Addition Workshop for Parents
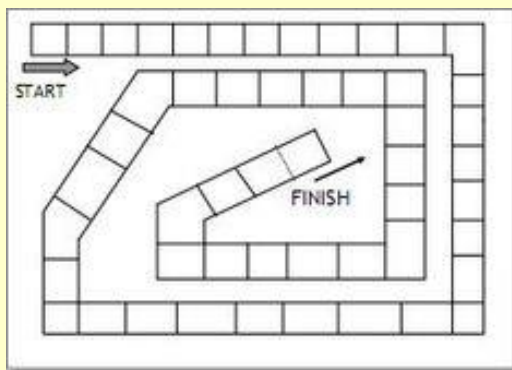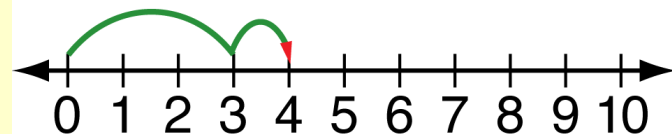
Friday 13th November

Year 1

National Curriculum

• Make and use number bonds within 20.

• Read, write and interpret mathematical statements involving addition.

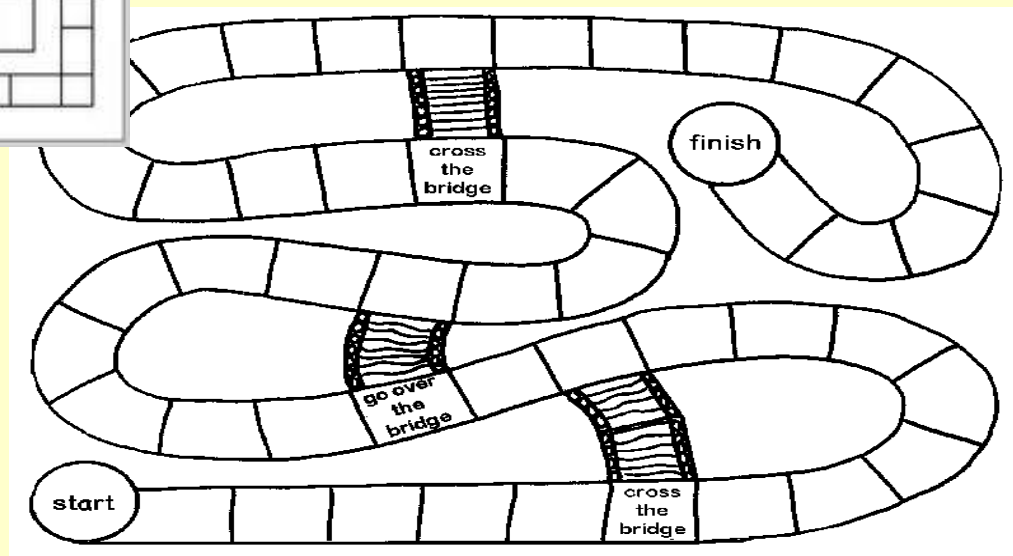• Add one-digit and two digit numbers to 20, including zero.

How to help at home:

- Children do counting tasks.
- In play/daily routines ask:

Can you give me 1 more…2 more?

- Blank track games

$$3 + 1 = 4$$

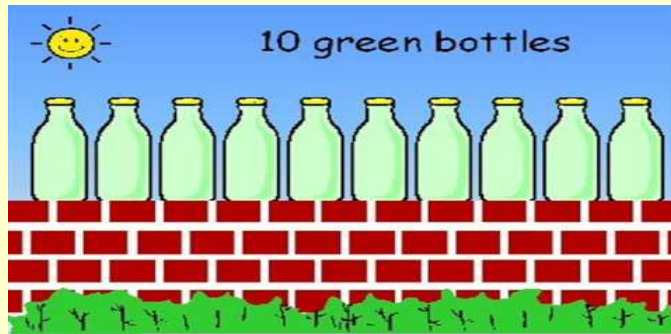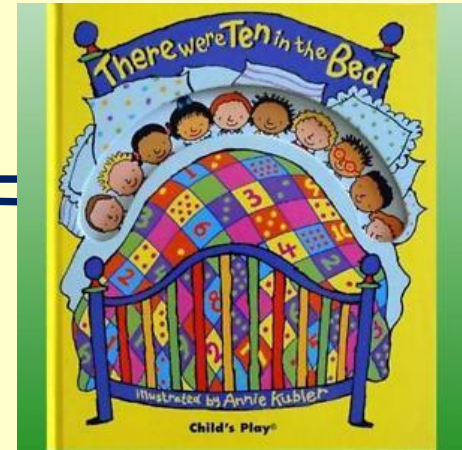- 1-6 dice
- 0-9 dice
- 1-6 dice with 1 more
- 0-9 with 1 more
- 1-6 with 1 less
- 0-9 with 1 less
- Two 1-6 dice

