

Number and Place Value

Knowledge Organiser

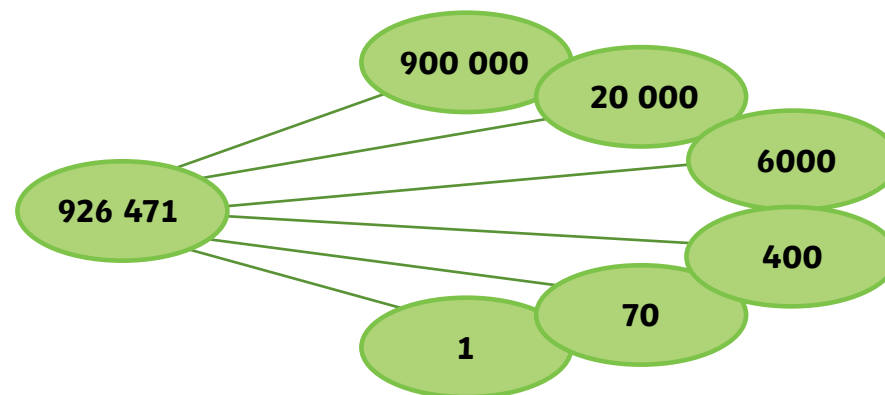
Key Vocabulary	Compare and Order					
millions	equals		greater than		less than	
thousands	26 + 38 = 8 × 8		23 873 > 8256		901 198 < 1 091 098	
hundreds	Both calculations have		The number on the left has 2		The number on the right has 1	
tens	the value 64.		ten thousands and the number on the		million and the number on	
ones			right has 0 ten thousands.		the left has 0 millions.	
zero						
place value	smallest	898	6735	6835	7019	9002
greater than					11 235	greatest
less than						
order	Negative Numbers					
round						
rounded	Counting in Powers of 10					
negative number	Counting in 10s			Counting in 100s		
partition	365	375	385	395	405	415
digit	The tens increase until 9 tens becomes one more hundred and 0 tens.			The hundreds increase until 9 hundreds becomes one more thousand and 0 hundreds.		
interval						
sequence	Counting in 10 000s			Counting in 100 000s		
linear sequence	276 109	286 109	296 109	306 109	2 972 151	3 072 151
	The ten thousands increase until 9 ten thousands become one more hundred thousand and 0 ten thousands.			The hundred thousands increase until 9 hundred thousands becomes one more million and 0 hundred thousands.		
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Numbers to One Million

926 471

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
9	2	6	4	7	1

nine hundred and twenty-six thousand, four hundred and seventy-one



Roman Numerals

	I = 1	II = 2	III = 3	
IV = 4	V = 5	VI = 6	VII = 7	VIII = 8
IX = 9	X = 10	XI = 11	XX = 20	XXX = 30
XL = 40	L = 50	LX = 60	LXX = 70	LXXX = 80
XC = 90	C = 100	CL = 150	CC = 200	CCC = 300
CD = 400	D = 500	DC = 600	DCC = 700	DCCC = 800
CM = 900	M = 1000	MC = 1100	MD = 1500	MM = 2000



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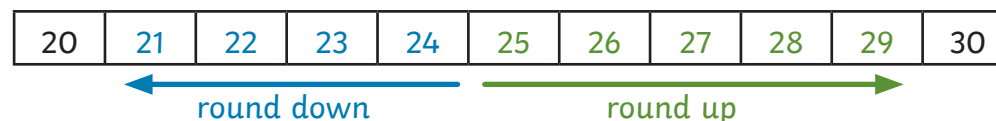
CCXLVIII = 248

DCCLXXXIV = 784

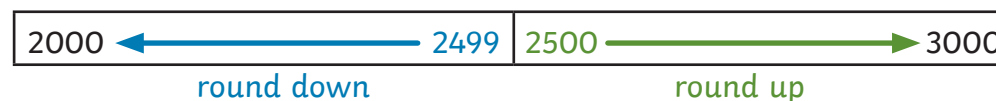
MMXIX = 2019

Rounding

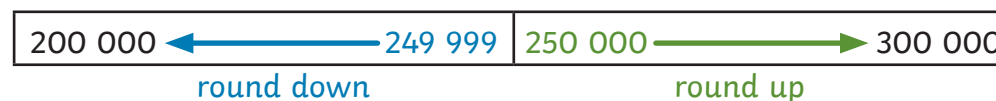
Rounding to the nearest 10



Rounding to the nearest 1000



Rounding to the nearest 100 000



Key Vocabulary

Add
Total
Make
Plus
Sum
More
Altogether
Difference
Subtract
Less
Minus
Take away
Column addition
Column subtraction
Estimate
Inverse operation
Number facts
Place value
Complex

Addition

Place Value Grid: $3274 + 5601 = 8875$

Th				
				
H				
				
T				
				
O				

Column Method

Starting with the ones, add each column in turn. Regroup tens, hundreds, thousands, ten thousands and/or as required.

$$\begin{array}{r} 45864 \\ +23497 \\ \hline 69361 \\ 111 \end{array}$$

Subtraction

Place Value Grid: $35\,727 - 6313 = 29\,414$

TTh	  	2 ten thousands left
Th	        	5 thousands – 6 thousands cannot be done. Exchange ten thousand for ten thousands becoming 15 thousands – 6 thousands = 9 thousands
H	      	7 hundreds – 3 hundreds = 4 hundreds
T	 	2 tens – 1 ten = 1 ten
O	      	7 ones – 3 ones = 4 ones

2 ten thousands left

5 thousands – 6 thousands cannot be done. Exchange ten thousand for ten thousands becoming 15 thousands – 6 thousands = 9 thousands

7 hundreds – 3 hundreds = 4 hundreds

2 tens – 1 ten = 1 ten

7 ones – 3 ones = 4 ones

Column Method

Starting with the ones, subtract each column in turn. Exchange tens, hundreds, thousands and/or ten thousands as required.

$$\begin{array}{r} 35727 \\ - 6313 \\ \hline 29414 \end{array}$$

Estimate and Approximate

Rounding to Estimate

$$41\ 635 + 7386 = 49\ 021$$

Round to ten:

$$41\ 630 + 7380 = 49\ 010$$

$$41\ 630 + 7390 = 49\ 020$$

$$41\ 640 + 7390 = 49\ 030$$

Rounding is not as accurate when both numbers are rounded up. A better estimate comes from "rounding" one down and one up.

Estimating on a Number Line



The arrow is about $\frac{3}{4}$ of the way across the line so it is 40 000.



Inverse Operations

Use the inverse to check:

53 476

32 732

20 744

To check $53\ 476 - 32\ 732 = 20\ 744$
use $32\ 732 + 20\ 744 = 53\ 476$

Start with a number, subtract 409 and double. I end with 6264. To find the starting number use the inverse: halve, then add 409. Half of 6264 = 3132. $3132 + 409 = 3541$. The starting number was 3541.

Multistep Problems

Using a Bar Model

The sum of two numbers is 25 567.

The difference is 1875.



Subtract 1875 from 25 567 = 23 692.

Halve 23 692 to find smaller number = 11 846.

Add 1875 to find larger number = 13 721.

