



Maths Resources



Number Square

Use this number square to help you learn your numbers and to do your maths homework.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Don't forget to rehearse number formation.
Can you spot any patterns in the grid?

Ask your child to find 10 more or 10 less than a given number.
What patterns can they see?

Times Table Square

Use this times table square to help you learn your tables and to do your maths homework.

×	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

■ Square Numbers

$$1^2 = 1 \times 1 = 1$$

$$2^2 = 2 \times 2 = 4$$

$$3^2 = 3 \times 3 = 9 \text{ etc.}$$

○ Cube Numbers

$$1^3 = 1 \times 1 \times 1 = 1$$

$$2^3 = 2 \times 2 \times 2 = 8$$

$$3^3 = 3 \times 3 \times 3 = 27 \text{ etc.}$$

×	1	2	3	4
1	1	2	3	4
2	2	4	6	8
3	3	6	9	12

Example of how to use the times table

$$2 \times 3 = 6 \text{ or } 3 \times 2 = 6$$

You can also find related division facts

$$6 \div 3 = 2$$

$$6 \div 2 = 3$$

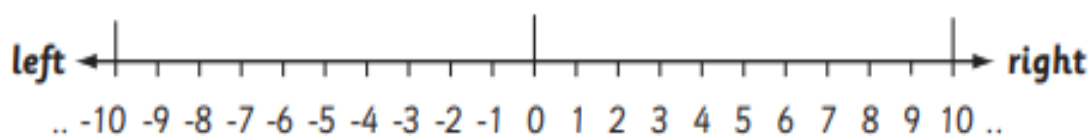
Tables

1 ×	2 ×	3 ×	4 ×
1 × 1 = 1	2 × 1 = 2	3 × 1 = 3	4 × 1 = 4
1 × 2 = 2	2 × 2 = 4	3 × 2 = 6	4 × 2 = 8
1 × 3 = 3	2 × 3 = 6	3 × 3 = 9	4 × 3 = 12
1 × 4 = 4	2 × 4 = 8	3 × 4 = 12	4 × 4 = 16
1 × 5 = 5	2 × 5 = 10	3 × 5 = 15	4 × 5 = 20
1 × 6 = 6	2 × 6 = 12	3 × 6 = 18	4 × 6 = 24
1 × 7 = 7	2 × 7 = 14	3 × 7 = 21	4 × 7 = 28
1 × 8 = 8	2 × 8 = 16	3 × 8 = 24	4 × 8 = 32
1 × 9 = 9	2 × 9 = 18	3 × 9 = 27	4 × 9 = 36
1 × 10 = 10	2 × 10 = 20	3 × 10 = 30	4 × 10 = 40
1 × 11 = 11	2 × 11 = 22	3 × 11 = 33	4 × 11 = 44
1 × 12 = 12	2 × 12 = 24	3 × 12 = 36	4 × 12 = 48
5 ×	6 ×	7 ×	8 ×
5 × 1 = 5	6 × 1 = 6	7 × 1 = 7	8 × 1 = 8
5 × 2 = 10	6 × 2 = 12	7 × 2 = 14	8 × 2 = 16
5 × 3 = 15	6 × 3 = 18	7 × 3 = 21	8 × 3 = 24
5 × 4 = 20	6 × 4 = 24	7 × 4 = 28	8 × 4 = 32
5 × 5 = 25	6 × 5 = 30	7 × 5 = 35	8 × 5 = 40
5 × 6 = 30	6 × 6 = 36	7 × 6 = 42	8 × 6 = 48
5 × 7 = 35	6 × 7 = 42	7 × 7 = 49	8 × 7 = 56
5 × 8 = 40	6 × 8 = 48	7 × 8 = 56	8 × 8 = 64
5 × 9 = 45	6 × 9 = 54	7 × 9 = 63	8 × 9 = 72
5 × 10 = 50	6 × 10 = 60	7 × 10 = 70	8 × 10 = 80
5 × 11 = 55	6 × 11 = 66	7 × 11 = 77	8 × 11 = 88
5 × 12 = 60	6 × 12 = 72	7 × 12 = 84	8 × 12 = 96
9 ×	10 ×	11 ×	12 ×
9 × 1 = 9	10 × 1 = 10	11 × 1 = 11	12 × 1 = 12
9 × 2 = 18	10 × 2 = 20	11 × 2 = 22	12 × 2 = 24
9 × 3 = 27	10 × 3 = 30	11 × 3 = 33	12 × 3 = 36
9 × 4 = 36	10 × 4 = 40	11 × 4 = 44	12 × 4 = 48
9 × 5 = 45	10 × 5 = 50	11 × 5 = 55	12 × 5 = 60
9 × 6 = 54	10 × 6 = 60	11 × 6 = 66	12 × 6 = 72
9 × 7 = 63	10 × 7 = 70	11 × 7 = 77	12 × 7 = 84
9 × 8 = 72	10 × 8 = 80	11 × 8 = 88	12 × 8 = 96
9 × 9 = 81	10 × 9 = 90	11 × 9 = 99	12 × 9 = 108
9 × 10 = 90	10 × 10 = 100	11 × 10 = 110	12 × 10 = 120
9 × 11 = 99	10 × 11 = 110	11 × 11 = 121	12 × 11 = 132
9 × 12 = 108	10 × 12 = 120	11 × 12 = 132	12 × 12 = 144

