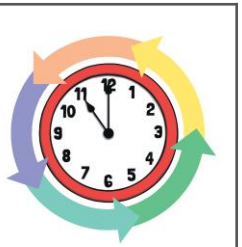
Year 1 Knowledge Organiser

1	one	11	eleven
2	two	12	twelve
3	three	13	thirteen
4	four	14	fourteen
5	five	15	fifteen
6	six	16	sixteen
7	seven	17	seventeen
8	eight	18	eighteen
9	nine	19	nineteen
10	ten	20	twenty

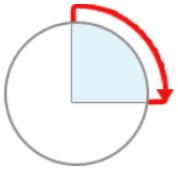
Months of the Year	
1st	January
2nd	February
3rd	March
4th	April
5th	May
6th	June
7th	July
8th	August
9th	September
10th	October
11th	November
12th	December

+	add plus
−	subtract minus
=	equals

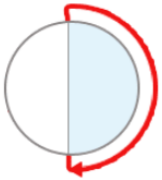
Clockwise



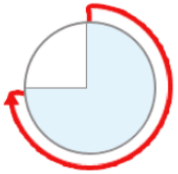
Anti-clockwise



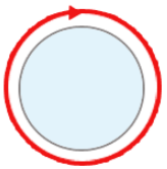
quarter turn



half turn

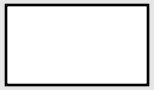


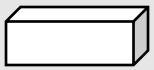
three-quarter turn



full turn

Days of the Week
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday

2D Shapes	
 circle	 rectangle
 square	 triangle

3D Shapes	
 cube	 cuboid
 sphere	 pyramid

One pence	Two pence	Five pence	Ten pence	Twenty pence
				
1p	2p	5p	10p	20p

Fifty pence	One pound	Two pounds	Five pounds	Ten pounds
				
50p	£1	£2	£5	£10

Year 2 Knowledge Organiser

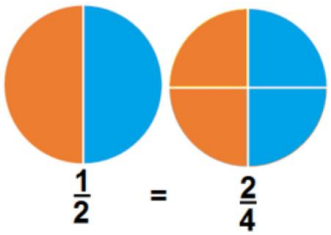

o'clock


half past


quarter past


quarter to

<	Greater than
>	Less than
=	Equals



one half = two quarters

length	centimetres metres	cm m
weight mass	grams kilograms	g kg
capacity	millilitres litres	ml l

60 seconds	=	1 minute
60 minutes	=	1 hour
24 hours	=	1 day

Tens	
ten	10
twenty	20
thirty	30
forty	40
fifty	50
sixty	60
seventy	70
eighty	80
ninety	90

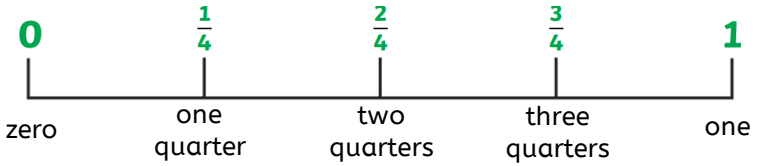
Ones	
one	1
two	2
three	3
four	4
five	5
six	6
seven	7
eight	8
nine	9

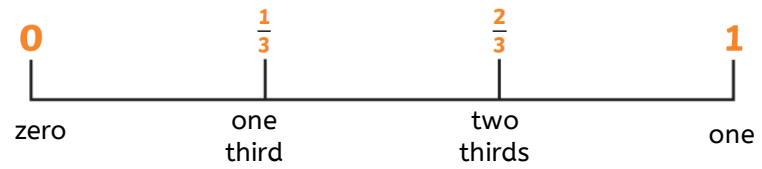
2D Shapes

Name	Sides	Vertices
Circle	1	0
Square	4	4
Rectangle	4	4
Triangle	3	3

3D Shapes

Name	Faces	Edges	Vertices
Cube	6	12	8
Cuboid	6	12	8
Sphere	1 curved surface	0	0
Pyramid	5	8	5





One pence	Two pence	Five pence	Ten pence	Twenty pence
				
1p	2p	5p	10p	20p

Fifty pence	One pound	Two pounds	Five pounds	Ten pounds
				
50p	£1	£2	£5	£10

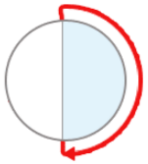
Year 3 Knowledge Organiser

Unit Fraction	Non-unit Fraction
Any fraction with 1 as its numerator (top number)	Any fraction with a numerator (top number) greater than 1

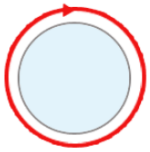
Angles as Turns

One right angle is one quarter turn

Three right angles is a three-quarter turn



Two right angles are one half turn



Four right angles is a full turn

Horizontal	Vertical
Perpendicular	**Parallel**
At an angle of 90 degrees	Always having the same distance between two lines