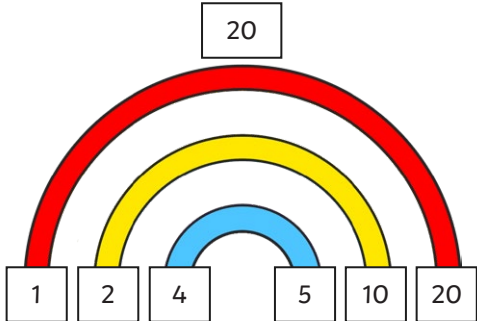
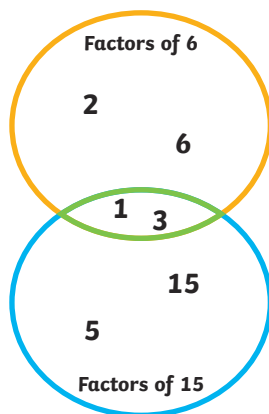
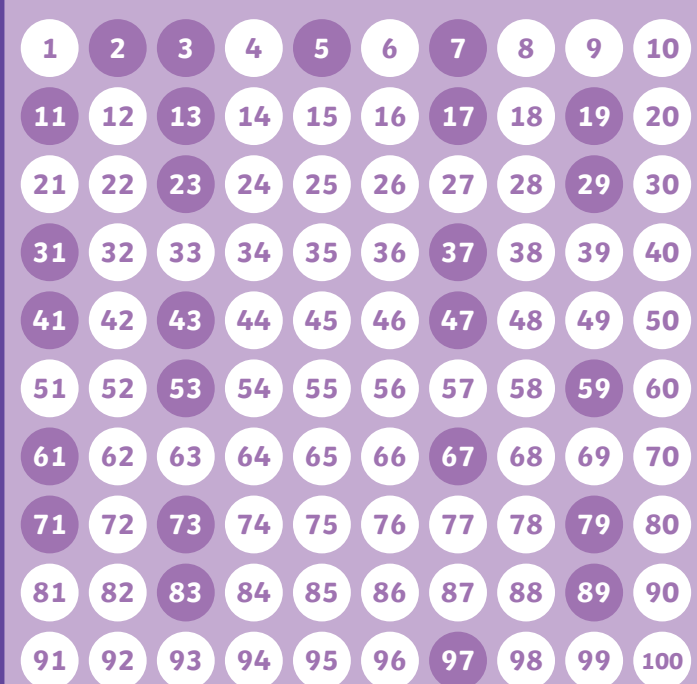
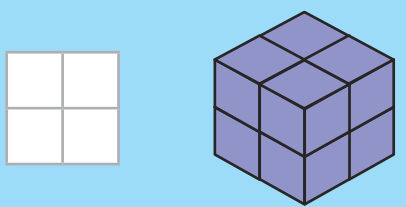
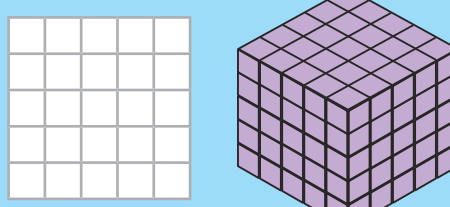
£20			£20 is used to buy 2 books costing £3.75 and £8.49.
£3.75	£8.49	?	
£12.24		£7.76	How much change is given?

$$£3.75 + £8.49 = £12.24$$

$$£20.00 - £12.24 = £7.76$$

Multiplication and Division

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Key Vocabulary	Factors	Prime Numbers
multiply	A factor is a number that divides into another number exactly, without leaving a remainder.  The factors of 20 are 1, 2, 4, 5, 10 and 20. The factor pairs are: 1 and 20 2 and 10 4 and 5 A common factor is a factor of 2 or more numbers. 	
groups of		
lots of		
times		
divide		
share		
remainder		
factor		
multiple	Squared ² and Cubed ³ Numbers	Related Calculations
product	 $2^2 = 4$ $2 \times 2 = 4$ $2^3 = 8$ $2 \times 2 \times 2 = 8$  $5^2 = 25$ $5 \times 5 = 25$ $5^3 = 125$ $5 \times 5 \times 5 = 125$	$8 \times 9 = 72$ $80 \times 9 = 720$ $9 \times 8 = 72$ $90 \times 8 = 720$ $72 \div 9 = 8$ $720 \div 9 = 80$ $72 \div 8 = 9$ $720 \div 8 = 90$
		

Short Multiplication

$$2543 \times 7 = 17801$$

	2	5	4	3
×				7
1	7	8	0	1
1	3	3	2	

Remember to move any regrouped digits into the next column. After the next multiplication, add the regrouped number to the answer.

Long Multiplication

$$2543 \times 67 = 170381$$

		2	5	4	3
	×			6	7
	1	7	8	0	1
1	5	2	5	8	0
1	3	2	1		
1	7	0	3	8	1
1	1				

Before multiplying by the number in the tens column, remember to use zero as a placeholder because the 6 in 67 is 6 tens (60).

Division

$$136 \div 4 = 34$$

		3	4
4	1	3	6
-	1	2	0
		1	6
	-	1	6
			0

→ 30 × 4

→ 4 × 4

Short Division

		3	8
4	1	5	2

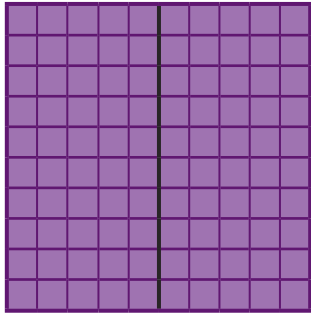
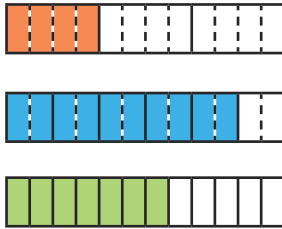
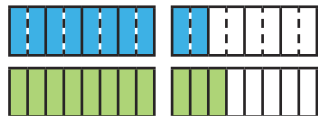
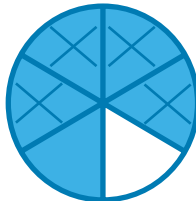
$$15 \div 4 = 3 \text{ remainder } 3$$

Remember to regroup any remainders and move them into the next column.

		4	5	5	r	3
5	2	2	7	8		

$$28 \div 5 = 5 \text{ remainder } 3$$

If your calculation has a remainder, remember to record it in the answer using the letter **r**.

