

Unit 12

Decimals



In this unit we will ...

- ⚡ Add and subtract decimals with the same number of digits after the decimal point
- ⚡ Add and subtract decimals with a different number of digits after the decimal point
- ⚡ Add whole numbers to decimals
- ⚡ Subtract decimals from whole numbers
- ⚡ Solve problems involving addition and subtraction of decimals including money problems
- ⚡ Multiply and divide decimals and whole numbers by 10, 100 and 1,000



We will need to use column methods.
How can we add these two numbers?

H	T	O
1	2	6

$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 1 \quad 2 \quad 6 \\ + \quad 7 \quad 5 \\ \hline \end{array}$$



We will need some maths words.
Do you know what they all mean?

add subtract decimal tenths
hundredths thousandths multiply
divide decimal point whole
column exchange place value
decimal place digit



We also need to be able to subtract numbers.

Can you remember a way of making 500 – 367 easier?

Why are these two calculations the same?

$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 5 \quad 0 \quad 0 \\ - 3 \quad 6 \quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 4 \quad 9 \quad 9 \\ - 3 \quad 6 \quad 6 \\ \hline \end{array}$$

Unit I3

Geometry – properties of shapes 1



In this unit we will ...

- ⚡ Measure angles in degrees
- ⚡ Learn to measure angles with a protractor
- ⚡ Draw lines and angles accurately
- ⚡ Calculate missing angles
- ⚡ Learn about angles in shapes



We will need some maths words. Which one can mean an angle that is a quarter turn?

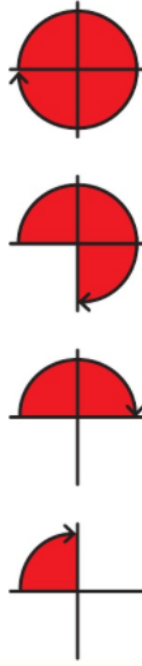
angle	whole turn	right angle
acute angle	obtuse angle	reflex angle
	degrees (°)	interior angle
clockwise	anticlockwise	orientation



We will need this too! Can you see where the mark for 55 mm is?



Do you remember about measuring angles as turns?



Unit 14

Geometry – properties of shapes 2



In this unit we will ...

- ⚡ Recognise and draw parallel lines
- ⚡ Recognise and draw perpendicular lines
- ⚡ Label parallel and perpendicular lines with the correct notation
- ⚡ Accurately identify regular and irregular polygons
- ⚡ Recognise different 3D shapes from different views



Do you remember how to spot parallel lines? Can you see the pair that are not parallel?

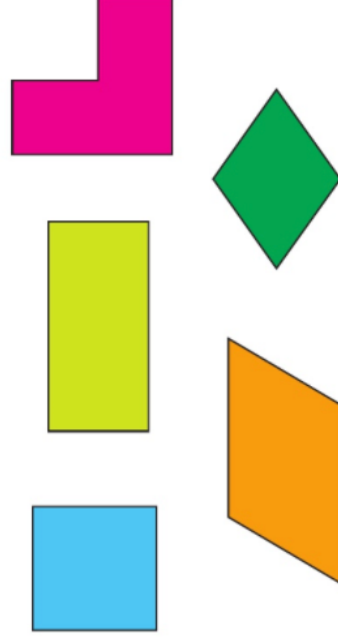


We will need some maths words. Which one can mean an angle inside a 2D shape?

parallel	perpendicular	angle
right angle	interior angle	quadrilateral
view	regular	irregular
3D shape	pyramid	sphere
hexagon	pentagon	triangle
top view	plan view	side view



We need to recognise shapes too. Can you find the one that is not a quadrilateral?



Unit 15

Geometry – position and direction



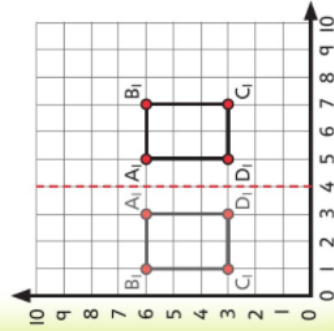
Here are some maths words we will be using.
Are any of these words new?

reflection translation vertex
vertices coordinates mirror line
horizontal axis vertical axis



In this unit we will ...

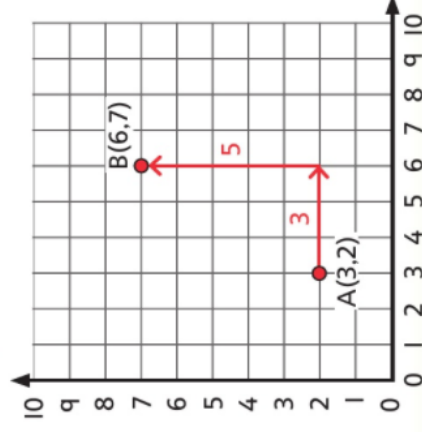
- ⚡ Learn to reflect simple 2D shapes in vertical and horizontal lines
- ⚡ Plot and find coordinates of a reflected point on a grid
- ⚡ Use coordinates to calculate new points of a reflected shape
- ⚡ Translate 2D shapes on grid paper
- ⚡ Use coordinates to find translations



We will be reflecting shapes in a mirror line and using coordinates. What are the coordinates of this reflected shape? Do you notice anything about the reflection?



We need to be able to work out the distance between coordinates on a grid. How far apart are the coordinates A and B?



Unit 16

Measure – converting units



Here are some maths words we will be using.
Are any of these words new?

convert	metric units	imperial units
kilo	kilogram	gram
centimetre	metre	millimetre
litre	millilitre	pound (lb)
	inch (in)	foot (ft)
	pint	gallon
	approximately	stone (st)
		timetable

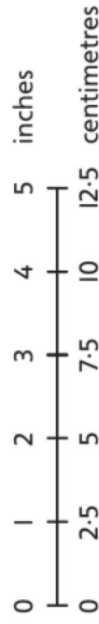


In this unit we will ...

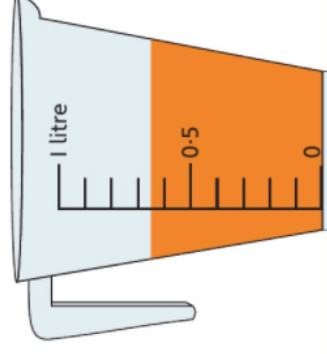
- ⚡ Convert between metric units of length, mass and capacity
- ⚡ Recognise imperial units and understand how to convert them into metric units
- ⚡ Convert between units of time
- ⚡ Read timetables and understand the information they show
- ⚡ Solve problems based on measures



How many centimetres are approximately the same as 5 inches?



How many millilitres of orange juice are in this jug?



Unit 17

Measure – volume and capacity



In this unit we will ...

- ⚡ Learn what the volume of a shape is
- ⚡ Find volumes of shapes by counting unit cubes
- ⚡ Draw shapes with different volumes
- ⚡ Compare the volume of different shapes
- ⚡ Estimate the capacity of different shapes

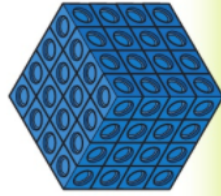


We will need some maths words.
Which of these are new?

volume cube cuboid 3D shape
solid capacity calculate
estimate unit cubes
least greatest



How many unit cubes are
used to make this cube?



Which container do you think has
the greatest capacity? Why?