 = Square numbers

Positive and Negative Numbers

Positive and Negative numbers can be shown on a number line:

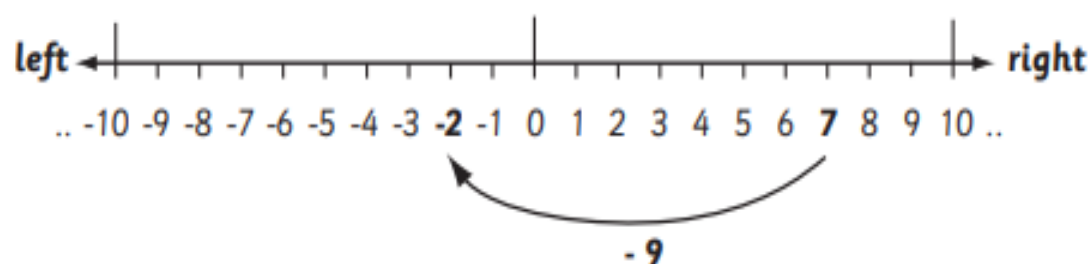


To subtract, move to the **left** ← To add, move to the **right** →

Examples:

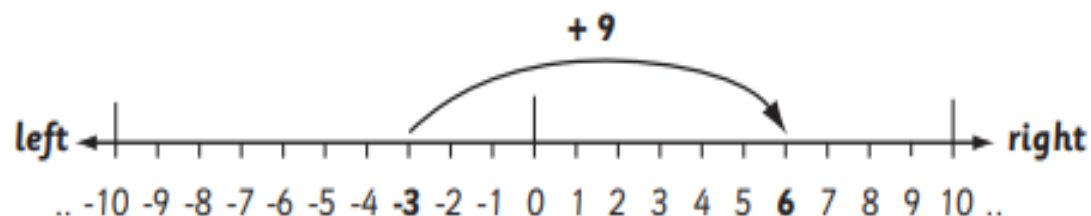
1) $7 - 9 = -2$

Start at **7** and
move **left 9** spaces



2) $-3 + 9 = 6$

Start at **-3** and
move **right 9** spaces



Hint: Think about the temperature falling or the temperature increasing.

Working with Numbers

Types of number

Factor	Numbers that divide into a number exactly e.g. the factors of 12 are 1×12 , 2×6 , 3×4
Multiples	In a "times table" e.g. multiples of 5 include 5, 10, 15, 20, 25
Integer	Positive and negative whole numbers and 0 e.g. -5, -4, -3, -2, -1, 0, +1, +2, +3, +4, +5
Square	Multiply a number by itself e.g. 5^2 is the same as $5 \times 5 = 25$ The first twelve square numbers are highlighted on the "Times Table Square" page in this section.
Prime number	A number with only two factors, 1 and the number itself e.g. $3 = 1 \times 3$ The first 8 prime numbers are 2, 3, 5, 7, 11, 13, 17, 19
Cubed	A number multiplied by itself twice e.g. $2^3 = 2 \times 2 \times 2 = 8$

Rounding

Rounding is where a number is made into an approximate amount. A number can be rounded off to the nearest tenth, whole number, ten, hundred, thousand, etc.

e.g. 37 to the nearest ten = 40
 832 to the nearest hundred = 800

A number that lies half way between tens, hundreds, thousands, etc. is always rounded up, numbers below this are rounded down.