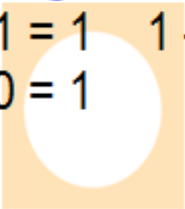- Number rhymes and books
10-1=   9-1=   8-1=   7-2=

10 green bottles

- Taking 1 away with food
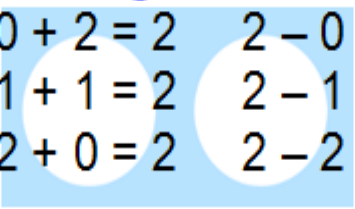
- Taking away on fingers
Knowing finger patterns

5 + 5 =10
10 - 5 = 5

09/11/2010 12:48 PM

- # Number bonds for making 1,2,3…20
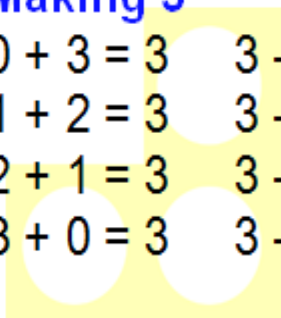
Making 1
0 + 1 = 1   1 − 0 = 1
1 + 0 = 1
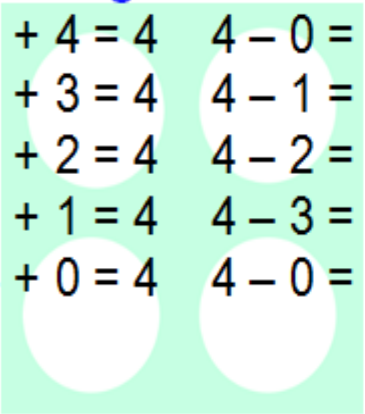
Making 2
0 + 2 = 2   2 − 0 = 2
1 + 1 = 2   2 − 1 = 1
2 + 0 = 2   2 − 2 = 0
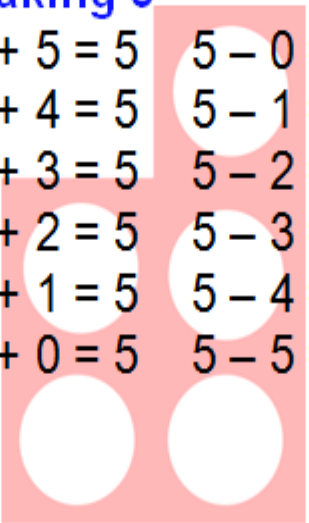
Making 3
0 + 3 = 3   3 − 0 = 3
1 + 2 = 3   3 − 1 = 2
2 + 1 = 3   3 − 2 = 1
3 + 0 = 3   3 − 3 = 0
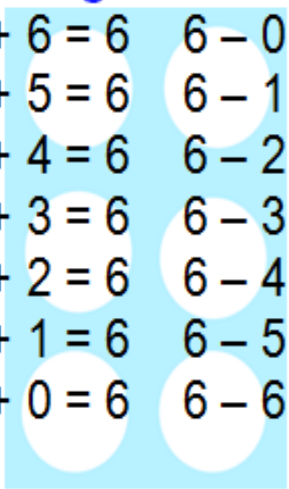
Making 4
0 + 4 = 4   4 − 0 = 4
1 + 3 = 4   4 − 1 = 3
2 + 2 = 4   4 − 2 = 2
3 + 1 = 4   4 − 3 = 1
4 + 0 = 4   4 − 0 = 4

