
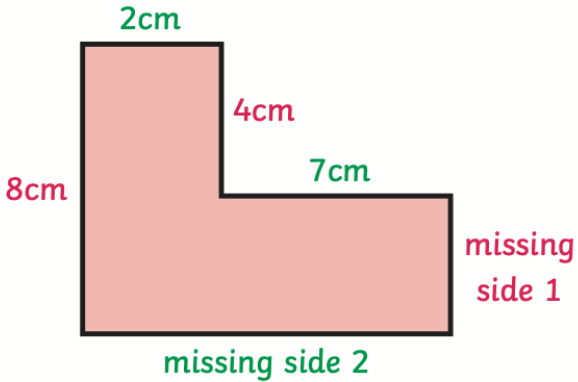
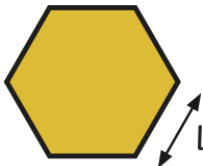
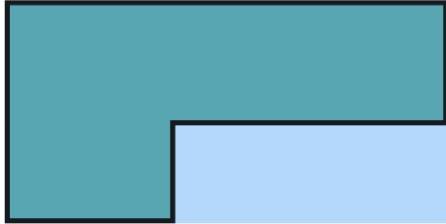



# Perimeter and Area

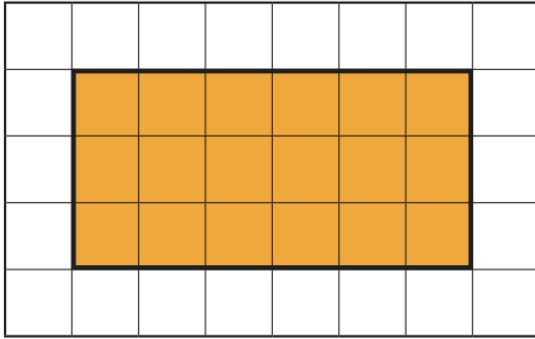
# Knowledge Organiser

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			Measure the length (l) and width (w). $Perimeter = l + w + l + w$ or $(l + w) \times 2$	* This shape is not drawn to the dimensions specified.
perimeter			Measure the perimeter of regular shapes:  Measure the length (l) and count the number of sides (s) on the shape. $Perimeter = l \times s$	$Missing\ side\ 1 + 4cm = 8cm,$ $so\ missing\ side\ 1 = 4cm.$  $Missing\ side\ 2 = 2cm + 7cm = 9cm$
length	Measure the perimeter of irregular shapes: 	$Perimeter = sum\ of\ all\ sides =$ $2cm + 4cm + 7cm + 4cm + 9cm + 8cm = 34cm$		
width	Measure the length of each side and add them together.			
rectangle				
rectilinear				
dimensions				
				

## Length and Perimeter

### Area of Rectangles

The area of a rectangle on a grid:



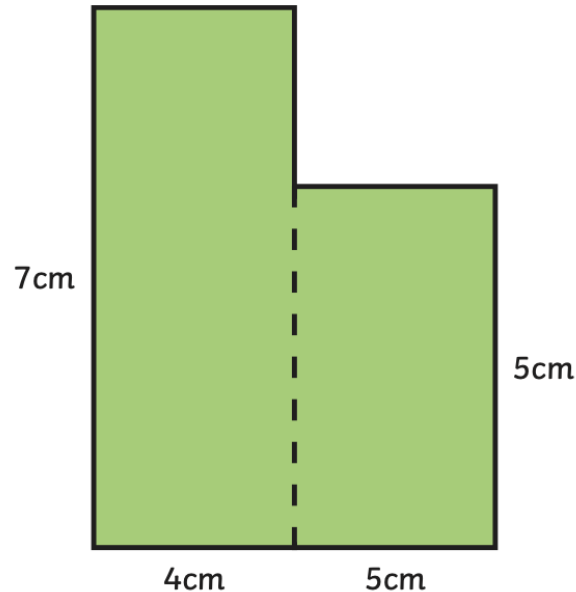
Multiply the length  $\times$  width  
 $= 6 \times 3 = 18$  squares.

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:

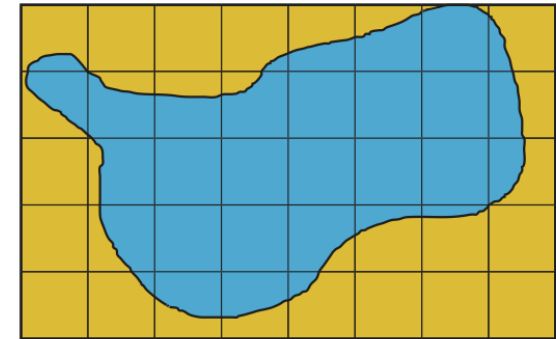


$$\begin{aligned}\text{Area} &= 7\text{cm} \times 4\text{cm} + 5\text{cm} \times 5\text{cm} \\ &= 28\text{cm}^2 + 25\text{cm}^2 \\ &= 53\text{cm}^2\end{aligned}$$

## 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.