MATHS KNOWLEDGE ORGANISER - YEAR 2

Units of Measure

Time

second (s) — minute (min) — hour (h) — day — week — month — year

60 | 60 | 24 | 7 | 4 | 12

Length

millimetres (mm) | centimetres (cm) | metres (m) | kilometres (km)

Mass


grams (g) | kilograms (kg)

Capacity / Volume



millilitres (ml) | centilitres (cl) | litres (l)

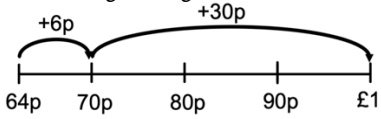
Money

£2.00 (200p) | £1.00 (100p) | £0.50 (50p) | £0.20 (20p) | £0.10 (10p) | £0.05 (5p) | £0.02 (2p) | £0.01 (1p)

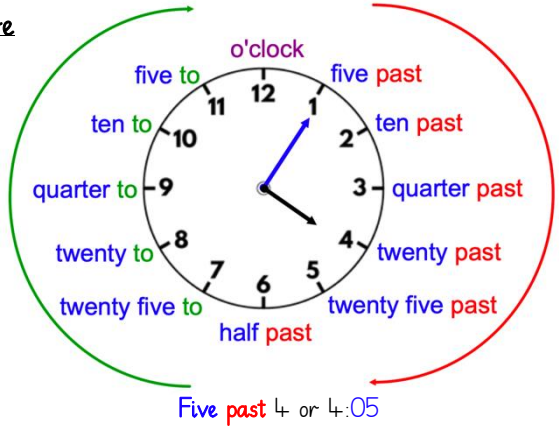
Adding

41p + 23p = 40p + 1p + 20p + 3p
= 60p + 4p
= 64p

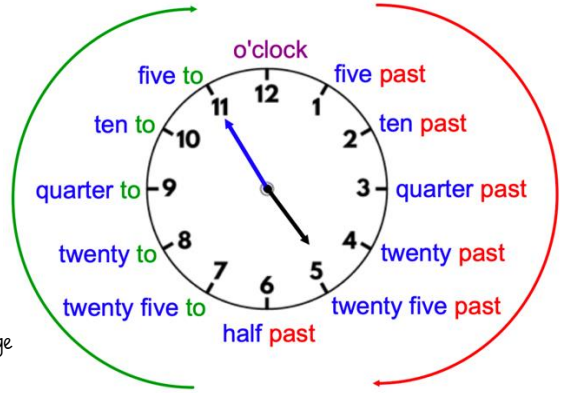
Making change



36p change from £1



Five past 4 or 4:05



Five to 5 or 4:55

Tables and Graphs

Pictogram

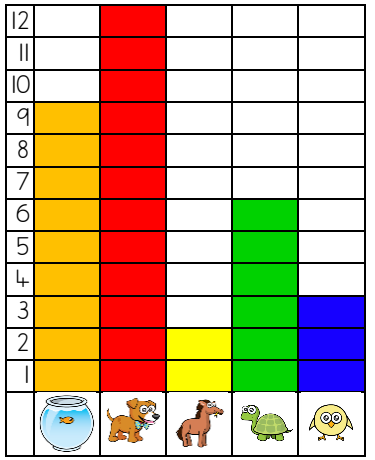
Number of ice creams eaten	
girls	
boys	
adults	

Key: = 1 ice cream

Tally chart
Year 2's pets

animal	tally	total
fish	𝍸 ||||	9
dog	𝍸 𝍸 ||	12
horse	||	2
tortoise	𝍸 |	6
bird	|||	3
	Total pets	32

Block graph
Year 2's pets



Fractions

Half


$\frac{1}{2}$

The whole is split into two equal parts.

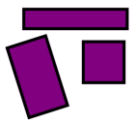
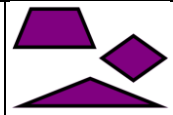
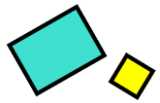
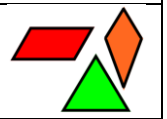
Quarter


$\frac{1}{4}$

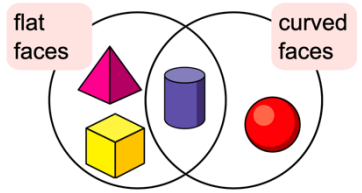
The whole is split into four equal parts.

