



# Y5 Area

## MATHS KNOWLEDGE ORGANISER

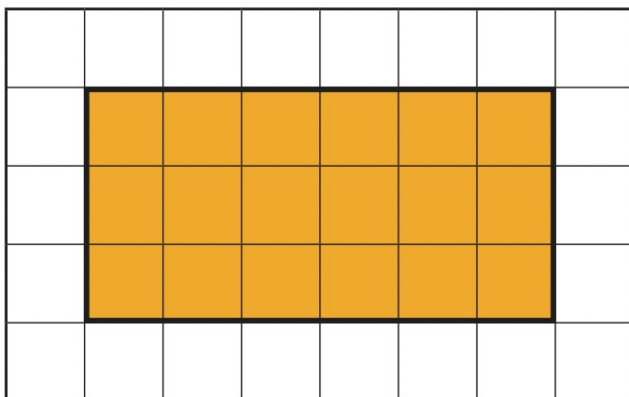


### ESSENTIAL VOCABULARY

<b>perimeter</b>	Distance around the outside of a shape.
<b>rectilinear</b>	A shape with straight lines and parallel sides.
<b>area</b>	The size a surface takes up.
<b>dimensions</b>	The sides that can be measured (length, width and height)

### AREA OF RECTANGLES

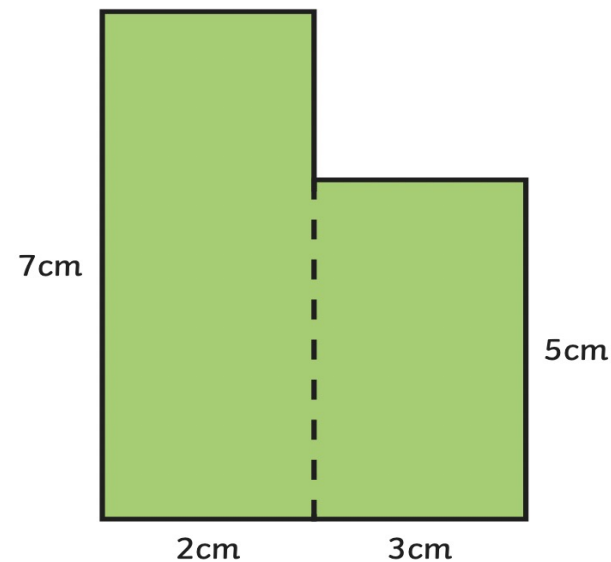
The area of a rectangle on a grid:



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

### AREA OF COMPOUND SHAPES

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



$$\begin{aligned} \text{Area} &= 7\text{cm} \times 2\text{cm} + 3\text{cm} \times 5\text{cm} \\ &= 14\text{cm}^2 + 15\text{cm}^2 \\ &= 29\text{cm}^2 \end{aligned}$$

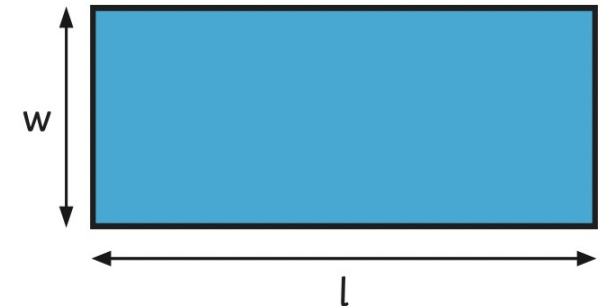
### LINKS TO PREVIOUS LEARNING

- Year 4 : To find the area of a rectilinear shape by counting the squares.

### PERIMETER

#### Measure Perimeter

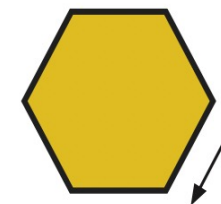
Measure the perimeter of a rectangle:



Measure the length (l) and width (w).

$$\text{Perimeter} = l + w + l + w \text{ or } (l + w) \times 2$$

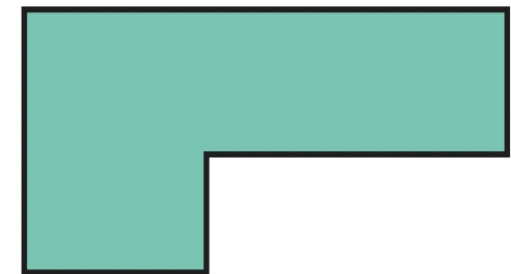
Measure the perimeter of regular shapes:



Measure the length (l) and count the number of sides (s) on the shape.

$$\text{Perimeter} = l \times s$$

Measure the perimeter of irregular shapes:



Measure the length of each side and add them together.