

Numeracy Key Facts Booklet



**St Bernard's Primary School
Primary 5**

Place value

thousands	hundreds	tens	ones
3	7	4	8

↑
3000

↑
700

↑
40

↑
8

Round to nearest 10, 100, 1000.

Example 1- Round 4279 to the nearest 1000

- Step 1 - Find the 'round-off digit' - 4
- Step 2 - Look one digit to the right of 4 - 2

5 or more? NO - leave 'round off digit' unchanged
- Replace following digits with zeros

ANSWER - 4000

Example 2- Round 4279 to the nearest 10

- Step 1 - Find the 'round-off digit' - 7
- Step 2 - Look one digit to the right of 7 - 9

5 or more? YES - Add one to the 'round off digit'
- Replace following digits with zeros

ANSWER - 4280

I know number bonds to 100

By the end of this half term, children should know the following facts. The aim is for them to recall these facts **instantly**.

Some examples:

$60 + 40 = 100$	$37 + 63 = 100$
$40 + 60 = 100$	$63 + 37 = 100$
$100 - 40 = 60$	$100 - 37 = 63$
$100 - 60 = 40$	$100 - 63 = 37$
$75 + 25 = 100$	$48 + 52 = 100$
$25 + 75 = 100$	$52 + 48 = 100$
$100 - 25 = 75$	$100 - 52 = 48$
$100 - 75 = 25$	$100 - 48 = 52$

This list includes some examples of facts that children should know. They should be able to answer questions including missing number questions. e.g. $49 + \square = 100$ or $100 - \square = 72$

Key Vocabulary

What do I **add** to 65 to make 100?

What is 100 **take away** 6?

What is 13 **less than** 100?

How many more than 98 is 100?

Multiplication tables

Times Table - 12x12												
	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

Remember:

$$7 \times 8 = 56 \quad 8 \times 7 = 56$$

Pupils must know all corresponding division facts

Count in Multiples

Skip - Count by Multiples

2, 4, 6, 8, 10, 12, 14, 16, 18
 3, 6, 9, 12, 15, 18, 21, 24, 27
 4, 8, 12, 16, 20, 24, 28, 32, 36
 5, 10, 15, 20, 25, 30, 35, 40, 45
 6, 12, 18, 24, 30, 36, 42, 48, 54
 7, 14, 21, 28, 35, 42, 49, 56, 63
 8, 16, 24, 32, 40, 48, 56, 64, 72
 9, 18, 27, 36, 45, 54, 63, 72, 81
 10, 20, 30, 40, 50, 60, 70, 80, 90
 11, 22, 33, 44, 55, 66, 77, 88, 99
 12, 24, 36, 48, 60, 72, 84, 96, 108

Pupils must be able to count forwards and backwards using the multiples up to x12

$56 \div 7 = 8$ $56 \div 8 = 7$	
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Factors

Pupils must be able to recall factor pairs for all multiples within their times tables.

4/10 Factor pairs

The number 12 can be made from these factor pairs

$$1 \times 12$$

$$2 \times 6$$

$$3 \times 4$$

$$4 \times 3$$

$$6 \times 2$$

$$12 \times 1$$

From these factor pairs we can see that the factors of 12 are: 1, 2, 3, 4, 6, 12

Finding 1,10,100,1000 more than/less than

thousands	hundreds	tens	ones
4	5	6	7



To increase or decrease by 1000 this is the digit that changes.

4567 has increased by 1000 to **5**567

thousands	hundreds	tens	ones
5	5	6	7

4567 has decreased by 1000 to **3**567

thousands	hundreds	tens	ones
3	5	6	7

Multiplying & Dividing by 10 & 100

$$7 \times 10 = 70 \quad 30 \times 10 = 300$$

$$10 \times 7 = 70 \quad 10 \times 30 = 300$$

$$70 \div 7 = 10 \quad 300 \div 30 = 10$$

$$70 \div 10 = 7 \quad 300 \div 10 = 30$$

$$6 \times 100 = 600 \quad 40 \times 100 = 4000$$

$$100 \times 6 = 600 \quad 100 \times 40 = 4000$$

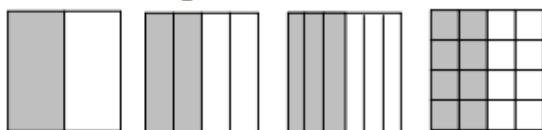
$$600 \div 6 = 100 \quad 4000 \div 40 = 100$$