Sorting

Carroll Diagram

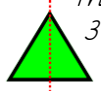
	rectangles	not rectangles
purple		
not purple		

Venn Diagram

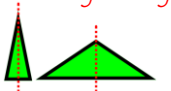


2D Shapes

Triangles
3 sides



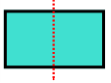
equilateral



isosceles

vertical line of symmetry

Quadrilaterals
4 sides



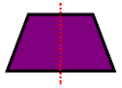
rectangle

square

parallelogram

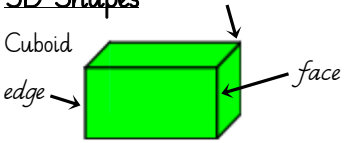
rhombus

kite



trapezium

3D Shapes

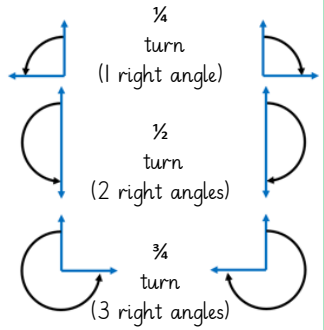


	Faces
Cube	6 squares
Pyramid	1 square 4 triangles
Cylinder	2 flat circles 1 curved face
Sphere	1 curved face

Direction

Left | Right

Anticlockwise | Clockwise



MATHS KNOWLEDGE ORGANISER - YEAR 2

Times Tables

2	5	10	3
2 x 0 = 0	5 x 0 = 0	10 x 0 = 0	3 x 0 = 0
2 x 1 = 2	5 x 1 = 5	10 x 1 = 10	3 x 1 = 3
2 x 2 = 4	5 x 2 = 10	10 x 2 = 20	3 x 2 = 6
2 x 3 = 6	5 x 3 = 15	10 x 3 = 30	3 x 3 = 9
2 x 4 = 8	5 x 4 = 20	10 x 4 = 40	3 x 4 = 12
2 x 5 = 10	5 x 5 = 25	10 x 5 = 50	3 x 5 = 15
2 x 6 = 12	5 x 6 = 30	10 x 6 = 60	3 x 6 = 18
2 x 7 = 14	5 x 7 = 35	10 x 7 = 70	3 x 7 = 21
2 x 8 = 16	5 x 8 = 40	10 x 8 = 80	3 x 8 = 24
2 x 9 = 18	5 x 9 = 45	10 x 9 = 90	3 x 9 = 27
2 x 10 = 20	5 x 10 = 50	10 x 10 = 100	3 x 10 = 30
2 x 11 = 22	5 x 11 = 55	10 x 11 = 110	3 x 11 = 33
2 x 12 = 24	5 x 12 = 60	10 x 12 = 120	3 x 12 = 36

Order Numbers

Compare tens first

Tens	Ones
5	1
2	9
7	3
5	7

73 > 57 > 51 > 29

Eats the larger number

73 > 57

is bigger than

29 < 51

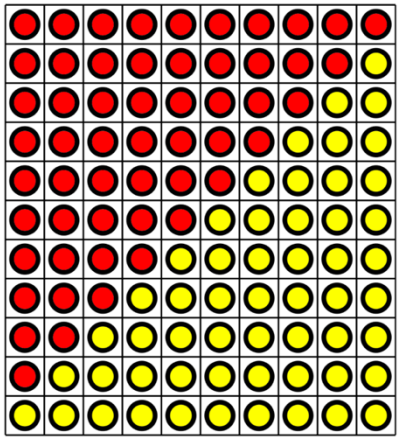
is smaller than

Naming numbers

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

21	twenty-one
22	twenty-two
23	twenty-three
24	twenty-four
25	twenty-five
26	twenty-six
27	twenty-seven
28	twenty-eight
29	twenty-nine
30	thirty
40	forty
50	fifty
60	sixty
70	seventy
80	eighty
90	ninety
100	one hundred