Making 5
0 + 5 = 5   5 − 0 = 5
1 + 4 = 5   5 − 1 = 4
2 + 3 = 5   5 − 2 = 3
3 + 2 = 5   5 − 3 = 2
4 + 1 = 5   5 − 4 = 1
5 + 0 = 5   5 − 5 = 0

Making 6
0 + 6 = 6   6 − 0 = 6
1 + 5 = 6   6 − 1 = 5
2 + 4 = 6   6 − 2 = 4
3 + 3 = 6   6 − 3 = 3
4 + 2 = 6   6 − 4 = 2
5 + 1 = 6   6 − 5 = 1
6 + 0 = 6   6 − 6 = 0

Addition

10+2=
- Counting out both sets
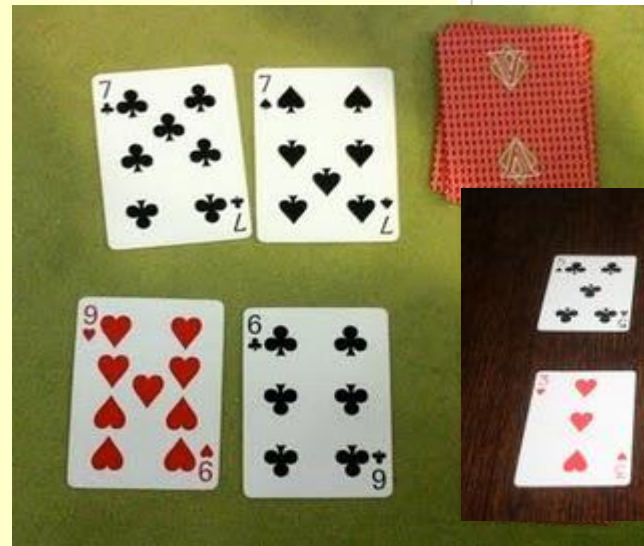- Counting on from bigger number
- Doing it mentally
- Instant recall
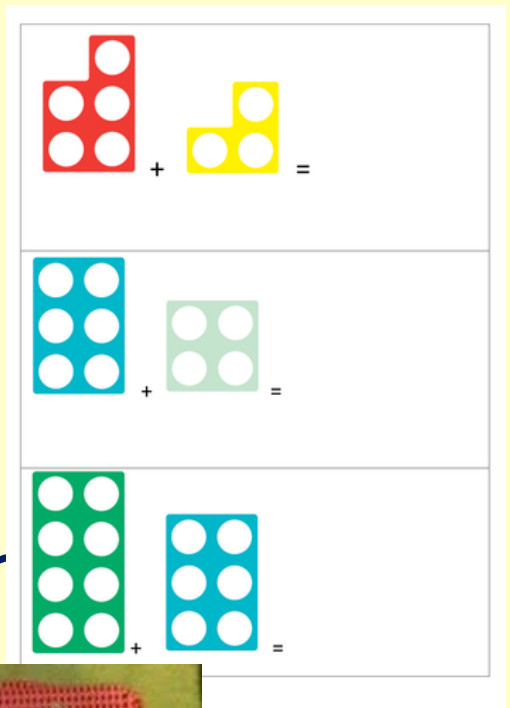
5+3
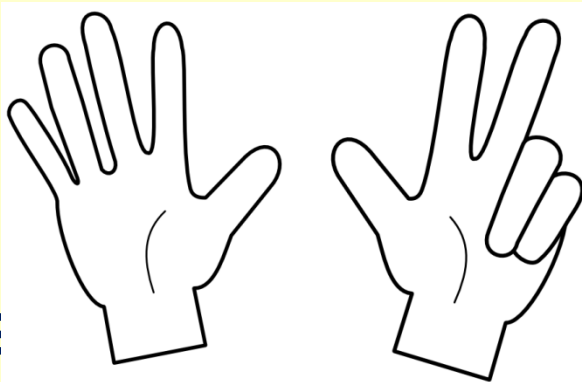
game

addition war card

Year 1

1. Start by practically working out number bonds to

and within 20.

