Helping Your Child with Mathematics

A Booklet for Parents

Year 3

Calculation Strategies

In Year 3 your child will use the following written calculation strategies.

Addition

Mental method, using partitioning:

47 + 76 = (40 + 70) + (7 + 6)

or

47 + 76 = (47 + 70) + 6

Introduction to vertical layout, using partitioning

300	+ 70	+ 8	
400	+ 80	+ 7	
700	+ 150	+ 15	= 865

Subtraction

Mental method, using partitioning:

47 - 25 = (40 - 20) + (7 - 5)

or

47 + 76 = (47 - 20) – 5

Introduction to vertical layout, using partitioning

	500	60	3	
-	200	40	1	
	300	20	2	= 322

Multiplication

Use of multiplication tables:

$3 \times 6 = 18$

Mental method using partitioning multiplying tens first:

$38 \times 7 = (30 \times 7) + (8 \times 7) = 210 + 56 = 266$

Grid method 38×7

x	30	8	
7	210	56	266

Division

Use of multiplication tables and their inverse:

$3 \times 6 = 18$ $18 \div 6 = 3$ $18 \div 3 = 6$

Informal methods using multiples of the divisor or 'chunking' TU ÷ U

$72 \div 5$

	72
$5 \times 10 = 50$	- 50
	22
$5 \times 4 = 20$	- 20
14	2

Answer: 14 r 2

The following maths facts are important for your child to know. Please help them to learn them.

All the pairs of numbers that total 20

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

Addition and subtraction facts for all the numbers to 20

E.g. 13 + 7 = 20 20 — 7 = 13

Addition and subtraction facts for all the numbers that total 100

E.g. 35 + 65 = 100 100 - 65 = 35
22 + 78 = 100 100 – 78 = 22

Doubles and halves of all multiples of 10 up to 100

E.g. double 70 is 140, half of 70 is 35

Round numbers to the nearest 10

E.g. 34 – 30, 36 - 40

Multiplication facts

x2, x3, x4, x5, x8, x10

Division facts for these tables

E.g. 40 ÷ 5 = 8

Link x2, x4, x8 with doubling

E.g. 2 x 6 = 12 so 4 x 6 = 24 so 8 x 6 = 48

Counting on and back in steps of 6, 7, 9, 11 and 12 from any number.

E.g. 5, 11, 17, 23, 29, 35, 41, 47, 53, 59, 65

98, 89, 80, 71, 62, 53, 44, 35, 26, 17, 8

Shape

A quarter turn is one right angle
2 quarter turns is a half turn
3 quarter turns is a three quarter turn
4 quarter turns is a full turn.
A straight line is two right angles
Parallel lines never meet
A perpendicular line is at right angles to another line

Measures

1000 metres = 1 kilometre

100 centimetres = 1 metre 

1000 grams = 1 kilogram 

1000 millilitres = 1 litre 

Time

60seconds = 1minute 60minutes = 1 hour
24 hours = 1 day 7 days = 1 week
52 weeks = 1 year 12 months = 1 year
365 days = 1 year 366 days = 1 leap year
January = 31 days, February = 28 days (29 on leap year), March = 31 days, April = 30 days, May = 31 days, June = 30 days, July = 31 days, August = 31 days, September = 30 days, October = 31 days, November = 30 days, December = 31 days

Fun Activities to Do At Home

Number Games

Roll two dice. Make two-digit numbers, e.g. if you roll a 6 and 4, this could be 64 or 46. If you haven't got two dice, roll one dice twice. Ask your child to do one or more of the activities below.

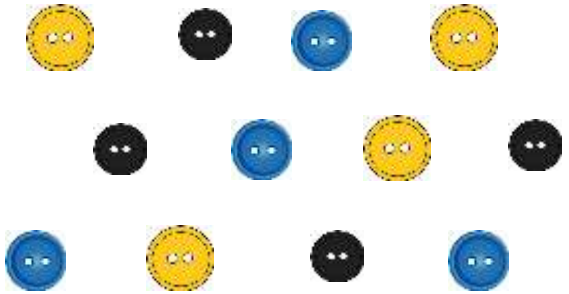
- Count on or back from each number in tens.
- Add 19 to each number in their head. (A quick way is to add 20 then take away 1.)
- Subtract 9 from each number. (A quick way is to take away 10 then add back one.)
- Double each number.

Fractions

Use 12 buttons, or paper clips or dried beans or…

- Ask your child to find **half** of the 12 things.
- Now find one **quarter** of the same group.
- Find one **third** of the whole group.

Repeat with other numbers.



Can You Tell The Time?

Whenever possible, ask your child to tell you the time to the nearest 5 minutes. Use a clock with hands as well as a digital watch or clock.

Also ask:

- What time will it be one hour from now?
- What time was it one hour ago?

Time your child doing various tasks, e.g.

- getting ready for school;
- tidying a bedroom;
- saying the 5 times, 10 times or 2 times table…

Ask your child to guess in advance how long they think an activity will take. Can they beat their time when they repeat it?

Cupboard Maths

Ask your child to look at the weights printed on jars, tins and packets in the food cupboard, e.g.

tinned tuna 185g

tinned tomatoes 400g

jam 454g

Choose six items. Ask your child to put them in order. Is the largest item the heaviest?