Roman Numerals	
1	I
2	II
3	III
4	IV
5	V
6	VI
7	VII
8	VIII
9	IX
10	X
11	XI
12	XII

Days in a Month	
January	31 days
February	28 days
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

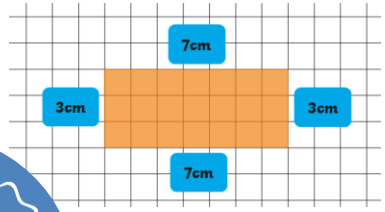
AM	=	Before midday
PM	=	After midday
Midday	=	12:00

60 seconds	=	1 minute
60 minutes	=	1 hour
24 hours	=	1 day

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

Perimeter

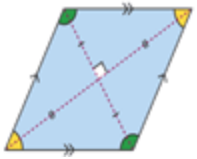
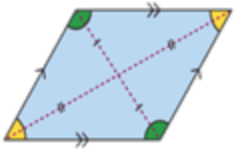
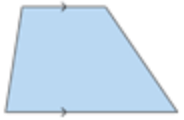
Perimeter is the **total length of the outside** of a shape.

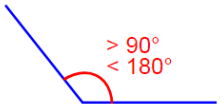


12am	00:00	4am	04:00	8am	08:00	12pm	12:00	4pm	16:00	8pm	20:00
1am	01:00	5am	05:00	9am	09:00	1pm	13:00	5pm	17:00	9pm	21:00
2am	02:00	6am	06:00	10am	10:00	2pm	14:00	6pm	18:00	10pm	22:00
3am	03:00	7am	07:00	11am	11:00	3pm	15:00	7pm	19:00	11pm	23:00

Year 4 Knowledge Organiser

Horizontal	Vertical
Perpendicular	**Parallel**
 At an angle of 90 degrees	 Always having the same distance between two lines

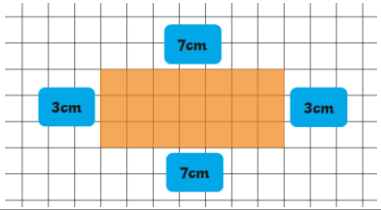
Parallelogram	Rhombus	Trapezium
 Two pairs of parallel sides	 All sides have the same length and are parallel	 One pair of parallel sides

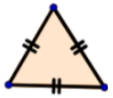
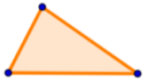
Acute angle	Right angle	Obtuse angle
 Less than 90°	 Exactly 90°	 More than 90° but less than 180°

Length	Weight/mass	Capacity
10mm = 1cm 100cm = 1m 1,000m = 1km	1,000g = **1kg**	1,000ml = **1l**

Perimeter

Perimeter is the total length of the outside of a shape.



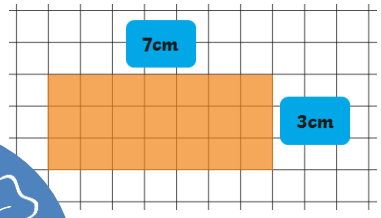
Equilateral triangle	Isosceles triangle	Scalene triangle	Right angled triangle
 3 equal sides and 3 angles of 60°	 2 equal sides and 2 equal angles	 No equal sides or angles	 One angle is a right angle (90°)

Roman Numerals	
fifty	L
One hundred	C
Five hundred	D
One thousand	M

Roman Numerals	
1	I
2	II
3	III
4	IV
5	V
6	VI
7	VII
8	VIII
9	IX

Area

Area is the measurement of a surface



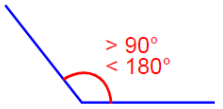
12am	00:00	4am	04:00	8am	08:00	12pm	12:00	4pm	16:00	8pm	20:00
1am	01:00	5am	05:00	9am	09:00	1pm	13:00	5pm	17:00	9pm	21:00
2am	02:00	6am	06:00	10am	10:00	2pm	14:00	6pm	18:00	10pm	22:00
3am	03:00	7am	07:00	11am	11:00	3pm	15:00	7pm	19:00	11pm	23:00

Year 5 Knowledge Organiser

Approximate conversion between **imperial** and **metric** units					
inch	cm	pound	kg	pint	ml
1	2.5	1	0.5	1	0.6

Square Numbers					
1^2	1 x 1	1	7^2	7 x 7	49
2^2	2 x 2	4	8^2	8 x 8	64
3^2	3 x 3	9	9^2	9 x 9	81
4^2	4 x 4	16	10^2	10 x 10	100
5^2	5 x 5	25	11^2	11 x 11	121
6^2	6 x 6	36	12^2	12 x 12	144

Cube Numbers		
1^3	1 x 1 x 1	1
2^3	2 x 2 x 2	8
3^3	3 x 3 x 3	27
4^3	4 x 4 x 4	64
5^3	5 x 5 x 5	125

Acute angle	Right angle	Obtuse angle
		
Less than 90°	Exactly 90°	More than 90° but less than 180°

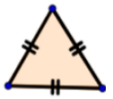
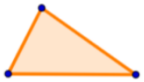
Full turn = **360º**