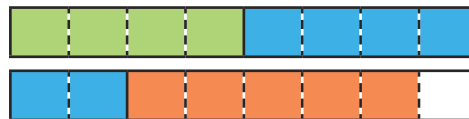
Fractions		Knowledge Organiser		
Key Vocabulary		Equivalent Fractions		
numerator	To find equivalent fractions, we multiply or divide the numerator and denominator by the same number.  ×5 ×10 $\frac{1}{2} = \frac{5}{10} = \frac{50}{100}$ ×5 ×10	We can compare and order fractions by using common denominators. $\frac{1}{3}, \frac{5}{6}, \frac{7}{12}$ $\frac{4}{12}, \frac{10}{12}, \frac{7}{12}$ $\frac{1}{3}, \frac{7}{12}, \frac{5}{6}$  $\frac{11}{8} > \frac{5}{4} = \frac{10}{8}$ 		
denominator				
unit fraction				
non-unit fraction				
whole				
equivalent		Mixed Numbers		
mixed number	Mixed numbers contain a whole number and a fraction. whole $2\frac{1}{4}$ fraction	Improper Fractions		
improper fraction	Convert an Improper Fraction to a Mixed Number		Convert a Mixed Number to an Improper Fraction	
simplest form	$\frac{9}{4}$ $9 \div 4 = 2 \text{ r } 1$ $2\frac{1}{4}$ Divide the numerator by the denominator. This shows you the whole number and the fraction.		Multiply the whole by the denominator to make an improper fraction. $2\frac{5}{6} = \frac{12}{6} + \frac{5}{6} = \frac{17}{6}$ Add the fractions together.	
multiple				
common denominator		Adding and Subtracting Fractions		
common numerator	To add or subtract fractions with denominators that are multiples of the same number, we must change one fraction to have the same denominator. $\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$  $\frac{4}{5} - \frac{3}{5} = \frac{1}{5}$   $\frac{1}{4} + \frac{3}{8} = \frac{2}{8} + \frac{3}{8} = \frac{5}{8}$ $\frac{5}{6} - \frac{2}{3} = \frac{5}{6} - \frac{4}{6} = \frac{1}{6}$ 			
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Fractions

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Add Fractions Where the Total is Greater Than 1

$$\frac{1}{2} + \frac{3}{4} + \frac{5}{8} = \frac{4}{8} + \frac{6}{8} + \frac{5}{8} = \frac{15}{8} = 1\frac{7}{8}$$



Add Mixed Numbers

$$1\frac{1}{4} + \frac{3}{8} = 1\frac{2}{8} + \frac{3}{8} = 1 + \frac{5}{8} = 1\frac{5}{8}$$

$$1\frac{1}{4} + \frac{3}{8} = \frac{5}{4} + \frac{3}{8} = \frac{10}{8} + \frac{3}{8} = \frac{13}{8} = 1\frac{5}{8}$$



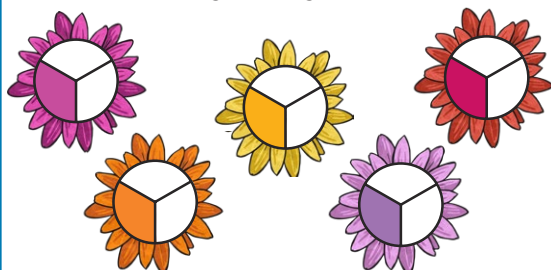
Subtract from a Mixed Number

$$1\frac{2}{3} - \frac{2}{9} = 1\frac{6}{9} - \frac{2}{9} = 1\frac{4}{9}$$

starting number	find the equivalent fraction	subtract

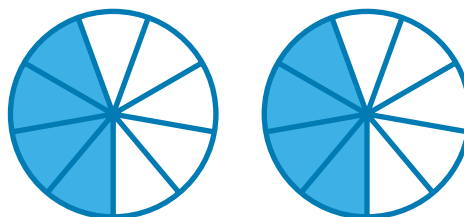
Multiply Unit Fractions by an Integer

$$\frac{1}{3} \times 5 = \frac{5}{3}$$



Multiply Non-Unit Fractions by an Integer

$$2 \times \frac{4}{9} = \frac{8}{9}$$



Subtract Two Mixed Numbers

$$2\frac{3}{4} - 1\frac{5}{8} = 1\frac{1}{8}$$



$$2 - 1 = 1$$

$$\frac{3}{4} - \frac{5}{8} = \frac{1}{8}$$

Multiply Mixed Numbers by Integers

Convert to an improper fraction and multiply the numerator by the integer.

$$2\frac{1}{4} \times 2 = \frac{9}{4} \times 2 = \frac{18}{4} = 4\frac{2}{4} = 4\frac{1}{2}$$

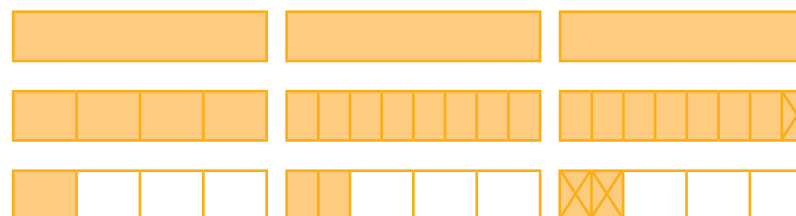


Use repeated addition.

$$2\frac{1}{4} \times 2 = 2\frac{1}{4} + 2\frac{1}{4} = 4\frac{2}{4} = 4\frac{1}{2}$$

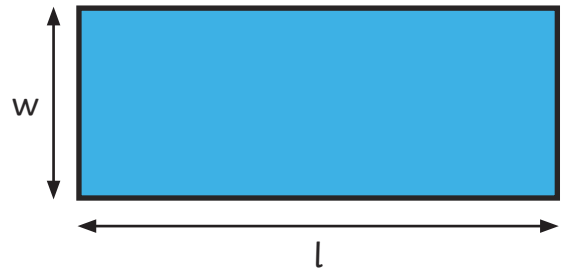
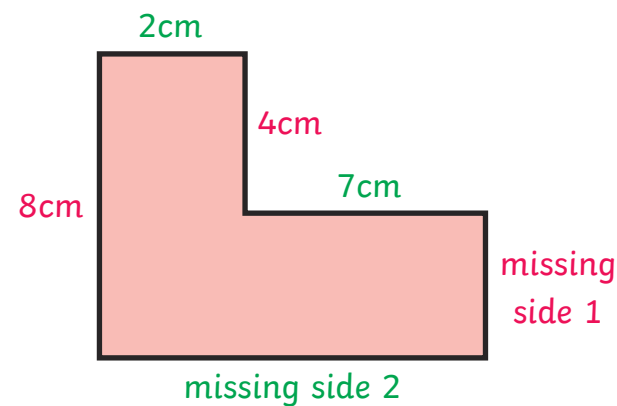
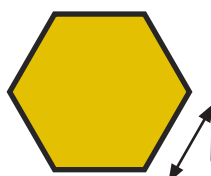
Subtract from a Mixed Number - Breaking the Whole

$$2\frac{1}{4} - \frac{3}{8} = 2\frac{2}{8} - \frac{3}{8} = 1\frac{10}{8} - \frac{3}{8} = 1\frac{7}{8}$$



Perimeter and Area

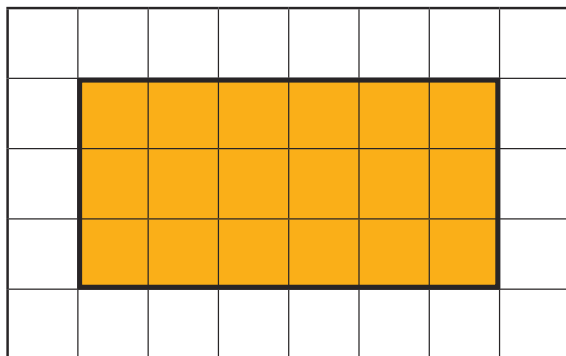
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Key Vocabulary	Measure Perimeter	Calculate Perimeter
metre	Measure the perimeter of a rectangle:  Measure the length (l) and width (w). Perimeter = l + w + l + w or (l + w) × 2	Calculate the missing sides of this rectilinear shape to find the perimeter:  * This shape is not drawn to the dimensions specified. Missing side 1 + 4cm = 8cm, so missing side 1 = 4cm. Missing side 2 = 2cm + 7cm = 9cm Perimeter = sum of all sides = 2cm + 4cm + 7cm + 4cm + 9cm + 8cm = 34cm
kilometre		
perimeter		
length	Measure the perimeter of regular shapes:  Measure the length (l) and count the number of sides (s) on the shape. Perimeter = l × s	
width		
rectangle		
rectilinear		
dimensions		
 visit twinkl.com	Measure the perimeter of irregular shapes:  Measure the length of each side and add them together.	

