

Rounding

Round to the nearest 10

54 → 50
55 → 60
313 → 310
549 → 550

Round to the nearest 100

415 → 400
950 → 1,000
4,561 → 4,600
7,221 → 7,200

Round to the nearest 1,000

4,328 → 4,000
9926 → 10,000
18,792 → 19,000
21,114 → 21,000

Compare

45,000 < 54,000

10,160 > 9,999

65,000 = 65,000

MMM DXL > MMM CIX

Year Six Maths Organiser



Roman Numerals

A letter placed **after** a greater value adds:

XVII = 10 + 5 + 1 + 1 = 17

A letter placed **before** a greater value subtracts:

XXIX = 10 + 10 + (10 - 1) = 29

I	1	XI	11	XXX	30
II	2	XII	12	XL	40
III	3	XIII	13	L	50
IV	4	XIV	14	LX	60
V	5	XV	15	LXX	70
VI	6	XVI	16	LXXX	80
VII	7	XVII	17	XC	90
VIII	8	XVIII	18	C	100
IX	9	XIX	19	D	500
X	10	XX	20	M	1,000

Addition

104,328 + 61,731 = ?

1	0	4	3	2	8
+	6	1	7	3	1
1	6	6	0	5	9

3.65 + 2.41 = 6.06

2.41 + 3.65 = ?

Subtraction

294,382 - 182,501 = ?

2	9	3	8	2	
-	1	8	2	0	1
1	1	1	8	8	1

Multiplication

Th	H	T	O
1	8	2	6
x			3
5	4	7	8
2		1	

H	T	O
2	2	
x	3	1
2	2	
6	6	0
6	8	2

Th	H	T	O
2	3	4	
x		3	2
4	6	8	
17	10	2	0
7	4	8	8

Division

73 ÷ 45041 = 17

73 ÷ 219 = 338

Th	H	T	O
4	2	6	6
2	8	5	12

Mean

The mean is the average. Add up all the numbers, then divide by how many numbers there are.

prime number

A number with exactly two factors, itself and one

composite number

A number with more than two factors

square number

a number that has been multiplied by itself

cube number

multiply a number by itself and then itself again

Place Value Grid

millions	hundreds of thousands	tens of thousands	thousands	hundreds	tens	ones		tenths	hundredths
1,000,000	100,000	10,000	1,000	100	10	1	●	0.1	0.01

Angles

Acute Angle	Right Angle	Obtuse Angle	Reflex Angle	Angles around a point total 360°	Angles on a straight line total 180°	Angles in a quadrilateral total 360°	Angles in a triangle total 180°	Perpendicular

Perimeter and Area

Perimeter <i>(pathway around the outside)</i>	Perimeter <i>(rectilinear shapes)</i>	Area of a Quadrilateral <i>length (base) x width (height)</i>	Area <i>(compound shapes)</i>	Area <i>(of any triangle)</i>

Measurements

mm in a cm	10 mm = 1 cm
mm in a m	1,000 mm = 1 m
cm in a m	100 cm = 1 m
m in a km	1,000 m = 1 km
g in a kg	1,000 g = 1 kg
ml in a l	1,000 ml = 1 l

Fractions to Decimals

$\frac{1}{10} = 0.1$	$\frac{1}{8} = 0.125$	$\frac{1}{2} = 0.5$
$\frac{2}{10} = 0.2$	$\frac{1}{6} = 0.17$	$\frac{23}{100} = 0.23$
$\frac{3}{10} = 0.3$	$\frac{1}{5} = 0.2$	$\frac{1}{100} = 0.01$
$\frac{4}{10} = 0.4$	$\frac{1}{4} = 0.25$	To find the decimal equivalent of a fraction, divide the numerator by the denominator.
$\frac{5}{10} = 0.5$	$\frac{1}{3} = 0.3\bar{3}$	

Measure - Volume

4 x 4 = 16 cubes
2 x 4 = 8 cubes
16 + 8 = 24 cm³

length x width x height

3D shapes

cube	cuboid	cylinder	sphere	cone	square-based pyramid	triangular prism

quarter turn	half turn
three-quarter turn	full turn

Prisms and Pyramids



Symmetry - regular polygons

equilateral triangle	square	pentagon	hexagon	octagon

Symmetry - irregular polygons

rectangle	trapezium	rhombus	parallelogram	kite