Area and perimeter

As outcomes, Year 5 pupils should, for example:

Use, read and write, spelling correctly: area, covers, surface, perimeter, distance, edge... and use the symbols for: square centimetres (cm²), square metres (m²), square millimetres (mm²).

Perimeter

Express the formula for the perimeter of a rectangle first in words, then in letters.

Work out and express in words a formula for finding the perimeter of a regular polygon.

Respond to questions such as:

- The perimeter of a rectangle is 72 cm. The shortest side is 9 cm. What is the length of the longest side?
- Draw some shapes on squared paper. Measure the perimeters to the nearest mm.



Area

Express the formula for the area of a rectangle first in words, then in letters.

Choose a suitable unit to estimate the area of, for example:

- a sheet of newspaper... the top of a desk...
- a leaf... a postage stamp...
- the top of a matchbox...
- the cover of a book... a round table mat...
- the hall floor... the swimming pool surface... Discuss how to find the area of each one.

Measure and calculate how close the estimates were.

Respond to oral or written questions like:

• What is the approximate area of this rectangle?



 Would you expect the area of: a paperback book to be 100 cm², 600 cm² or 6000 cm²;

a bedroom floor to be 10 m^2 or 100 m^2 ; a playing card to be 5 cm^2 , 50 cm^2 or 100 cm^2 ?

Suggest areas you would measure in mm², cm², m²...

Know that 1 square metre is 10 000 cm². Know that 1 square centimetre is 100 mm².

As outcomes, Year 6 pupils should, for example:

Use, read and write, spelling correctly: area, covers, surface, perimeter, distance, edge... and use the symbols for: square centimetres (cm²), square metres (m²), square millimetres (mm²).

Perimeter

Calculate the perimeters of compound shapes that can be split into rectangles.



Area

Know the formula for finding the area of a rectangle.

Begin to find the areas of compound shapes that can be split into rectangles, 10 cm such as this shape.

Respond to oral or written questions like:

- Find the length, breadth and height of this box. Use a calculator to find its surface area.
 I20 cm²
 I20 cm²
 I20 cm²
 I20 cm²
- Each of these shapes has an area of two square units. Draw some more.
 Decide which has the longest perimeter.



Find the area of a right-angled triangle by considering it as half of a rectangle.

7 cm

19 cm