Length and Perimeter

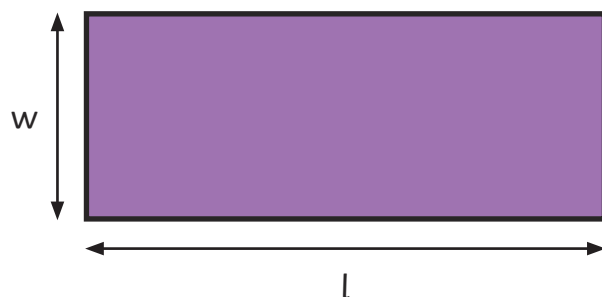
Area of Rectangles

The area of a rectangle on a grid:



Multiply the length $\times$ width
 $= 6 \times 3 = 18$ squares.

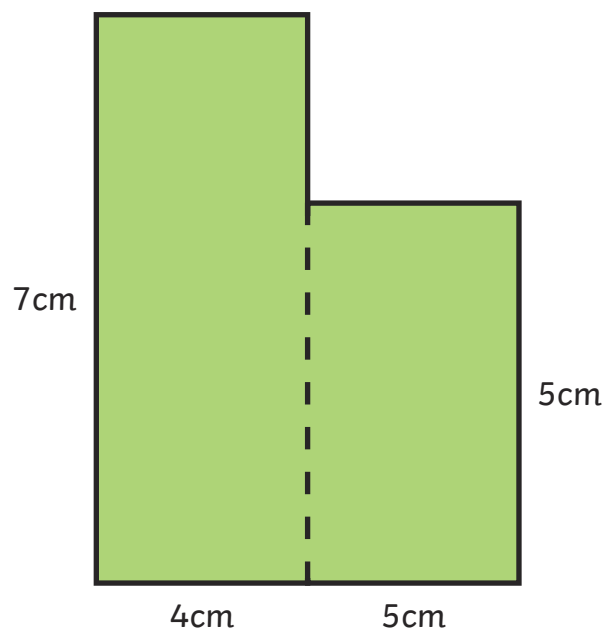
The area of a rectangle = length (l) $\times$ width (w).



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Area of Compound Shapes

To find the area of a compound shape, divide the shape into rectangles with known dimensions:

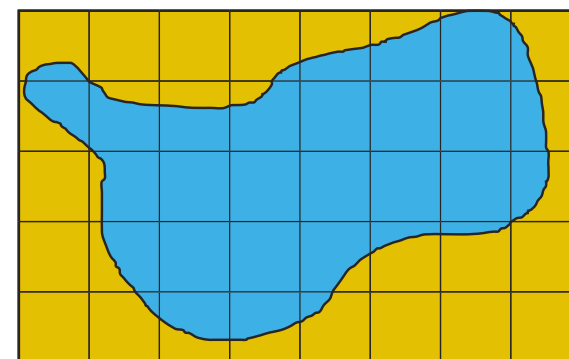


$$\begin{aligned}\text{Area} &= 7\text{cm} \times 4\text{cm} + 5\text{cm} \times 5\text{cm} \\ &= 28\text{cm}^2 + 25\text{cm}^2 \\ &= 53\text{cm}^2\end{aligned}$$

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Area of Irregular Shapes

To find the area of an irregular shape, find the number of whole squares and part squares.



Whole squares = 10

Part squares = 22

Estimate of area = whole squares +
half part squares

$$= 10\text{cm}^2 + 11\text{cm}^2 = 21\text{cm}^2$$

*There are other ways to estimate the area of irregular shapes.

Key Vocabulary

axis
continuous data
horizontal
data
interpret
label
line graph
maximum value
minimum value
pattern
predict
relationship
represent
scale
survey
table
tally
timetable
vertical
x-axis
y-axis

Reading and Understanding Tables

A table to show ticket prices at a local cinema.

Ticket Type	Weekday Price	Weekend Price
Adult	£6	£7.50
Child	£4	£4.50
Student	£5.50	£6

In order to understand the data presented in a table, you must read the **table's title** and the **headings**. Remember to always look at the heading that **each piece of information** falls under.

Timetables

Here is a bus timetable:

		Three different buses		
Bus stop locations	Mill Road	0726		0842
	High Street	0729	0803	
	Pitsmoor Road	0759	0833	
	Fulwood	0845	0919	0946

The bus starts at this time and location.

The bus does not stop here.

The bus terminates at this time and location.

Completing Tables

Here is a table showing the favourite drink flavours of some children.

	Boys	Girls	Total
Orange	8		18
Blackcurrant		6	
Total	15		

To find how many boys voted for blackcurrant, look at the total number of boys who voted and subtract the number of votes for orange.

To find how many girls voted for orange, look at the total number of votes for orange and subtract the number of votes from boys.

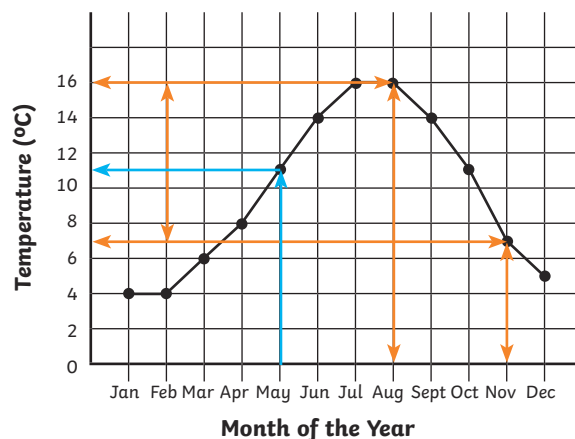
To find the total number of votes for blackcurrant, the total number of girls or the total number of voters, simply add up the values from the appropriate row or column.

Read and Interpret Line Graphs

Here is a line graph showing the average temperature for each month.

The y-axis shows temperature in intervals of 2°C on a scale of 0°C to 16°C .

The points show the average temperature for each month.



The x-axis shows the months of the year.

Use Line Graphs to Solve Problems

To find the average temperature in May, follow the arrow up from May and across to the temperature. As this is halfway between 10°C and 12°C , the average temperature in May is 11°C .

