The area and perimeter are the same for all the shapes except the square where the perimeter is 8cm instead of 10cm.

Can you explain why?

The perimeter is less because the squares have been put together so 2 sides that were on the outside are now on the inside.