



Year 5 and 6 Maths Knowledge Organiser

Cube Numbers		Cube Roots	
1^3	1	$\sqrt[3]{1}$	1
2^3	8	$\sqrt[3]{8}$	2
3^3	27	$\sqrt[3]{27}$	3
4^3	64	$\sqrt[3]{64}$	4
5^3	125	$\sqrt[3]{125}$	5

Square Numbers		Square Roots	
1^2	1	$\sqrt{1}$	1
2^2	4	$\sqrt{4}$	2
3^2	9	$\sqrt{9}$	3
4^2	16	$\sqrt{16}$	4
5^2	25	$\sqrt{25}$	5
6^2	36	$\sqrt{36}$	6
7^2	49	$\sqrt{49}$	7
8^2	64	$\sqrt{64}$	8
9^2	81	$\sqrt{81}$	9
10^2	100	$\sqrt{100}$	10
11^2	121	$\sqrt{121}$	11
12^2	144	$\sqrt{144}$	12
13^2	169	$\sqrt{169}$	13

Prime Numbers			
2	17	41	67
3	19	43	71
5	23	47	73
7	29	53	79
11	31	59	83
13	37	61	89

Numbers	
0	a number with no value that comes between the positive and negative numbers
positive number	a number more than 0
negative number	a number less than 0
prime number	A number with exactly two factors, itself and one.
composite number	A number with more than two factors.

Roman Numerals	
I	1
V	5
X	10
L	50
C	100
D	500
M	1000

Geometry	
width (w)	
height (h)	
length (l)	
volume	Volume = length x height x depth

Angle Totals	
	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°

Statistics	
mean	the sum of all data points divided by the number of data points

Circle Geometry		
radius	a straight line from the centre to the circumference	
chord	a straight line joining two points on the circumference	
diameter	a chord which passes through the centre	
circumference	the distance once around the circle	

Multiplication Grid												
X	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

Place Value Grid									
Millions	Hundred thousands	Ten thousands	thousands	hundreds	tens	ones	tenths	hundredths	thousandths
1 000 000	100 000	10 000	1000	100	10	1	0.1	0.01	0.001
X 1000	X 100	X 10							

Factors and Multiples	
factors	numbers we multiply together to get other numbers
multiple	the result of multiplying a number by an integer
HCF	Highest Common Factor - the largest factor shared by two or more numbers
LCM	Lowest Common Multiple - the smallest number that is a multiple of two or more numbers.