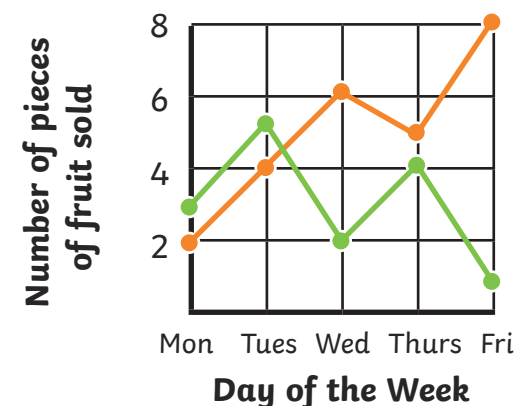
To find the difference between the average temperatures in August and in November, find the temperature for each month and calculate the difference between the two. The shape of the line graph can show how the temperature changed. The average temperature falls 9°C from August to November.

Draw Line Graphs

Here is a table showing the number of different types of fruit sold each day.

	Bananas	Apples
Mon	2	3
Tues	4	5
Wed	6	2
Thurs	5	4
Fri	8	1

This graph can be used to represent the data from the table.



Mark each point for the number of bananas sold each day and join each point with a line.

Mark each point for the number of apples sold each day and join each point with a line.

Properties of Shape

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Key Vocabulary

angle

right angle

acute

obtuse

reflex

protractor

horizontal

vertical

parallel

perpendicular

polygon

regular

irregular

two-dimensional

three-dimensional

flat face

curved surface

edge

curved edge

vertex

apex



Regular and Irregular Polygons

Regular	Irregular
  	  
  	  

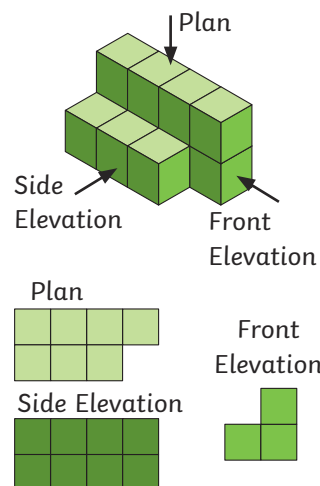
A polygon is any two-dimensional shape formed with straight lines.

In a regular polygon, all the sides and angles are equal.

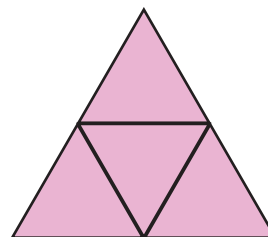
In an irregular polygon, the sides and angles are not equal.

Representations

Cube models can be drawn as 2D representations using different elevations.



A shape net is a 2D drawing of an unfolded 3D shape. When you are drawing or reasoning about shape nets, think carefully about where the edges of the faces meet.



Shape net of a tetrahedron.

Properties of 3D Shapes

Name	Surfaces		Edges		Vertices	Picture
	Flat	Curved	Flat	Curved		
cube	6	0	12	0	8	
cuboid	6	0	12	0	8	
square-based pyramid	5	0	8	0	5	
tetrahedron	4	0	6	0	4	
triangular prism	5	0	9	0	6	
pentagonal prism	7	0	15	0	10	
hexagonal prism	8	0	18	0	12	
octagonal prism	10	0	24	0	16	
octahedron	8	0	12	0	6	

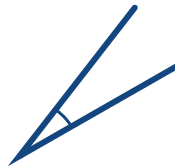


A cone has an apex. This is because a vertex is the point where two straight edges meet and a cone has no straight edges.

Identifying Angles

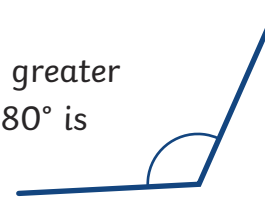
Acute Angles

Any angle that measures less than 90° is called an **acute** angle.



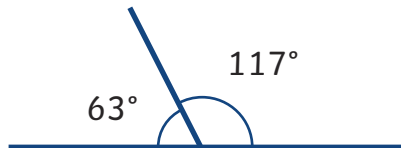
Obtuse Angles

Any angle that measures greater than 90° and less than 180° is called an **obtuse** angle.

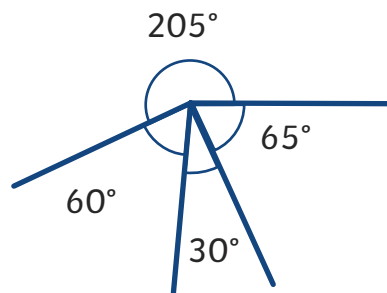


Reflex Angles

Any angle that measures greater than 180° is called a **reflex** angle.



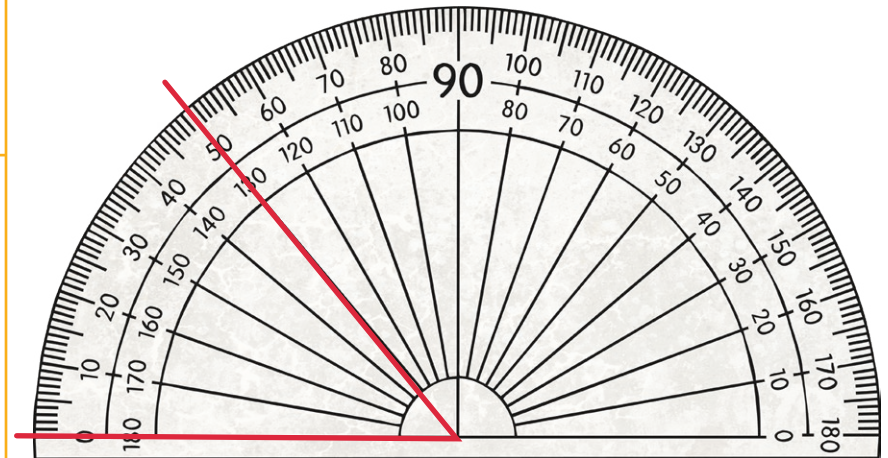
Angles on a straight line always total 180° .



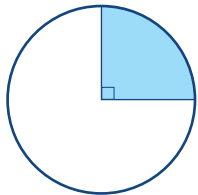
Angles around a point always total 360° .

Measuring and Drawing Angles

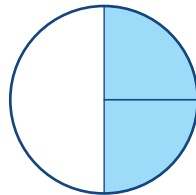
To measure angles, we use a protractor. Look carefully at how the numbers on the scale count from 0° to 180° in both directions.



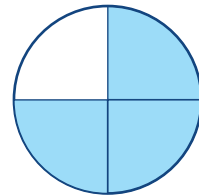
Multiples of 90° can be used as descriptions of a turn.



