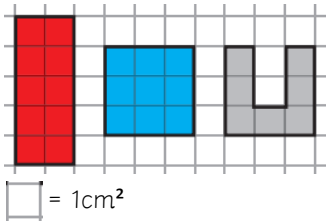
Castlefield School- Maths

Topic: Area and Perimeter	Year: Four	Theme: Measurement

Key concepts and questions

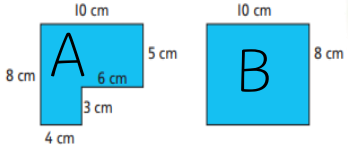
How is the area of shapes calculated?



To find the area of these shapes, you need to count all the squares. Don't forget to check the unit of measure.

Red shape = 10cm²
Blue shape = 9cm²
Grey shape = 7cm²

How is perimeter calculated for rectilinear shapes?



Perimeter is the total of all the side lengths in a 2D shape. To find the perimeter of a rectilinear shape, you add all the side lengths together, just like for squares and rectangles.

Shape A: 10cm+5cm+6cm+3cm+4cm+8cm= 36cm
Shape B: 10cm+10cm+8cm+8cm= 36cm

Key Vocabulary

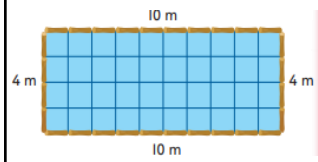
kilometre	metre	centimetre	millimetre
length	distance	width	compare
square	rectangle	rectilinear	All sides of the shape meet at 90 degrees
area	amount of space inside a 2D shape	perimeter	total length of all the sides of a shape

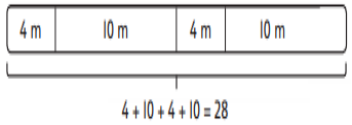
Representations

Bar Models

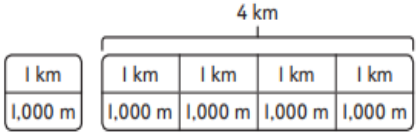
Support understanding and working out measure problems.

Bar models can help to represent how perimeter is the total of all side lengths.



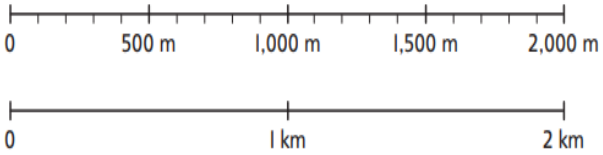


They can also be used to convert between measurements e.g. 4km=4000m



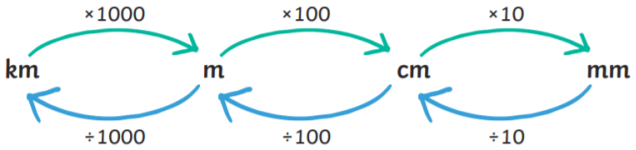
Number Lines

Demonstrate the equivalence of measures.



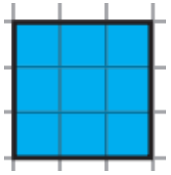
Making connections

Multiplying and dividing by 10, 100 and 1000

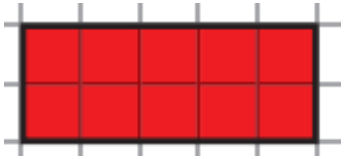


Arrays and multiplication

Finding the area of rectangles and squares is similar to arrays.



There are 3 rows of 3.
3 x 3 = 9cm²



There are 2 rows of 5.
2 x 5 = 10cm²