

Key concepts and questions

What is approximate equivalence between measures?

Length	Mass	Capacity
1 inch \approx 2.5cm 1 foot \approx 30cm 1 mile \approx 1.6km	16 ounces \approx 1 pound 1 ounce \approx 25g 1 pound \approx 450g 2.2 pounds \approx 1kg	8 pints \approx 1 gallon 1 gallon \approx 4.5 litres 1 pint \approx 570ml

How would you find the area of this irregular shape?

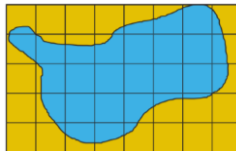
Whole squares + more than half full squares + halves. Squares that are less than half full are not counted.

Whole=10

More than half=6

Halves=4=2 wholes

$$10\text{cm}^2 + 6\text{cm}^2 + 2\text{cm}^2 = 21\text{cm}^2$$



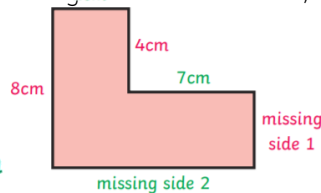
How are missing sides lengths on a rectilinear shape found?

The 2 shortest horizontal sides total the longest horizontal side, same for the vertical sides.

$$\text{Missing side 1} + 4\text{cm} = 8\text{cm},$$

$$\text{so missing side 1} = 4\text{cm}.$$

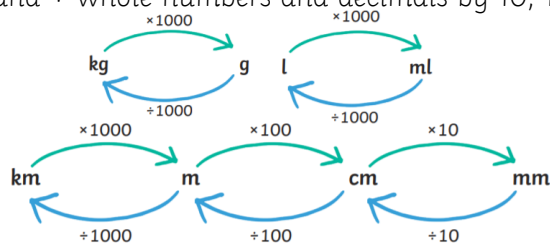
$$\text{Missing side 2} = 2\text{cm} + 7\text{cm} = 9\text{cm}$$



Making connections

Place value, multiplication and division

When converting between different units of measure, you will mostly \times and \div whole numbers and decimals by 10, 100 and 1000.



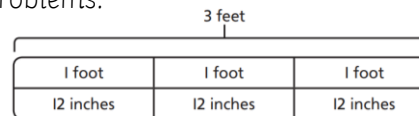
Key Vocabulary

area	perimeter	volume	capacity
analogue	digital	estimate	measure
calculate	compare	approximately	equivalent
rectilinear	All sides of the shape meet at 90 degrees.		
imperial	Weight: Pound, ounce, stone. Length: Inch, foot, yard. Volume: pint, gallon.		
metric	Weight: Gram (g), kilogram (kg). Length: millimetre (mm), centimetre (cm), metre (m), kilometre (km). Volume: millilitre (ml), litre (l).		

Representations

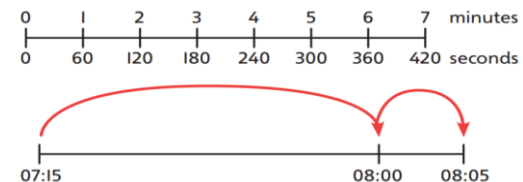
Bar models

Bar models represent equivalent measures e.g. 3 feet=36 inches. They can also be used to represent problems.



Numberlines

Numberlines can be used to convert between 2 units of measure and find durations of time.



Place value charts

Place value charts will help with converting between units of measure.

T	O	1 10
1	2	
$\div 10$		
	1	2

Cubes

Cubes can be used to estimate the volume of 3D shapes.