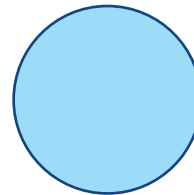
$\frac{1}{4}$ turn - 90°



$\frac{1}{2}$ turn - 180°

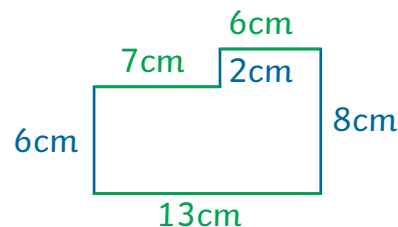


$\frac{3}{4}$ turn - 270°



1 turn - 360°

Using Properties of Rectangles



$$6\text{cm} + 2\text{cm} = 8\text{cm}$$

$$7\text{cm} + 6\text{cm} = 13\text{cm}$$

Key Vocabulary

coordinate

quadrant

x-axis

y-axis

reflection

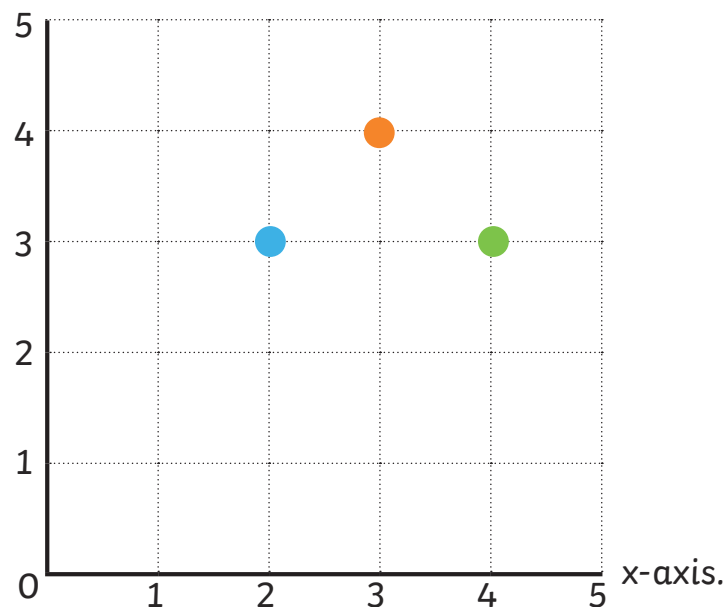
mirror line

translation

horizontal

vertical

y-axis.



Coordinates are a useful way to locate a position on a map or grid.

The numbers across the horizontal line of the grid are on the **x-axis**.

The numbers on the vertical line of the grid are on the **y-axis**.

We always read or write the number on the x-axis before the y-axis.

The x and y position are written in brackets with a comma.

The coordinate of the orange spot is **(3, 4)**.

To help you remember which point to read or write first, simply remember to move 'along the corridor and up the stairs'.

In other words, move on the **x-axis** and then move on the **y-axis**.



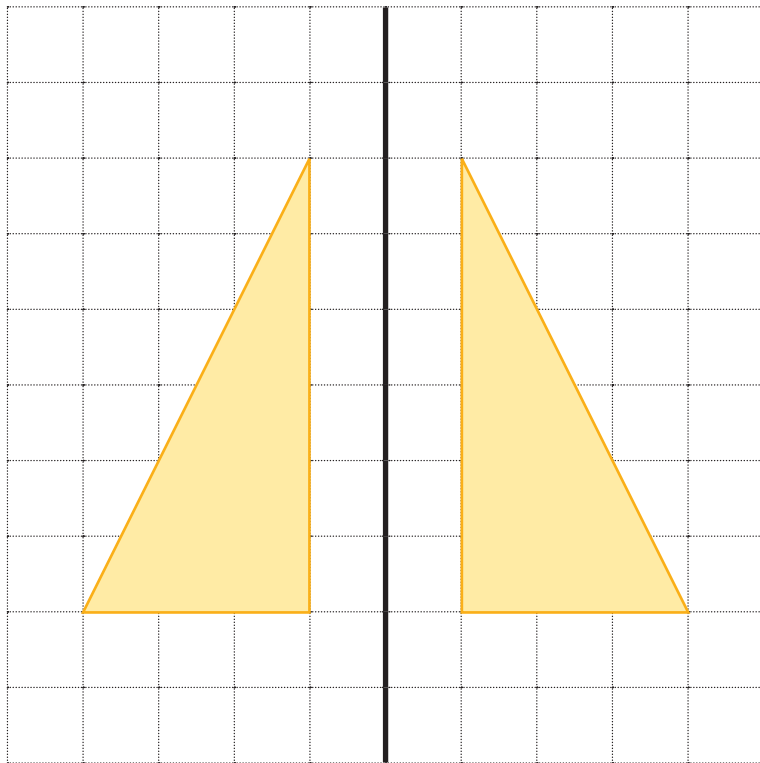
Position and Direction

Reflection

A shape is reflected when it is flipped over a mirror line.

The reflected image is congruent to the original. This means that the measurements of the sides and angles have not changed.

Each point of the reflected shape is the same distance from the mirror line as the original shape.

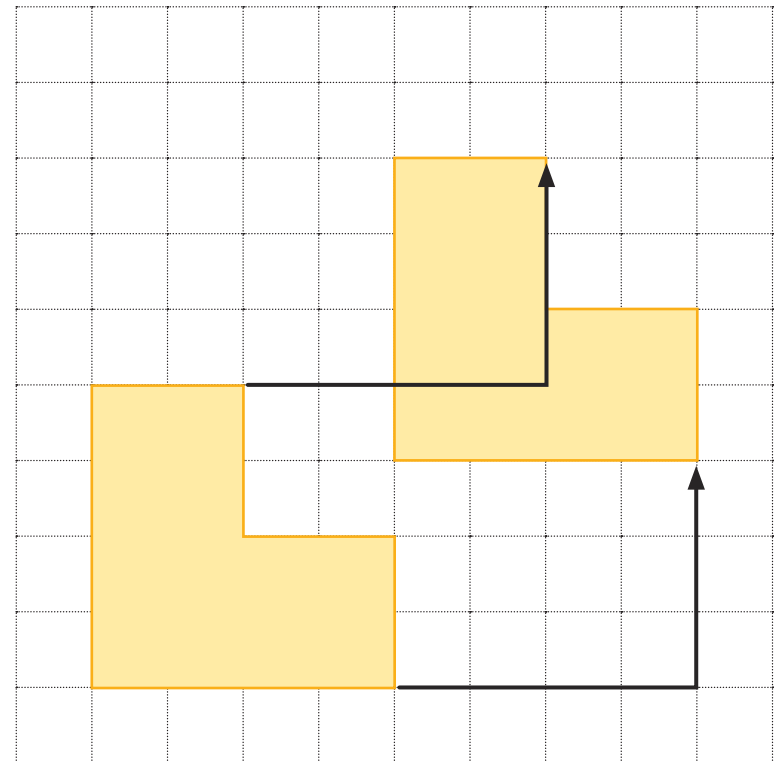


Knowledge Organiser

Translation

In maths, translation means moving an object on a grid. The object is moved without changing the size, turning or reflecting it.

When translating an object on a grid, it can move up or down, left or right.