e.g. 6.5 rounded to the nearest whole number = 7
 748 rounded to the nearest hundred = 700

Metric Measurements

Length

millimetre	mm
centimetre	cm
metre	m
kilometre	km

10mm = 1cm
100cm = 1m
1000m = 1km

Area

millimetre squared	mm ²
centimetre squared	cm ²
metre squared	m ²
kilometre squared	km ²



Capacity

millilitre	ml
litre	l
kilolitre	kl

1000ml = 1l
1000l = 1kl

Mass

gram	g
kilogram	kg
tonne	t

1000g = 1kg
1000kg = 1t

Temperature

degrees Celsius	°C
degrees Fahrenheit	°F

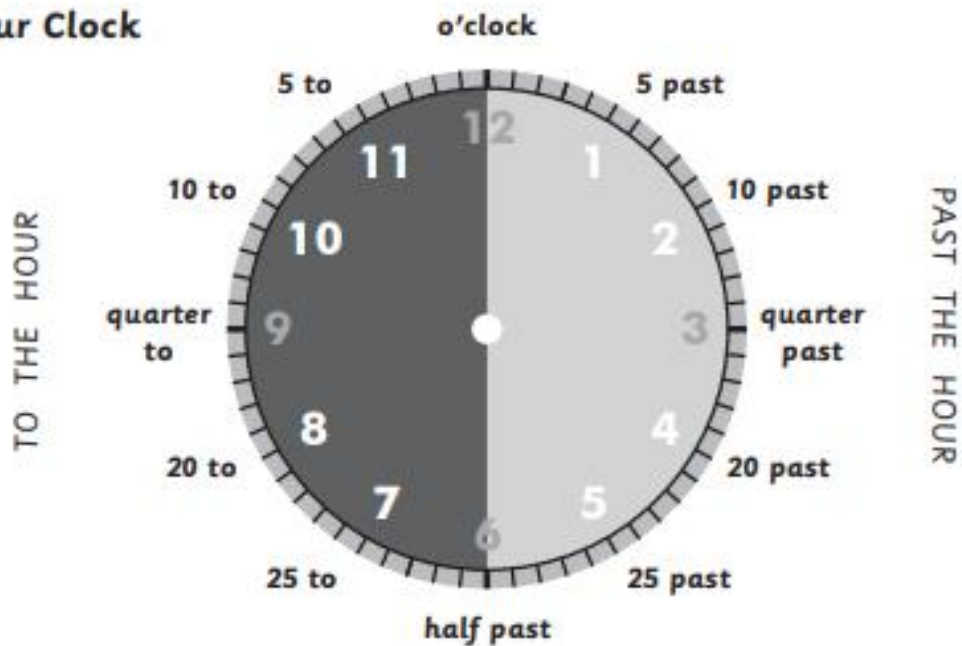
Volume

millimetre	mm ³
centimetre	cm ³
metre	m ³
kilometre	km ³



Time

12 Hour Clock



24 Hour Clock



Days of the week

Months of the Year

Monday	January	July
Tuesday	February	August
Wednesday	March	September
Thursday	April	October
Friday	May	November
Saturday	June	December
Sunday		

Thirty days hath September, April, June, and November. All the rest have thirty-one. But February's twenty-eight, the LEAP YEAR, which comes once in four. Gives February one day more.

How Much Time?

1 minute = 60 seconds	1 week = 7 days
1 hour = 60 minutes	1 year = 52 weeks + 1 day (365 days)
1 day = 24 hours	1 leap year = 52 weeks + 2 days (366 days)
	The next leap year is 2028

