

The Four Operations in Year 6

Addition

	2	3	3	6	1
		9	0	8	0
+	5	9	7	7	0
		1	3	0	0
<hr/>					
	9	3	5	1	1
<hr/>					
	2	1	2		

	8	1	0	5	9
		3	6	6	8
		1	5	3	0
+	2	0	5	5	1
<hr/>					
	1	2	0	5	7
		1	1	1	

Subtraction

	9	8	10	6	9	9
-		8	9	9	4	9
<hr/>						
		6	0	7	5	0

	9	10	5	.	4	1	9	kg
-		3	6	.	0	8		kg
<hr/>								
		6	9	.	3	3	9	kg

Multiplication

	Th	H	T	U	
	3	6	5	2	
x				8	
<hr/>					
	2	9	2	1	6
	5	4			

Short multiplication

	Th	H	T	U	
	1	2	3	4	
x			1	6	
<hr/>					
	7	4	0	4	
	1	2	3	4	0
<hr/>					
	1	9	7	4	4

Long multiplication

Multiplication of numbers with up to 2 decimal places

Step 1 - Grid method

		TU	th	
		24.00		
X	3	0.1	0.09	
8	24	0.8	0.72	
<hr/>				
		0.72		
		25.52		

Step 2 - Short multiplication

	U	.	t	h	
	3	.	1	9	
x	8				
<hr/>					
	2	5	.	5	2

Division

Long division for dividing by 2-digits

Short division with remainders:

	8	1	2	.	1	2	5
8	6	4	9	7	.	0	0

Useful list: 1x is 36
10x is 360
100x is 3600

Estimate
Calculate
Check it!

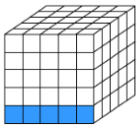
	27
36	972
	-720 = 36 x (20)
	252
	-180 = 36 x (5)
	72
	-72 = 36 x (2)
	0

	28 r 12 or $\frac{12}{15}$ or $\frac{4}{5}$
15	432
	-300 = 15 x (20)
	132
	-120 = 15 x (8)
	12

Year 6 Key Vocabulary

Square Number: It is a number which can be represented in the shape of a square. A number that results from multiplying an integer by itself. It is also called perfect square. EXAMPLES: 4, 9, 16, 25, 36.

Cubed number: a number raised to the third power which is indicated by a small 3 to its upper-right.



$$5 \times 5 \times 5 = 125$$

$$\text{so } 5^3 = 125$$

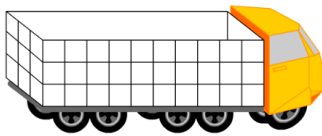
Equivalent:

Equivalent equations– Equations that have the same solution.

Equivalent Fractions: fractions with the same value.

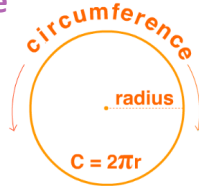
Cubic Metres/Centimetres

A standard metric unit for measuring volume.



Circumference

The distance around a circle.



Quadrant:

A quarter of a circle or its circumference.

Any quarter of a plane divided by an x and y axis.



Average:

An average is a measure used to find the location of the middle (central tendency) of a data set.

Prime Number: A number that has exactly two factors. A number that can only be divided evenly by itself and one.

EXAMPLES: 2, 3, 5, 7, 11, 13, 17, 19.

Common Factors:

A whole number that divides two or more other numbers exactly.

12 is a common factor of 24, 48 and 72.

20 is a multiple of 2 and 10 because $20 = 2 \times 10$
20 is a multiple of 4 and 5 because $20 = 4 \times 5$
20 is a common multiple of 2, 4, 5 and 10

Percentage:

A percent or percentage is a fraction expressed as a number out of 100 followed by the % symbol.

Ratio

commonly a ratio is the comparison of two values of the same kind, which may be written as **a to b**, **a:b** or as a fraction **a/b**.

Radius:

The distance from the centre of a regular polygon to a vertex.
The distance from the centre of a sphere to any point on its surface.

Parallel:

Equidistant, that is, the same distance apart, never touching.



Mean:

A type of average which is the middle value of an ordered set of data values.

Monday	35°
Tuesday	30°
Wednesday	32°
Thursday	31°
Friday	27°
Saturday	37°
Sunday	32°
Total:	224°
Divide	$224 \div 7$
Mean:	= 32°

Composite Numbers: A number with more than two factors.

$$16 = 1 \times 16 \quad 16 \div 1 = 16$$

$$16 = 2 \times 8 \quad 16 \div 2 = 8$$

$$16 = 4 \times 4 \quad 16 \div 4 = 4$$

16 is a composite number.
The factors of 16 are 1, 16, 2, 8, 4.

Common Multiples:

A multiple that is shared by two or more numbers.

Order of Operations:

The order in which mathematical operations should be done.

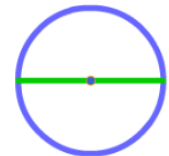
Acronyms such as BODMAS may be used.

Algebra:

An area of mathematics where numbers and quantities called variables are represented by letters and symbols.

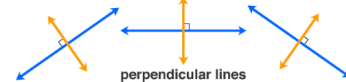
Diameter:

A straight line passing through the centre of circle to touch both sides of the circumference.



Perpendicular:

When two lines meet at right angles to the horizon or another object.



Pie Chart:

A chart using a divided circle where each section represents a percentage of the total.