2. Use pictures and marks to find 1 more/2 more.

3. Progress on to using number lines to calculate

within 20.

$$3 + 1 = 4$$

3
4

Dotty 6 Game

2
1

5
3

5
1

2
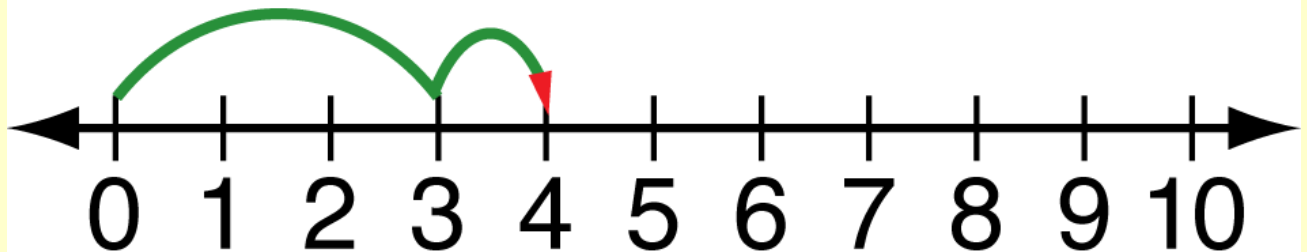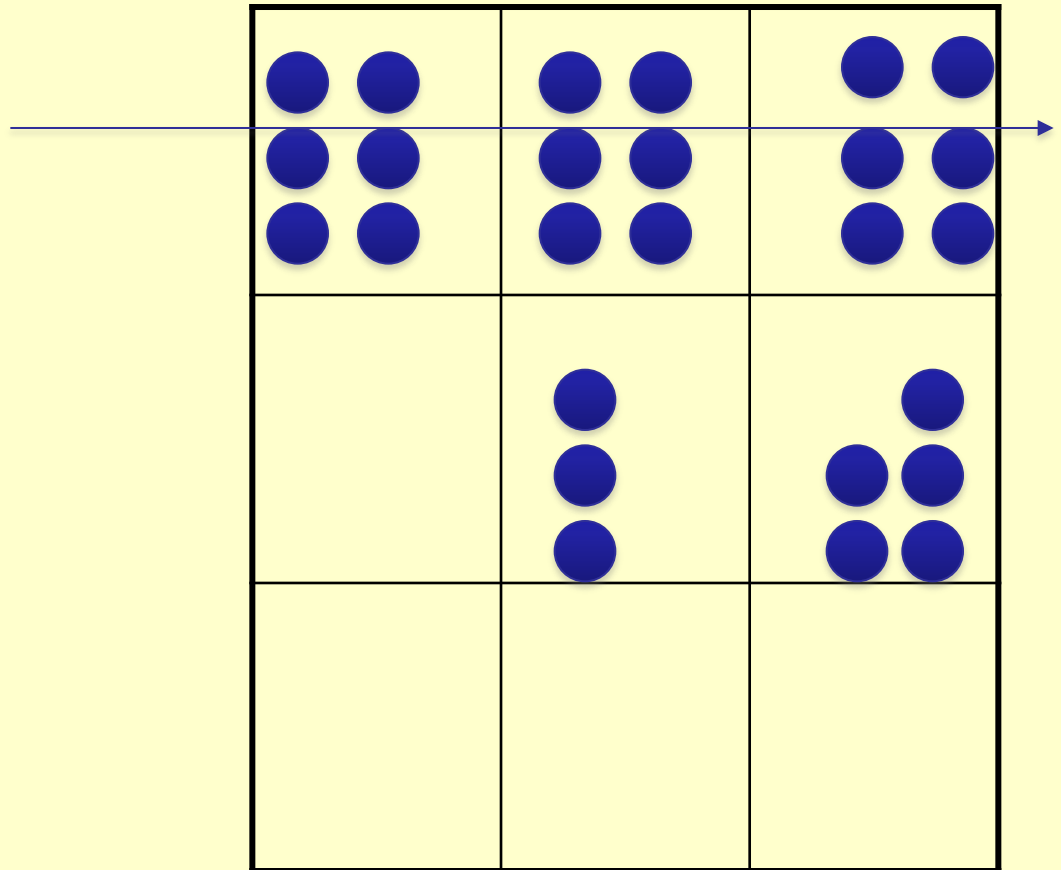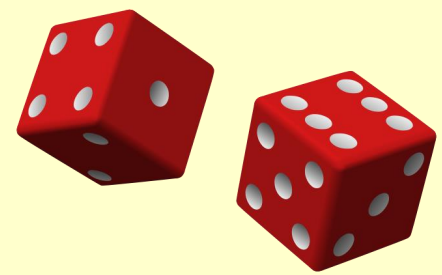
Green wins!
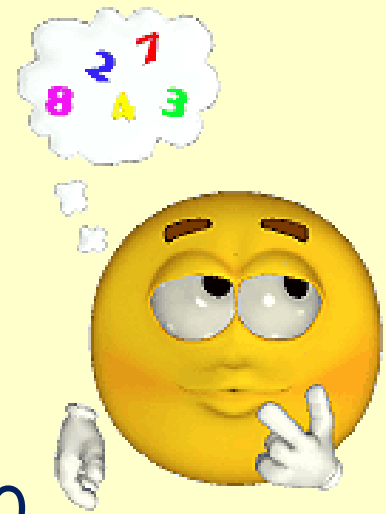
Year 2

