



Year 2 Mathematics Core Knowledge Organiser

Times Tables (10x)

$1 \times 10 = 10$	$7 \times 10 = 70$
$2 \times 10 = 20$	$8 \times 10 = 80$
$3 \times 10 = 30$	$9 \times 10 = 90$
$4 \times 10 = 40$	$10 \times 10 = 100$
$5 \times 10 = 50$	$11 \times 10 = 110$
$6 \times 10 = 60$	$12 \times 10 = 120$

Times Tables (5x)

$1 \times 5 = 5$	$7 \times 5 = 35$
$2 \times 5 = 10$	$8 \times 5 = 40$
$3 \times 5 = 15$	$9 \times 5 = 45$
$4 \times 5 = 20$	$10 \times 5 = 50$
$5 \times 5 = 25$	$11 \times 5 = 55$
$6 \times 5 = 30$	$12 \times 5 = 60$

Number Facts

odd numbers

Odd numbers are not divisible by 2. The ones digit in an odd number is 1, 3, 5, 7 or 9

Example:

31 45 69

even numbers

Even numbers are divisible by 2. The ones digit in an even number is 0, 2, 4, 6 or 8

Example:

32 16 48

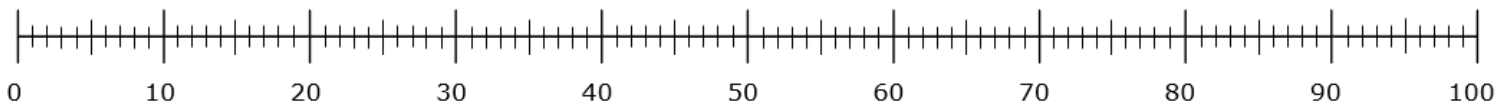
Times Tables (2x)

$1 \times 2 = 2$	$7 \times 2 = 14$
$2 \times 2 = 4$	$8 \times 2 = 16$
$3 \times 2 = 6$	$9 \times 2 = 18$
$4 \times 2 = 8$	$10 \times 2 = 20$
$5 \times 2 = 10$	$11 \times 2 = 22$
$6 \times 2 = 12$	$12 \times 2 = 24$

Number Bonds 20

$11 + 1 = 12$
$12 + 1 = 13$
$13 + 1 = 14$
$14 + 1 = 15$
$15 + 1 = 16$
$16 + 1 = 17$
$17 + 1 = 18$
$18 + 1 = 19$
$19 + 1 = 20$

Number Line



Counting forwards (up) and backwards (down) in 10s, 5s, 2s...

Addition

Use base 10 to calculate $45 + 37$

T	O
Do I need to make an exchange?	
There are <u>8</u> tens and <u>2</u> ones.	
$45 + 37 = 82$	

Subtraction

Use base 10 to calculate $73 - 25$

$73 - 25 = 48$

$25 = 20 + 5$

$73 - 20 = 53$
 $53 - 5 = 48$

Multiplication



There are 5 equal groups with 4 in each group.

$4 + 4 + 4 + 4 + 4 = 20$

$5 \times 4 = 20$

Division



The picture shows $6 \times 3 = 18$

What division does it also show?

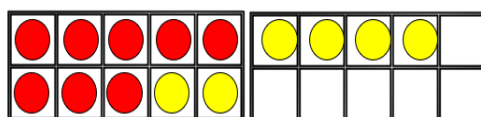
$18 \div 3 = 6$
 18 flowers altogether, 6 groups of 3

Place Value

hundred 100, ten 10, one 1

T	O
3	1

Fact Families



$8 + 6 = 14$

$6 + 8 = 14$

$14 = 8 + 6$

$14 = 6 + 8$

Double and near doubles

$1 + 1 = 2$		$1 + 2 = 3$
$2 + 2 = 4$		$2 + 3 = 5$
$3 + 3 = 6$		$3 + 4 = 7$
$4 + 4 = 8$		$4 + 5 = 9$
$5 + 5 = 10$		$5 + 6 = 11$
$6 + 6 = 12$		$6 + 7 = 13$
$7 + 7 = 14$		$7 + 8 = 15$
$8 + 8 = 16$		$8 + 9 = 17$
$9 + 9 = 18$		$9 + 10 = 19$
$10 + 10 = 20$		$10 + 11 = 21$

Fractions

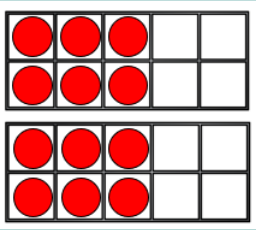


There are 3 equal parts.

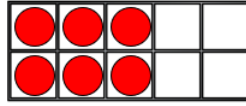
There is 1 part circled.

$\frac{1}{3}$ is circled.

Half of 12 = 6



halve
→
←
double



Fractions of shapes and quantities

<p>one third</p>	<p>one quarter</p>
<p>two quarters</p>	<p>three quarters</p>

Time

time

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

7 o'clock

quarter past 5

half past 1

quarter to 10

$\frac{1}{2}$ hour = 30 minutes
 $\frac{1}{4}$ hour = 15 minutes
 $\frac{3}{4}$ hour = 45 minutes

Geometry : 2D and 3D shapes

2D shapes

 circle 1 curved side	 triangle 3 corners 3 sides	 square 4 corners 4 sides
 rectangle 4 corners 4 sides	 pentagon 5 corners 5 sides	 hexagon 6 corners 6 sides
 heptagon 7 corners 7 sides	 octagon 8 corners 8 sides	

properties of 3D shapes

- face**: the flat surface of a 3D shape
- edge**: where two faces on a shape meet
- vertex** (plural: vertices): a point or corner where edges meet

 cube 6 square faces 12 edges 8 vertices	 cuboid 6 faces 12 edges 8 vertices
 cone 1 circular face 1 curved surface 1 curved edge 1 apex	 cylinder 2 circular faces 1 curved surface 2 curved edges 0 vertices
 triangular prism 5 faces 9 edges 6 vertices	 sphere 1 curved surface 0 edges 0 vertices

Money

1p	2p	5p	10p	20p	50p