Pupils should be taught to:

## Measure and calculate the perimeter and area of simple shapes

## As outcomes, Year 4 pupils should, for example:

Use, read and write:
area, covers, surface, perimeter, distance, edge...
and use symbols for:
square centimetres ( $\mathrm{cm}^{2}$ ).

## Perimeter

Respond to questions such as:

- Draw round the edge of a rectangle with your pencil.

How far did your pencil travel? Measure the distance.

- Estimate then measure the perimeter of the classroom... the top of your desk... a piece of A4 paper...
a regular hexagon...
- How long is the perimeter of: a $5 \mathrm{~cm} \times 5 \mathrm{~cm}$ square... a $4 \mathrm{~cm} \times 7 \mathrm{~cm}$ rectangle... a triangle whose sides are $10 \mathrm{~m}, 20 \mathrm{~m}$, and 24 m ?
- The perimeter of a square is 28 cm . What is the length of one side?
Draw two rectangles with the same perimeter as the square.
- Draw different rectangles with a perimeter of 24 cm . Which has the largest area?

Find a short way to work out the perimeter of a rectangle.

## Area

Find out which of two or more things has the greatest area by covering with, say, pennies, cubes, postcards, sheets of A4 paper, sheets of newspaper, squares... and counting.

Find areas by counting squares. For example:

- Find out which of two greetings cards has the greatest area by tracing on centimetre squared paper or by covering with a transparent centimetre grid.
- Each square is 1 square centimetre. What area is shaded?

- Find different ways of halving the area of a $5 \times 5$ pinboard. Justify your results.


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

- a postcard;
- a page of a book;
- this rectangle.

Measure and check.
Suggest areas to measure in square centimetres.

