
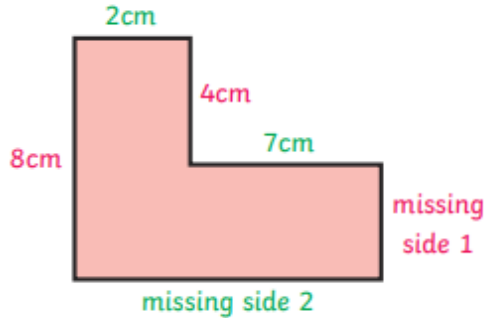
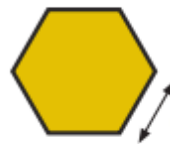




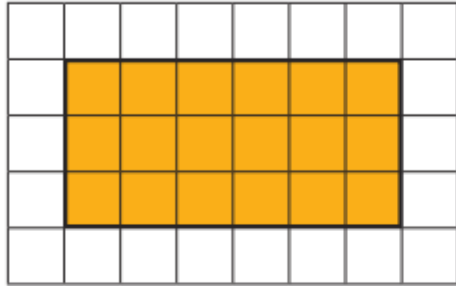
## Year 5 Perimeter and Area Knowledge Organiser.

Perimeter and Area		Knowledge Organiser
Key Vocabulary	Measure Perimeter	Calculate Perimeter
metre	Measure the perimeter of a rectangle: 	Calculate the missing sides of this rectilinear shape to find the perimeter: 
kilometre		
perimeter		
length	Measure the length (l) and width (w). $\text{Perimeter} = l + w + l + w$ or $(l + w) \times 2$	* This shape is not drawn to the dimensions specified.  <b>Missing side 1 + 4cm = 8cm, so missing side 1 = 4cm.</b>  <b>Missing side 2 = 2cm + 7cm = 9cm</b>  Perimeter = sum of all sides = $2\text{cm} + 4\text{cm} + 7\text{cm} + 4\text{cm} + 9\text{cm} + 8\text{cm} = 34\text{cm}$
width	Measure the perimeter of regular shapes:  Measure the length (l) and count the number of sides (s) on the shape. $\text{Perimeter} = l \times s$	
rectangle	Measure the perimeter of irregular shapes: 	
rectilinear	Measure the length of each side and add them together.	
dimensions	 visit <a href="https://www.twinkl.com">twinkl.com</a>	

## Length and Perimeter

### Area of Rectangles

The area of a rectangle on a grid:



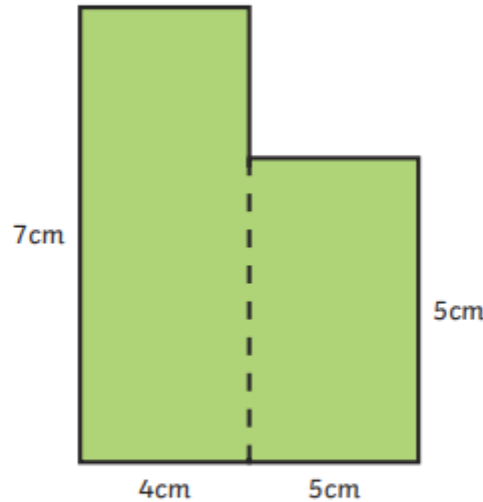
Multiply the length  $\times$  width  
 $= 6 \times 3 = 18$  squares.

The area of a rectangle = length (l)  $\times$  width (w).



### Area of Compound Shapes

To find the area of a compound shape, divide the shape into rectangles with known dimensions:

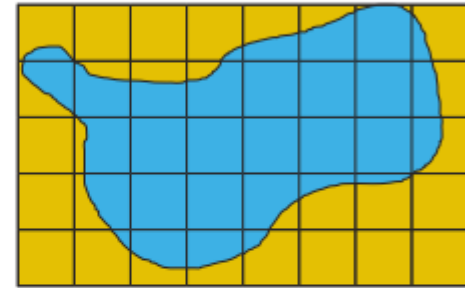


$$\begin{aligned} \text{Area} &= 7\text{cm} \times 4\text{cm} + 5\text{cm} \times 5\text{cm} \\ &= 28\text{cm}^2 + 25\text{cm}^2 \\ &= 53\text{cm}^2 \end{aligned}$$

## Knowledge Organiser

### Area of Irregular Shapes

To find the area of an irregular shape, find the number of whole squares and part squares.



Whole squares = 10  
 Part squares = 22

$$\begin{aligned} \text{Estimate of area} &= \text{whole squares} + \\ &\quad \text{half part squares} \\ &= 10\text{cm}^2 + 11\text{cm}^2 = 21\text{cm}^2 \end{aligned}$$

\*There are other ways to estimate the area of irregular shapes.