Mental Calculations/Known facts:

- Recall and use number bonds to and within 20.

- Derive and use related number facts to 100.
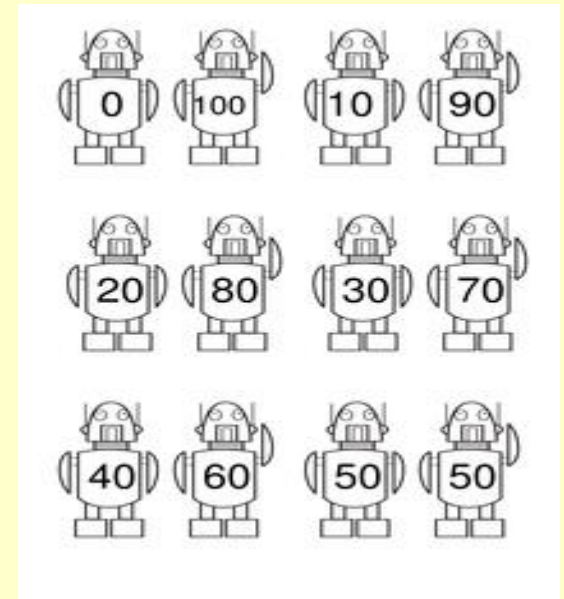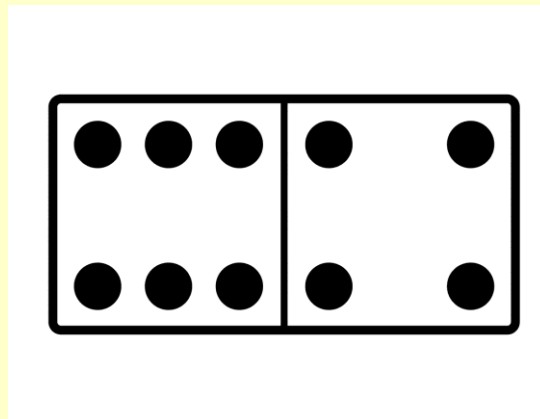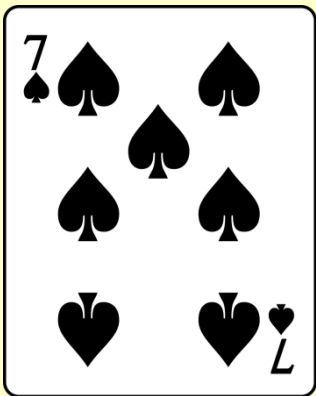
Hungry Jack Game
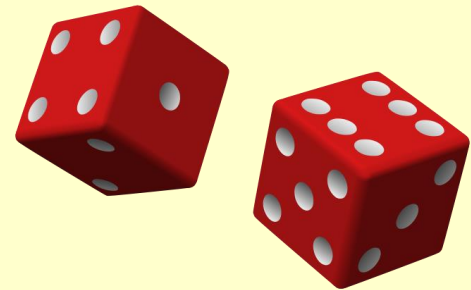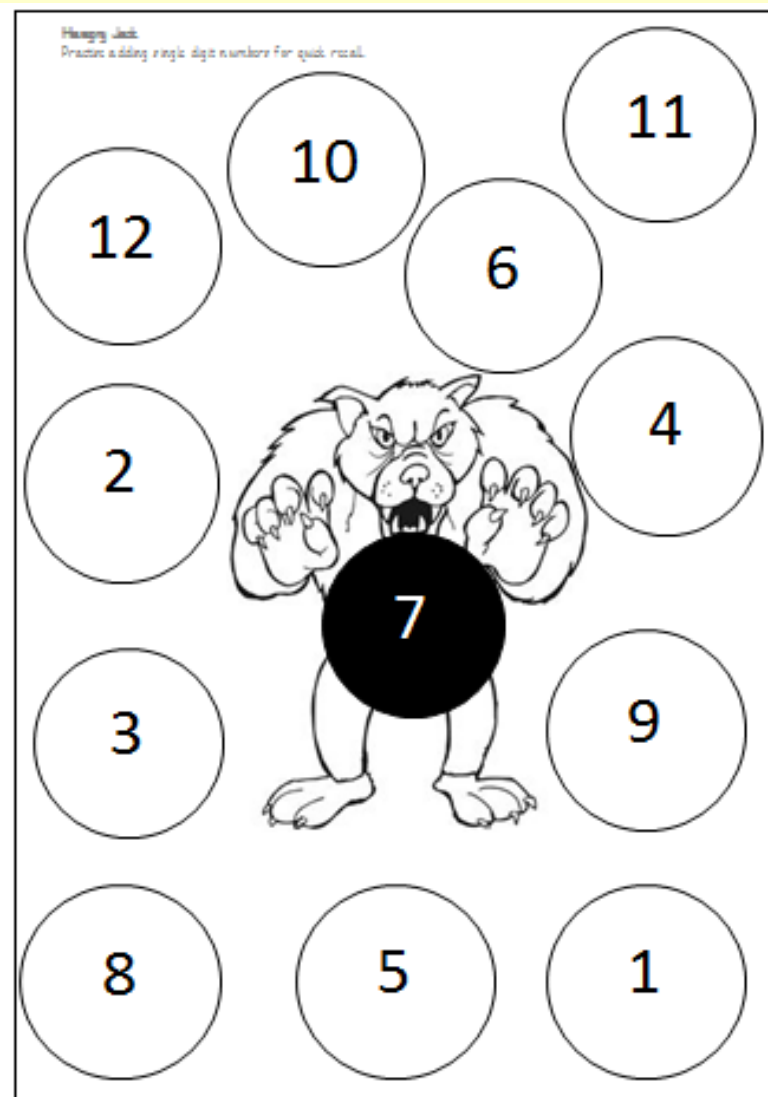
Year 2