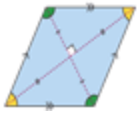
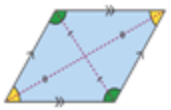
Half turn = **180º**

Angles inside of a triangle = **180º**

Angles inside of a quadrilateral = **360º**

Straight line angle = **180º**

Equilateral triangle	Isosceles triangle	Scalene triangle	Right angled triangle
			
3 equal sides and 3 angles of 60°	2 equal sides and 2 equal angles	No equal sides or angles	One angle is a right angle (90°)

Parallelogram	Rhombus	Trapezium
		
Two pairs of parallel sides	All sides have the same length and are parallel	One pair of parallel sides

Key Roman Numerals		
One	1	I
Five	5	V
Ten	10	X
Fifty	50	L
One hundred	100	C
Five hundred	500	D
One thousand	1,000	M

Fraction	Decimal	Percentage
$\frac{1}{100}$	0.01	1%
$\frac{1}{20}$	0.05	5%
$\frac{1}{10}$	0.1	10%
$\frac{1}{5}$	0.2	20%
$\frac{1}{4}$	0.25	25%
$\frac{1}{2}$	0.5	50%
$\frac{3}{4}$	0.75	75%
1	1	100%
$\frac{2}{5}$	0.4	40%
$\frac{4}{5}$	0.8	80%

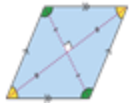
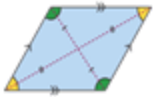
Prime Numbers up to 20

2 3 5 7 11 13 17 19

A prime number has exactly two factors

Year 6 Knowledge Organiser

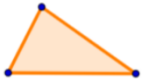
Term	Definition	Example
factor	A number that divides exactly into another number	Factors of 12: 1, 2, 3, 4 , 6, 12
common factor	Factors of two numbers that are the same	Common factors of 8 and 12: 1, 2 and 4
prime number	A number with exactly two factors	2, 3, 5, , 11 , 13, 17, 19…
composite number	A number with more than two factors	12 (as it has six factors)
prime factor	A factor that is prime	Prime factors of 12: 2, 3
multiple	A number that is in another number's times table	Multiples of 9: 9, 18, 27, 36…
common multiple	Multiples of two numbers that are the same	Common multiples of 4 and 6: 12,24…
square numbers	A result when a number has been multiplied by itself	25 (52 = 5x5) 49 (72 = 7x7)
cube numbers	When a number has been multiped by itself three times	8 (23 = 2x2x2) 27 (33 = 3x3x3)

Parallelogram	Rhombus	Trapezium
		
Two pairs of parallel sides	All sides have the same length and are parallel	One pair of parallel sides

Volume of a Cuboid
length **x** width **x** height


Measurement Conversions	
1cm	10mm
1m	100cm
1km	1,000m
1 mile	1.6km
1km	0.625 (5/8 mile)
1kg	1,000 grams
1 litre	1,000 millilitres

Full turn	360º
Half turn	180º
Right angle	90º
Acute angle	<90º
Obtuse angle	<180º
Reflex angle	>180º
Angle on a straight line	180º
Angles inside a triangle	180º
Angles inside a quadrilateral	360º

Equilateral	Isosceles	Scalene	Right angled
			
3 equal sides and 3 angles of 60°	2 equal sides and 2 equal angles	No equal sides or angles	One angle is a right angle (90°)

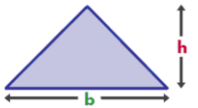
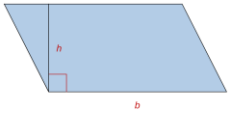
Name	Sides
quadrilateral	4
pentagon	5
hexagon	6
heptagon	7
octagon	8
nonagon	9
Decagon	10

Roman Numerals	
1	I
5	V
10	X
50	L
100	C
500	D
1,000	M

Fraction	Decimal	Percentage
$\frac{1}{100}$	0.01	1%
$\frac{1}{20}$	0.05	5%
$\frac{1}{10}$	0.1	10%
$\frac{1}{5}$	0.2	20%
$\frac{1}{4}$	0.25	25%
$\frac{1}{2}$	0.5	50%
$\frac{3}{4}$	0.75	75%
1	1	100%
$\frac{2}{5}$	0.4	40%
$\frac{4}{5}$	0.8	80%

Month	Days
January	31 days
February	28 days
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

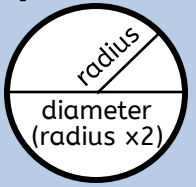
1 year = 365 days
Leap year = 366 days

Area of a triangle	Area of a parallelogram
(base x height) ÷ 2	base x height *(Height = perpendicular height)*
	

Shape Vocabulary

Perpendicular lines (at a right angle)

Vertical line



Horizontal line

Parallel lines

Perimeter = measure around the edge
Circumference = perimeter of a circle