Addition facts



to 10

10 + 0	0 + 10
9 + 1	1 + 9
8 + 2	2 + 8
7 + 3	3 + 7
6 + 4	4 + 6
5 + 5	

to 20

20 + 0	0 + 20
19 + 1	1 + 19
18 + 2	2 + 18
17 + 3	3 + 17
16 + 4	4 + 16
15 + 5	5 + 15
14 + 6	6 + 14
13 + 7	7 + 13
12 + 8	8 + 12
11 + 9	9 + 11
10 + 10	

Place Value

Tens	Ones
3	7

37 = 3 tens and 7 ones
= 30 + 7

Counting in tens

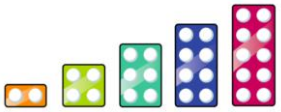
The tens number increases by 1 each time.

Tens	Ones
3	7
4	7
5	7
6	7
7	7

Even

Can all be paired

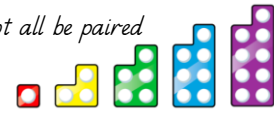
End in 2, 4, 6, 8, 0



2 4 6 8 10

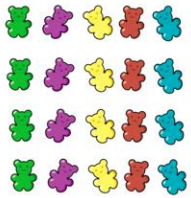
Odd *Cannot all be paired*

End in 1,3,5,7,9

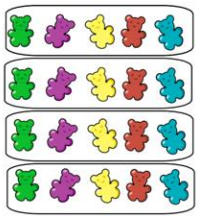


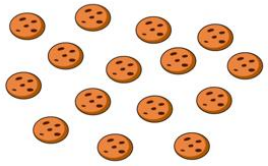
1 3 5 7 9

Multiplication and division

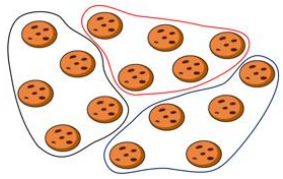


Share between 4 people.
20 ÷ 4 = 5





How many groups of 5?
15 ÷ 5 = 3



4 + 4 + 4 = 12
4 x 3 = 12

3 + 3 + 3 + 3 = 12
3 x 4 = 12

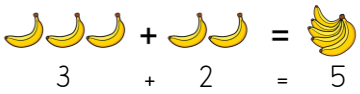
12 - 4 - 4 - 4 = 0
12 ÷ 4 = 3

12 - 3 - 3 - 3 - 3 = 0
12 ÷ 3 = 4

Multiplication is the same as repeated addition.

Division is the same as repeated subtraction.

Addition and Subtraction



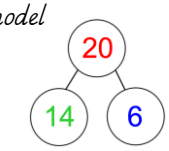
3 + 2 = 5

5 - 2 = 3

5 - 3 = 2

Subtraction is the inverse of addition.

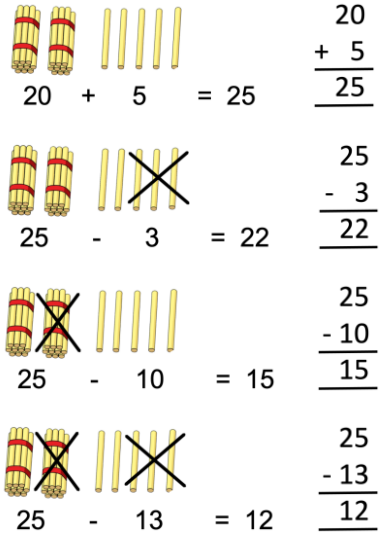
Part – whole model



14 + 6 = 20
6 + 14 = 20
20 – 6 = 14
20 – 14 = 6

Bar model

20	
14	6



20 + 5 = 25

25 - 3 = 22

25 - 10 = 15

25 - 13 = 12

Vocabulary

Add +	sum	total
	plus	altogether
Subtract –	take away	
	difference	
	How many more?	
	How many less?	
	How many left?	
Multiply ×	times	product
	double	triple
Divide ÷	share	split
	group	
Equals =	is	makes
	gives	