$$600 \div 100 = 6 \quad 4000 \div 100 = 40$$

Common equivalent fractions

- The same fraction can be expressed in different ways

ALL THESE ARE $\frac{1}{2}$



$$\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8}$$

ALL THESE ARE $\frac{3}{4}$



$$\frac{3}{4} = \frac{6}{8} = \frac{9}{12} = \frac{12}{16}$$

Add & subtract fractions

- To add and subtract fractions

When the denominators are the same

$$\frac{5}{8} + \frac{3}{8} = \frac{8}{8} = 1$$

Do not add the denominators

$$\frac{5}{8} - \frac{1}{8} = \frac{4}{8}$$

Do not subtract the denominators

Decimal Tenths

$$\begin{aligned}1/10 &= 0.1 = 10\% \\2/10 &= 0.2 = 20\% \\3/10 &= 0.3 = 30\% \\4/10 &= 0.4 = 40\% \\5/10 &= 0.5 = 50\% \\6/10 &= 0.6 = 60\% \\7/10 &= 0.7 = 70\% \\8/10 &= 0.8 = 80\% \\9/10 &= 0.9 = 90\% \\10/10 &= 1.0 = 100\% \text{ (1 whole)}\end{aligned}$$

$$1 \text{ whole and } 1/10 = 1.1$$

$$1 \text{ whole and } 2/10 = 1.2$$

$$1 \text{ and } 3/10 = 1.3$$

$$1 \text{ and } 4/10 = 1.4$$

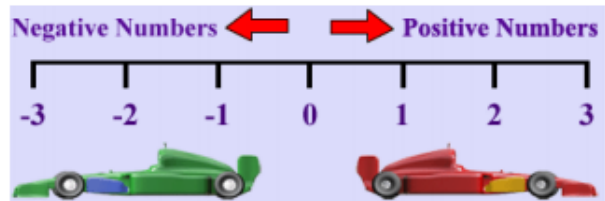
And so on

Negative numbers

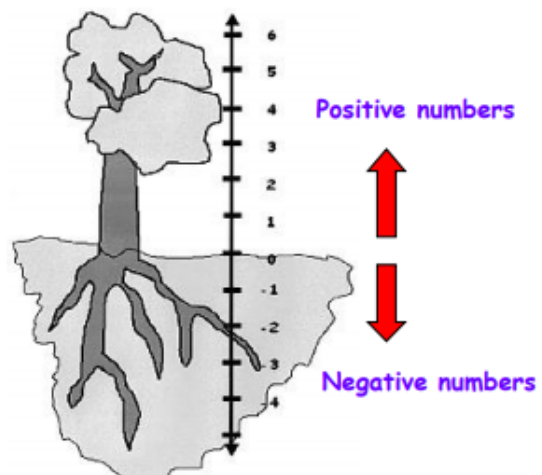
Negative numbers are numbers BELOW ZERO

Think of a number line

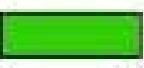
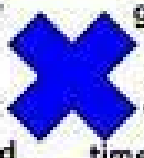
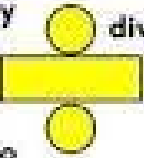
- Horizontal number line



- Vertical number line



Key Words in Problem Solving

ADDITION add plus and total  increase more sum together	SUBTRACTION take away minus less reduce remain take from fewer take difference how many more 
MULTIPLICATION multiply times product multiplied by  groups of lots of doubled times tables	DIVISION divided by share divide divide into  divisible by group each share equally

