MATHS KNOWLEDGE ORGANISER Year 3

Number Bonds To 100

0	100	20	80	35	65
5	95	25	75	40	60
10	90	30	70	45	55
15	85			50	50

Multiplication and Division – Derived Facts

$3 \times 4 = 12$
$4 \times 3 = 12$
$12 = 3 \times 4$
$12 = 4 \times 3$
$12 \div 3 = 4$
$12 \div 4 = 3$
$4 = 12 \div 3$
$3 = 12 \div 4$

12, ÷, ÷, 3, x, 4

Fractions

$\frac{1}{2}$	one half
$\frac{1}{3}$	one third
$\frac{2}{3}$	two thirds
$\frac{1}{4}$	one quarter
$\frac{3}{4}$	three quarters
$\frac{1}{5}$	one fifth
$\frac{1}{6}$	one sixth
$\frac{1}{7}$	one seventh
$\frac{1}{8}$	one eighth
$\frac{1}{9}$	one ninth
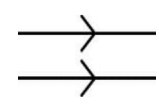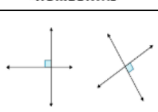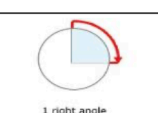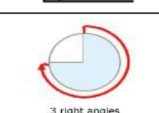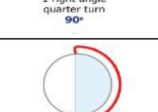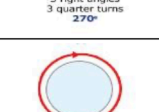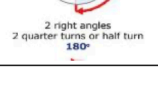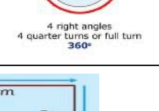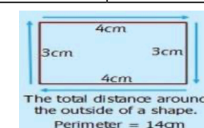
Days in a Month

January	31
February	28*
March	31
April	30
May	31
June	30
July	31
August	31
September	30
October	31
November	30
December	31

Leap year is 366 days with 29 days in February
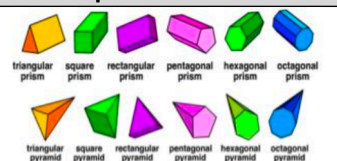
Measurements

mm in a cm	10 mm = 1 cm	m in a km	1000m = 1km
mm in a m	1000 mm = 1 m	g in a kg	1000g = 1 kg
cm in a m	100 cm = 1 m	ml in a l	1000 ml = 1 l

60 seconds in a minute.	60 minutes in an hour.	24 hours in one day.
7 days in a week.		12 months in one year.

Telling The Time

2.05	five past two
3.10	ten past three
19.20	twenty past seven
16.25	twenty-five past four
8.35	twenty-five to nine
21.40	twenty to ten
5.50	ten to six
12.55	five to one

Multiplication Tables

X	4	8	3	6	9
1	4	8	3	6	9
2	8	16	6	12	18
3	12	24	9	18	27
4	16	32	12	24	36
5	20	40	15	30	45
6	24	48	18	36	54
7	28	56	21	42	63
8	32	64	24	48	72
9	36	72	27	54	81
10	40	80	30	60	90
11	44	88	33	66	99
12	48	96	36	72	108

2D Shapes

triangle	a three sided polygon
quadrilateral	a four sided polygon
pentagon	a five sided polygon
hexagon	a six sided polygon
heptagon	a seven sided polygon
octagon	an eight sided polygon
nonagon	a nine sided polygon
decagon	a ten sided polygon
hendecagon	an eleven sided polygon
dodecagon	a twelve sided polygon

Geometry

Vertical		Parallel	
Horizontal	VERTICAL / HORIZONTAL		
Perpendicular		Right Angle	90°
Quarter Turn	1 right angle quarter turn 90°	Three-quarter Turn	3 right angles 3 quarter turns 270°
Half Turn	2 right angles 2 quarter turns or half turn 180°	Full Turn	4 right angles 4 quarter turns or full turn 360°
Perimeter			4cm, 3cm, 3cm, 4cm — The total distance around the outside of a shape. Perimeter = 14cm

3D Shapes

Prisms and Pyramids

triangular prism, square prism, rectangular prism, pentagonal prism, hexagonal prism, octagonal prism

triangular pyramid, square pyramid, rectangular pyramid, pentagonal pyramid, hexagonal pyramid, octagonal pyramid

Place Value Grid

	thousands	hundreds	tens	ones		tenths	hundredths
Numeral	1000	100	10	1	●	0.1	0.01