Children are expected to add numbers using concrete

objects, pictorial representations and mentally including:

- a two digit number and ones e.g. 25 + 6

- a two digit number and tens e.g. 43 + 30

- two, two digit numbers e.g. 35 + 52

- three single digit numbers e.g. 4 + 6 + 8

Place value

- Understanding the value of each digit
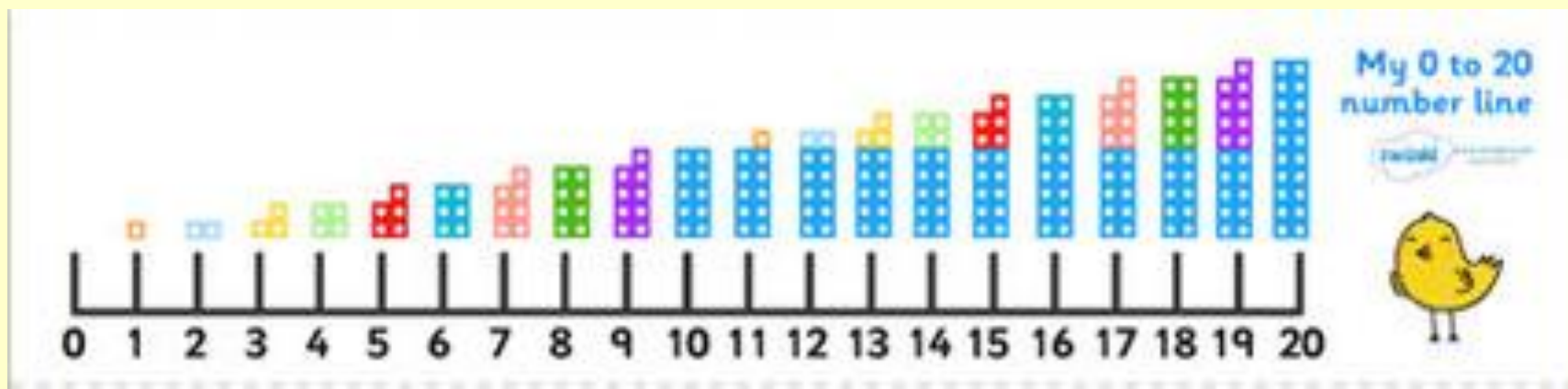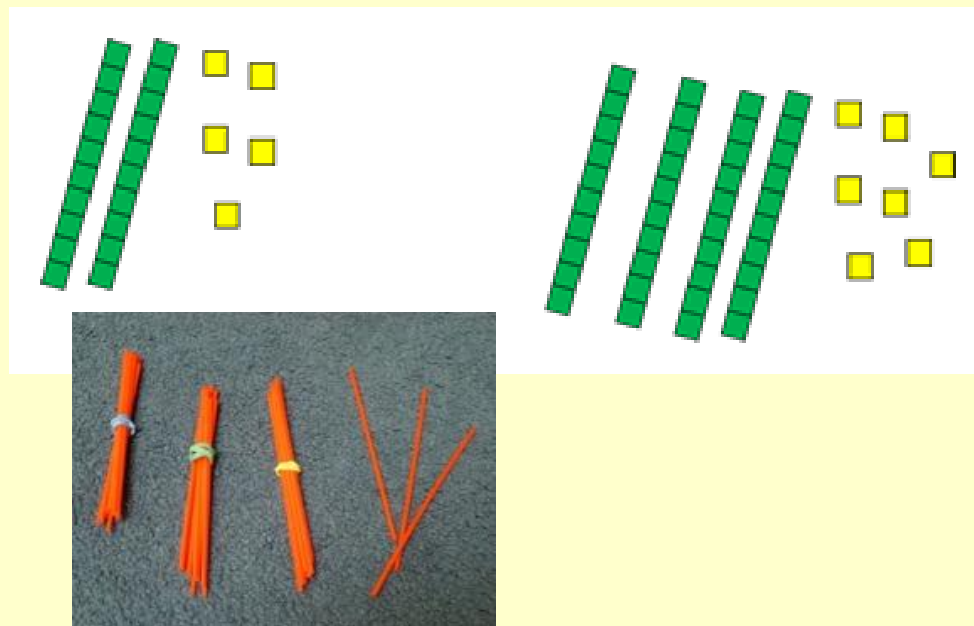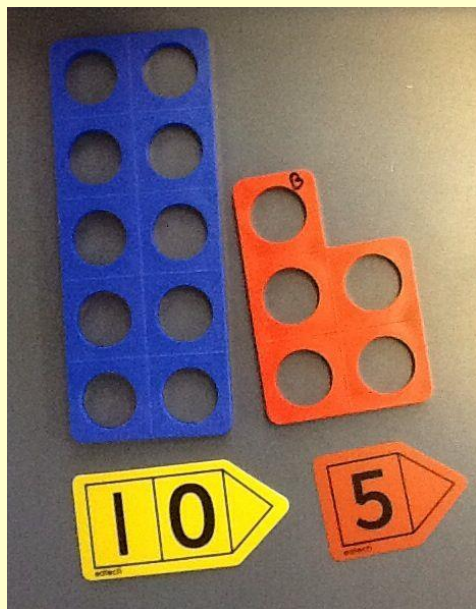
Year 2

1. Add numbers practically using objects.

2. Add using pictorial representations.

3. Add using number lines.

4. Progress into partitioned columnar method in preparation for Year 3.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Year 3
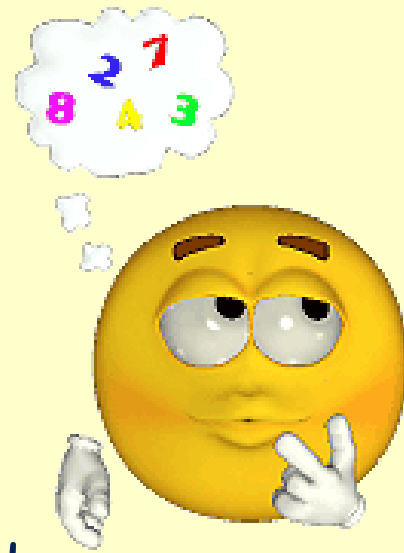
Mental Calculations:

Children are expected to be able to mentally add:

- a three digit number and ones e.g. 143 + 6 or 657 + 7

- a three digit number and tens e.g. 267 + 20 or 826 + 50

- a three digit number and hundreds e.g. 281 + 400 or 628

  + 300

Year 3

Written Methods

Children are expected to add up to 3 digit numbers using formal written methods of columnar method.

Year 3

1. Continue with the partitioned columnar method.

2. Start the expanded columnar method.

3. Progress to the compact columnar method.

4. Add money using pounds and pence practically.

T O	H T O	T O	H T O	T O	H T O
2 3	3 1 5	9 4	5 6 1	4 7	2 3 7
+ 4 2	+ 6 2 4	+ 7 3	+ 7 1 8	+ 2 5	+ 5 1 6
6 5	9 3 9	1 6 7	1 2 7 9	7 2	7 5 3

Columnar Method Game

Year 4

National Curriculum

• Use the formal method of columnar method with up to 4 digits.

• Add money using both pounds and pence.

H T O		H T O		Th H T O
3 7 1		3 7 6		2 3 8 8
+ 4 8 5		+ 4 8 5		+ 1 1 2 4
8 5 6		8 6 1		3 5 1 2
1		1 1		1 1

Year 5

Mental Calculations

Children should be able to add numbers mentally with increasingly large numbers.

Year 5

Children are expected to add whole numbers with more than 4 digits using formal columnar written methods.

```
  3   2 8 7 9
+ 3   5 9 8 7
  6   8 8 6 6
```

```
  1 9 . 0 1
    3 . 6 5
+ 0 . 7 0
  2 3 . 3 6
```

```
  £ 2 3 . 5 9
+ £ 7 . 5 5
  £ 3 1 . 1 4
```

Year 5

- Continue to use the columnar method with more than 4 digits.

- Add money in pounds and pence using decimals.

$$\begin{array}{r} 3\ \ 2\ 8\ 7\ 9 \\ +\ \ 3\ \ 5\ 9\ 8\ 7 \\ \hline 6\ \ 8\ 8\ 6\ 6 \end{array}$$

$$\begin{array}{r} 1\ 9\ .\ 0\ 1 \\ 3\ .\ 6\ 5 \\ +\ 0\ .\ 7\ 0 \\ \hline 2\ 3\ .\ 3\ 6 \end{array}$$

$$\begin{array}{r} £23\ .\ 59 \\ +\ £7\ .\ 55 \\ \hline £31\ .\ 14 \end{array}$$

Year 6

- Perform mental calculations, including mixed operations and large numbers.

- Solve addition multi step problems in contexts, deciding which operations and methods to use and why.

$$
\begin{array}{r}
2\ 3\ \cdot\ 3\ 6\ 1 \\
9\ \cdot\ 0\ 8\ 0 \\
5\ 9\ \cdot\ 7\ 7\ 0 \\
+\quad 1\ \cdot\ 3\ 0\ 0 \\
\hline
9\ 3\ \cdot\ 5\ 1\ 1 \\
{}_2\ {}_1\qquad {}_2
\end{array}
$$

$$
\begin{array}{r}
8\ 1\,,0\ 5\ 9 \\
3\,,6\ 6\ 8 \\
1\ 5\,,3\ 0\ 1 \\
+\ 2\ 0\,,5\ 5\ 1 \\
\hline
1\ 2\ 0\,,5\ 7\ 9 \\
{}_1\ {}_1\ {}_1\ {}_1
\end{array}
$$

Closest to 100

Top tips

- Check **youtube for demo's**
- Ask us!
- Check the calculation policy on the internet
- Play card and dice games
- Play computer games:

www.woodlands-junior.kent.sch.uk/MATHS/interactive/index.htm

www.multiplication.com/games/**addition-games**

www.fun4thebrain.com/addition.html

www.topmarks.co.uk/maths-games/5-7-years/addition-and-subtraction