Properties of 2D Shapes

2D Shapes

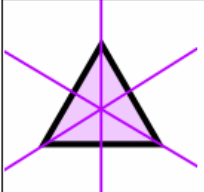
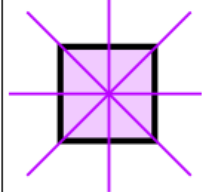
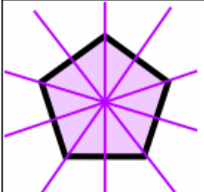
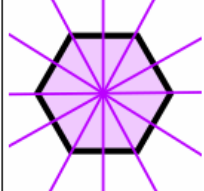
Name		Sides	Vertices
triangle		3	3
circle		1	0
square		4	4
rectangle		4	4
pentagon		5	5
hexagon		6	6
oval		1	0
rhombus		4	4
trapezium		4	4
parallelogram		4	4

Properties of 3D Shapes

3D Shapes

Name	Surfaces		Edges		Vertices	Picture
	Flat	Curved	Flat	Curved		
sphere	0	1	0	0	0	
cube	6	0	12	0	8	
cuboid	6	0	12	0	8	
cone	1	1	0	1	0	
cylinder	2	1	0	2	0	
square-based pyramid	5	0	8	0	5	
tetrahedron	4	0	6	0	4	
triangular prism	5	0	9	0	6	

Lines of Symmetry in 2D shapes

	An Equilateral Triangle (3 sides) has 3 Lines of Symmetry
	A Square (4 sides) has 4 Lines of Symmetry
	A Regular Pentagon (5 sides) has 5 Lines of Symmetry
	A Regular Hexagon (6 sides) has 6 Lines of Symmetry

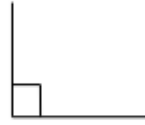
Angles in Shapes

Types of angles

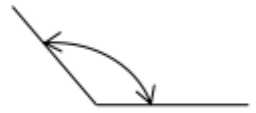
Acute
(less than 90°)



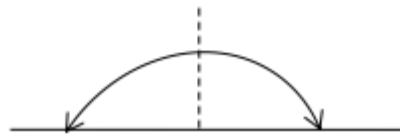
Right
(Exactly 90°)



Obtuse
(Between 90° & 180°)

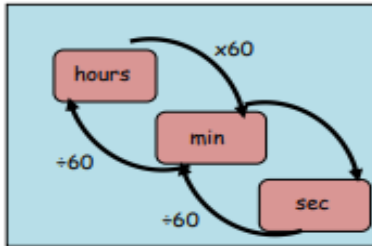
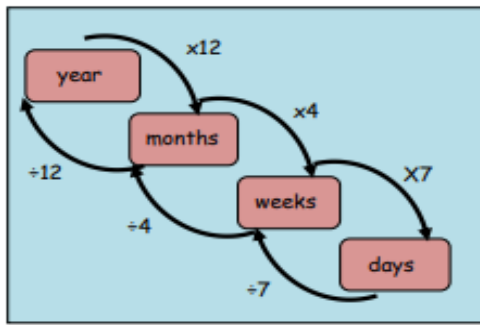


Straight line
(180° or two right angles)

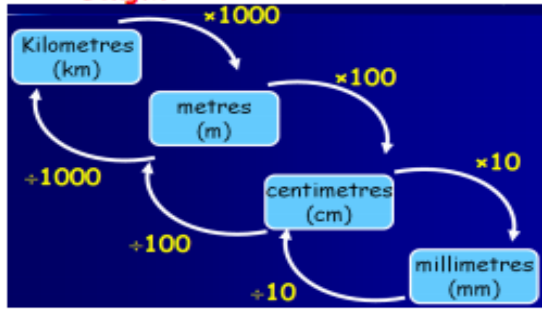


4. Convert between units of measure

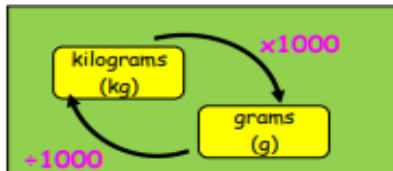
• Time



• Length



• Mass or weight



• Capacity or volume



12-hour time

12 a.m. (midnight)

1 a.m.

2 a.m.

3 a.m.

4 a.m.

5 a.m.

6 a.m.

7 a.m.

8 a.m.

9 a.m.

10 a.m.

11 a.m.

12 p.m. (noon)

1 p.m.

2 p.m.

3 p.m.

4 p.m.

5 p.m.

6 p.m.

7 p.m.

8 p.m.

9 p.m.

10 p.m.

11 p.m.

