

Perimeter and area

Lesson sequence

- Perimeter of rectangles
- Perimeter of rectilinear shapes
- Perimeter of polygons
- Area of rectangles
- Area of compound shapes
- Estimate area

Vocabulary

- *Multiply*
- *Perimeter*
 - *Area*
- *Rectilinear*
- *Rectangle*
- *Polygon*
- Compound shape
 - Width
 - Length

Sticky learning

New Knowledge

- *To know the formula for area is $l \times w$*
- *To know that imperial measurements include feet, inches and pints*
- *To know that metric measurements include meters, centimeters and kilometers*
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New Skills

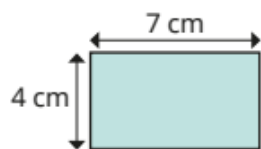
- *To calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes (also included in measuring)*
- *To measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres*
- *To calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes*
- *To calculate the perimeter of rectangles and related composite shapes, including using the relations of perimeter or area to find unknown lengths*

Concept Links/Prior Knowledge

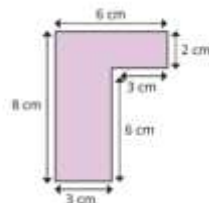
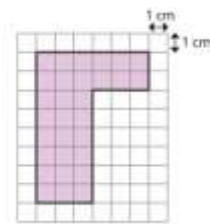
- *To know that area is the measurement of space inside a 2-Dimensional shape*
- *To measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres*
- *To find the area of rectilinear shapes by counting squares*

Pictorial representations

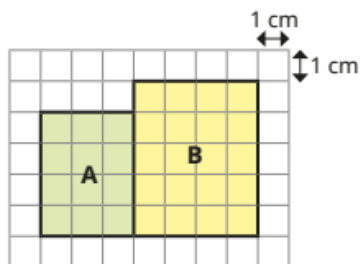
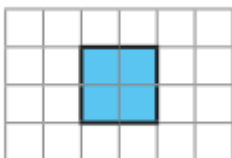
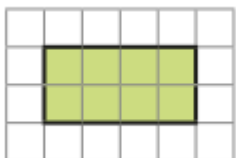
Perimeter



$$7\text{ cm} + 4\text{ cm} + 7\text{ cm} + 4\text{ cm} = 22\text{ cm}$$

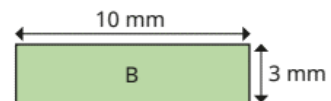


Area

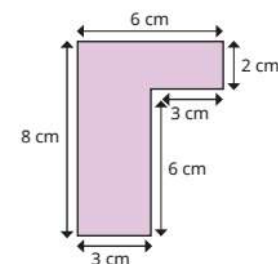


Abstract Representations

Perimeter

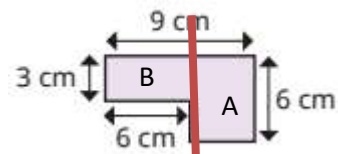


$$10 \times 3 = 30\text{mm}^2$$



$$6\text{cm} + 2\text{cm} + 3\text{cm} + 6\text{cm} + 3\text{cm} + 8\text{cm} = 28\text{cm}$$

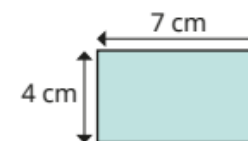
Area



$$A = 6\text{cm} \times 3\text{cm} = 18\text{cm}^2$$

$$B = 6\text{cm} \times 3\text{cm} = 18\text{cm}^2$$

$$18\text{cm}^2 + 18\text{cm}^2 = 36\text{cm}^2$$



$$7\text{cm} \times 4\text{cm} = 28\text{cm}^2$$