Money



1p



2p



5p



10p



20p



50p



£1

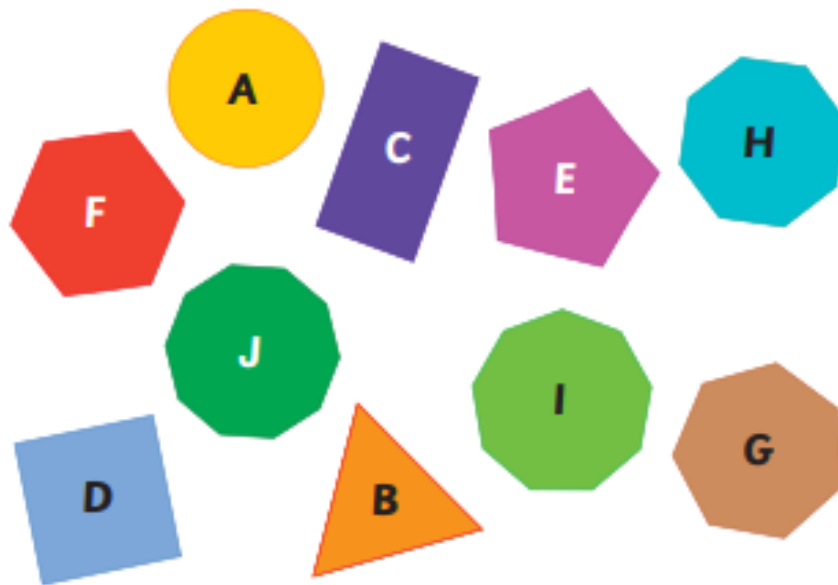


£2



Shapes and Solids

2D (flat)



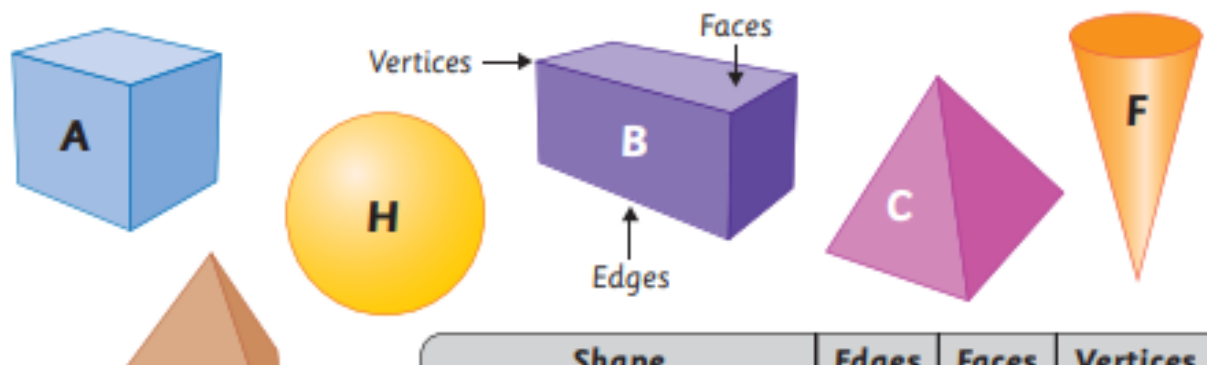
	Shape	Sides
A	circle	1
B	triangle	3
C	rectangle	4
D	square	4
E	pentagon	5
F	hexagon	6
G	heptagon	7
H	octagon	8
I	nonagon	9
J	decagon	10

3D (solid)

Face - A face is a flat surface on a 3D shape

Edges - The line where two faces meet is called an edge

Vertices - the point at which two or more edges meet

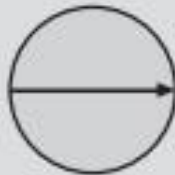


	Shape	Edges	Faces	Vertices
A	cube	12	6	8
B	cuboid	12	6	8
C	square based pyramid	8	5	5
D	triangular based pyramid	6	4	4
E	triangular prism	9	5	6
F	cone	Don't worry about edges, faces and vertices for these three shapes!		
G	cylinder			
H	sphere			

Circles

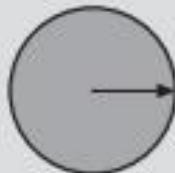
Circle

Parts of a circle include the following:



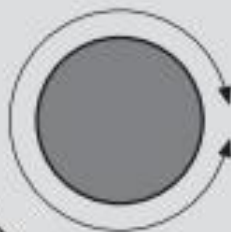
Diameter

The diameter is double the radius
 $d = 2 \times r$ $d = 2r$



Radius

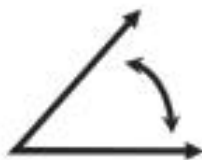
The radius is half the diameter
 $r = d \div 2$



Circumference

The length around the edge of the circle

Angles



Acute angle

(Angle less than 90°)



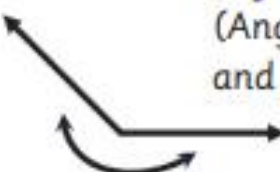
Right angle

(An angle of exactly 90°)



Obtuse angle

(Angle between 90° and 180°)



Reflex angle

(Angle between 180° and 360°)