Decimals

Key Vocabulary

tenths

hundredths

decimal tenths

decimal hundredths

decimal equivalents

part-whole model

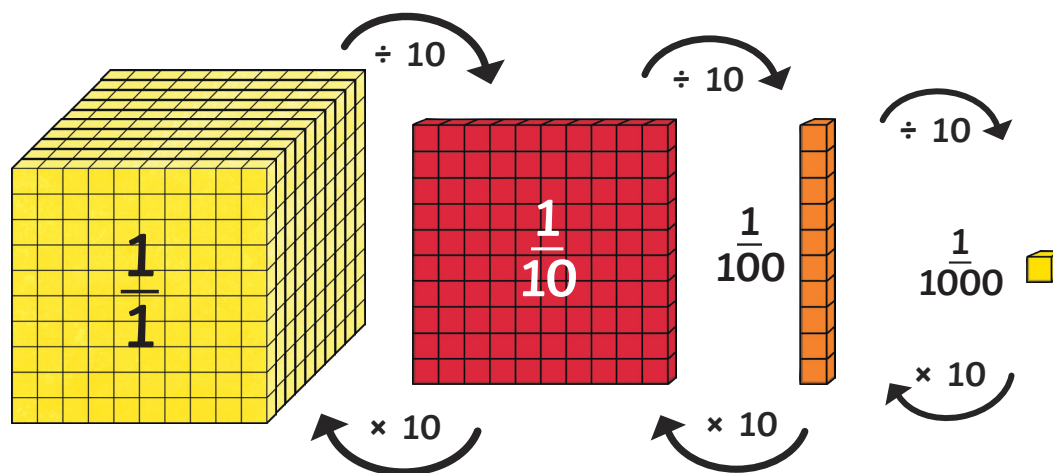
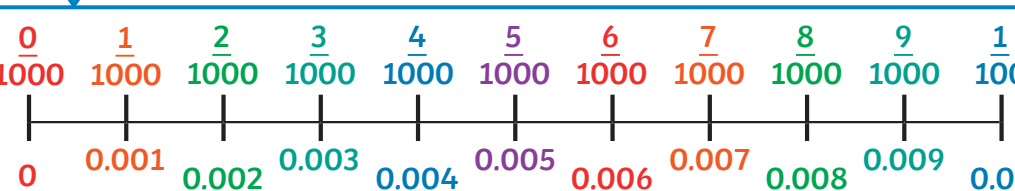
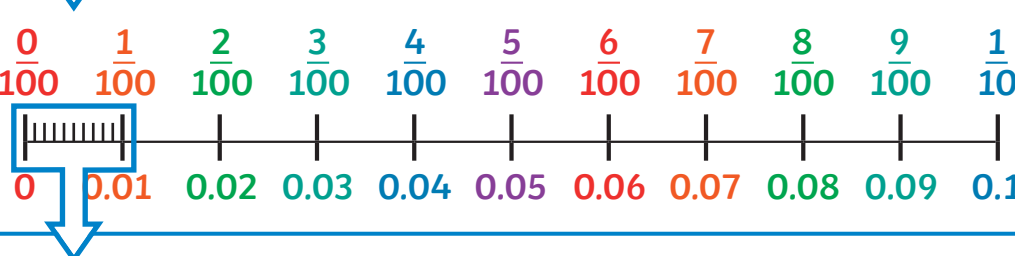
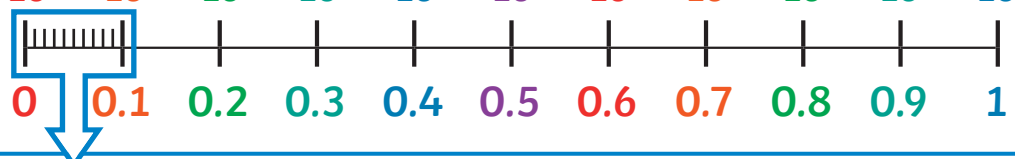
rounding

decimal point

place value

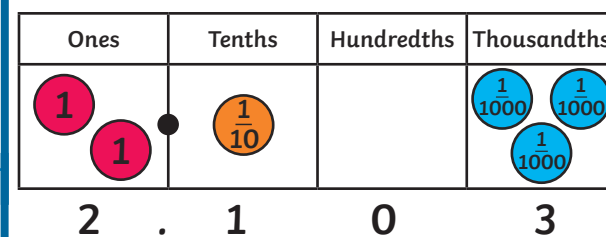
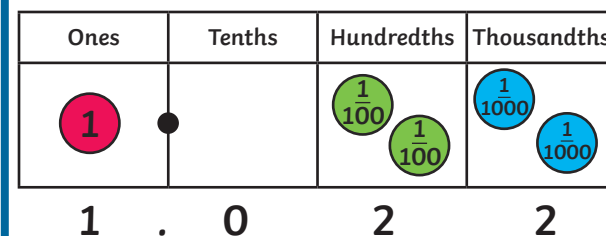
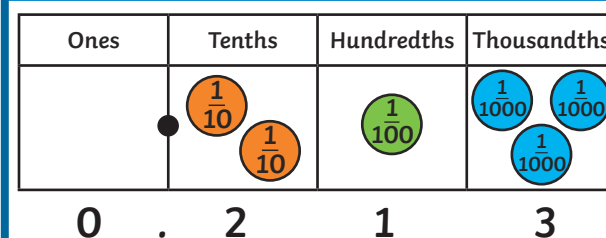
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Tenths, Hundredths and Thousandths



Knowledge Organiser

Order and Compare Numbers with Three Decimal Places



Decimal Numbers as Fractions

$$0.71 = \frac{71}{100} = \frac{7}{10} + \frac{1}{100}$$

$$0.37 = \frac{37}{100} = \frac{3}{10} + \frac{7}{100}$$

Decimals

Knowledge Organiser

Multiplying and Dividing by 10, 100 and 1000

Tens	Ones	Tenths	Hundredths	Thousandths
3	8			
3	8			

$\div 10$ (arrow from 8 to 0.8)
 $\times 10$ (arrow from 0.8 to 8)

Tens	Ones	Tenths	Hundredths	Thousandths
3	8			
3	0	8		

$\div 100$ (arrow from 8 to 0.08)
 $\times 100$ (arrow from 0.08 to 8)

Tens	Ones	Tenths	Hundredths	Thousandths
3	8			
3	0	0	8	

$\div 1000$ (arrow from 8 to 0.008)
 $\times 1000$ (arrow from 0.008 to 8)

Adding and Subtracting Decimals

$$0.8 + 0.001 = 0.801$$

$$1.031 - 0.23 = 0.801$$

$$0.4005 + 0.4005 = 0.801$$

Rounding Decimals



If the tenths digit is 1, 2, 3 or 4, we round down to the nearest whole number.

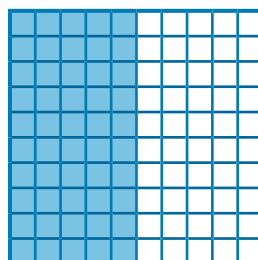
If the tenths digit is 5, 6, 7, 8 or 9, we round up to the nearest whole number.



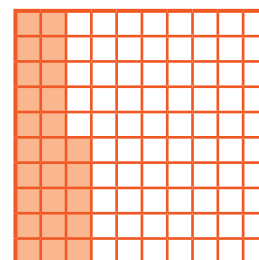
If the hundredths digit is 1, 2, 3 or 4, we round down to the nearest tenth.

If the hundredths digit is 5, 6, 7, 8 or 9, we round up to the nearest tenth.

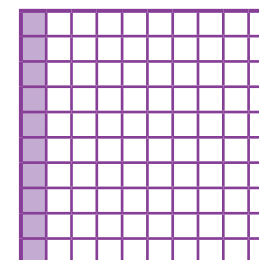
Percentage and Decimal Equivalents



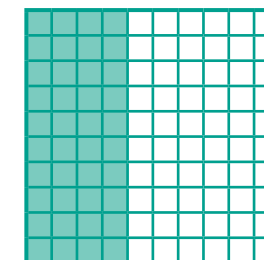
$$50\% = \frac{50}{100} = \frac{1}{2} = 0.5$$



$$25\% = \frac{25}{100} = \frac{1}{4} = 0.25$$



$$10\% = \frac{10}{100} = \frac{1}{10} = 0.1$$

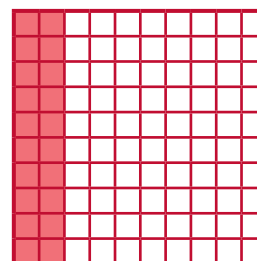


$$40\% = \frac{40}{100} = \frac{2}{5} = 0.4$$

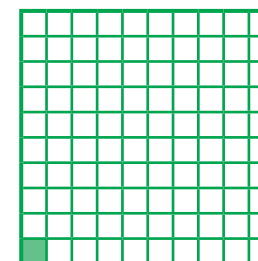
Crossing the Whole

$$0.82 + 0.63 = 1.45$$

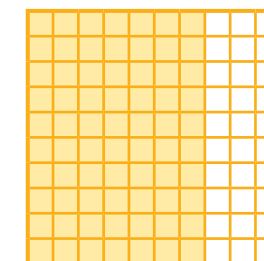
$$2.531 - 0.6 = 1.931$$



$$20\% = \frac{20}{100} = \frac{1}{5} = 0.2$$



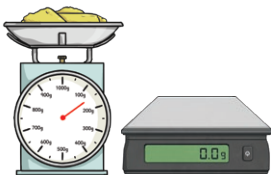
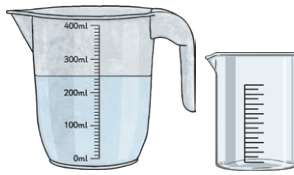
$$1\% = \frac{1}{100} = 0.01$$



$$70\% = \frac{70}{100} = \frac{7}{10} = 0.7$$

Converting Units

Knowledge Organiser

Key Vocabulary	Converting Mass	Converting Capacity
mass	 $\text{kg} \xrightarrow{\times 1000} \text{g}$ $\text{g} \xrightarrow{\div 1000} \text{kg}$ $1000\text{g} = 1\text{kg}$ $\frac{1}{10}\text{kg} = 0.1\text{kg} = 100\text{g}$ $\frac{1}{4}\text{kg} = 0.25\text{kg} = 250\text{g}$ $\frac{1}{2}\text{kg} = 0.5\text{kg} = 500\text{g}$ $\frac{3}{4}\text{kg} = 0.75\text{kg} = 750\text{g}$	 $\text{l} \xrightarrow{\times 1000} \text{ml}$ $\text{ml} \xrightarrow{\div 1000} \text{l}$ $1000\text{ml} = 1\text{ litre}$ $\frac{1}{10}\text{l} = 0.1\text{l} = 100\text{ml}$ $\frac{1}{4}\text{l} = 0.25\text{l} = 250\text{ml}$ $\frac{1}{2}\text{l} = 0.5\text{l} = 500\text{ml}$ $\frac{3}{4}\text{l} = 0.75\text{l} = 750\text{ml}$ $\frac{1}{100}\text{l} = 0.01\text{l} = 10\text{ml}$
gram		
kilogram		
capacity		
volume		
millilitre	Converting Length	
centilitre	 $\text{km} \xrightarrow{\times 1000} \text{m} \xrightarrow{\times 100} \text{cm} \xrightarrow{\times 10} \text{mm}$ $\text{mm} \xrightarrow{\div 10} \text{cm} \xrightarrow{\div 100} \text{m} \xrightarrow{\div 1000} \text{km}$ $1000\text{ metres} = 1\text{ kilometre}$ $100\text{cm} = 1\text{m}$ $10\text{mm} = 1\text{cm}$ $\frac{1}{10}\text{km} = 0.1\text{km} = 100\text{m}$ $\frac{1}{4}\text{km} = 0.25\text{km} = 250\text{m}$ $\frac{1}{2}\text{km} = 0.5\text{km} = 500\text{m}$ $\frac{3}{4}\text{km} = 0.75\text{km} = 750\text{m}$	
litre		
millimetre		
centimetre		
kilometre		
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Units of Time

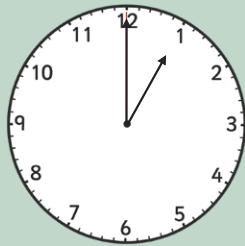
Minute

1 minute = 60 seconds



Hour

1 hour = 60 minutes



Day

1 day = 24 hours



Week

1 week = 7 days



Fortnight

1 fortnight = 2 weeks



Month

January = 31 days
February = 28 days (29 on a leap year)
March = 31 days
April = 30 days
May = 31 days
June = 30 days
July = 31 days
August = 31 days
September = 30 days
October = 31 days
November = 30 days
December = 31 days



Year

1 year =
12 months =
52 weeks =
365 days



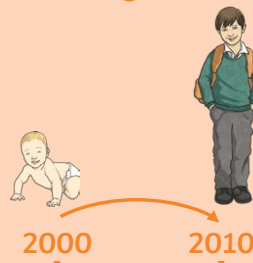
Leap Year

1 leap year =
366 days



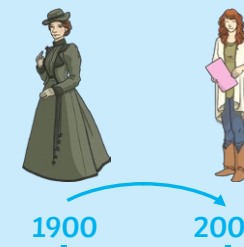
Decade

1 decade =
10 years



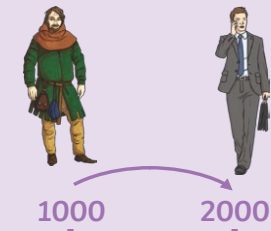
Century

1 century =
100 years



Millennium

1 millennium =
1000 years



Key Vocabulary

cubed

area

cross-section

prism

cube

cuboid

face

length

height

width

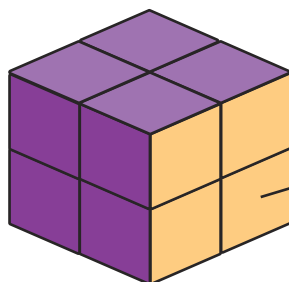
depth

Volume of Cubes and Cuboids

Volume is measured in cubed units. For example, **cm³**, **m³** and **km³**.

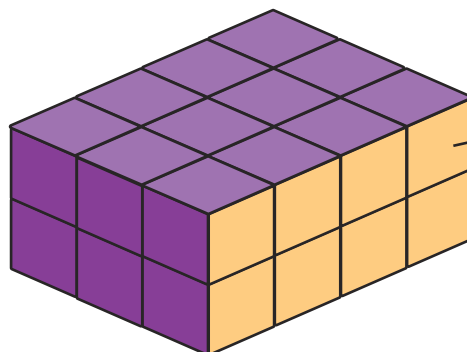
To calculate the volume of cubes and cuboids:

1. Calculate the area of the cross-section (one face).
2. Multiply the area of the cross-section (one face) by its depth.



$$\text{Area of cross section (face)} = 2\text{cm} \times 2\text{cm} = 4\text{cm}^2$$

$$4\text{cm}^2 \times 2\text{cm} = \text{Volume of } 8\text{cm}^3$$



$$\text{Area of cross section (face)} = 4\text{cm} \times 2\text{cm} = 8\text{cm}^2$$

$$8\text{cm}^2 \times 3\text{cm} = \text{Volume of } 24\text{cm}^3$$

