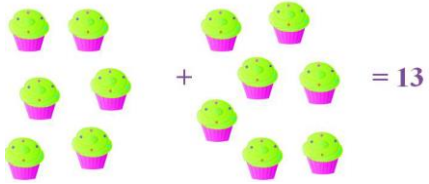
Key Stage 1 Calculation

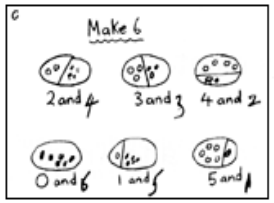
Year 1 & 2

Year 1 Calculation Guidelines

ADDITION

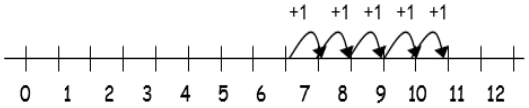
Adding objects and picture representations:





Counting in ones on number-lines:

8 + 5 = 13

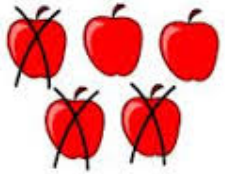


Counting in ones on a 100 square:

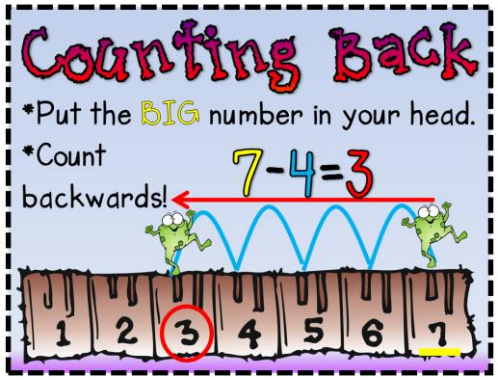
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

SUBTRACTION

Physically taking away objects:

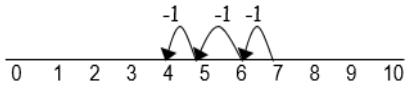


5 - 3 = 2



Counting back in ones on number-lines:

7 – 3 = 4
(counting back)



MULTIPLICATION

Children will experience equal groups of objects and will **count in 2s, 5s and 10s**.

How many socks are there in 3 pairs?

2 4 6

How many fingers are there on 5 hands?

5 10 15 20 25

DIVISION

Children will understand equal groups and share items out in play and problem solving:

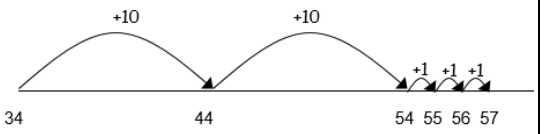
Year 2 Calculation Guidelines

ADDITION

Adding using **EMPTY NUMBER LINES:**

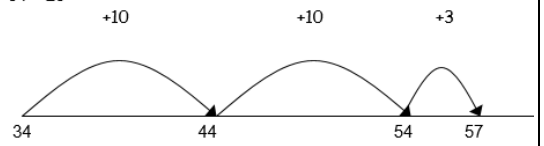
First counting on in tens and ones:

34 + 23 = 57



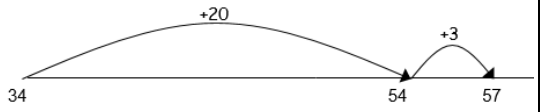
Then helping children to become more efficient by **adding the units in one jump (by using the known fact 4 + 3 = 7):**

34 + 23



Followed by **adding the tens in one jump** and the units in one jump.

34 + 23 = 57



Partitioning when they calculate with two digit numbers.

34 + 23 =

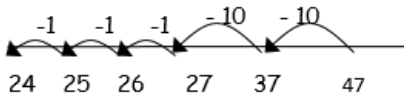
30 + 20 = 50 4 + 3 = 7 50 + 7 = 57

SUBTRACTION

Subtracting using **EMPTY NUMBER LINES:**

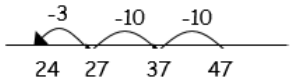
First counting back in tens and ones:

47 – 23 = 24



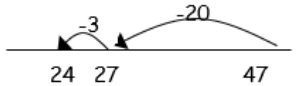
Subtracting the units in one jump (by using the known fact 7 – 3 = 4):

47 – 23 = 24



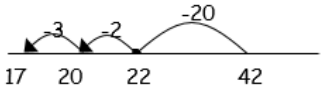
Subtracting the tens in one jump and the units in one jump:

47 – 23 = 24

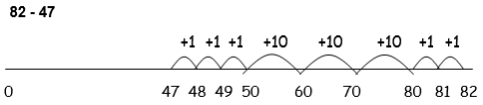


Bridging through ten can help children become more efficient:

42 – 25 = 17



Counting on:



MULTIPLICATION

Need to know their 2, 5 and 10 times tables facts

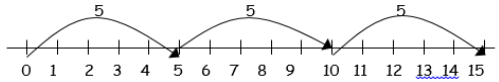
Begin to count in multiples of 3

Repeated addition

3 times 5 is:

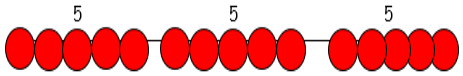
5 + 5 + 5 = 15 or 3 lots of 5 or 5 x 3

5 x 3 = 5 + 5 + 5



and on a bead bar:

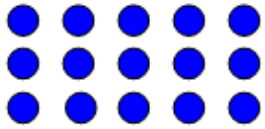
5 x 3 = 5 + 5 + 5



Commutativity

Children should know that 3 x 5 has the same answer as 5 x 3. This can also be shown on the number line.

Arrays



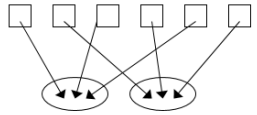
5 x 3 = 15

3 x 5 = 15

DIVISION

Sharing equally

6 sweets shared between 2 people, how many do they each get?

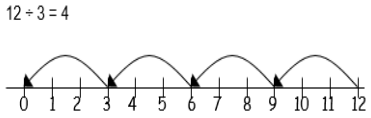


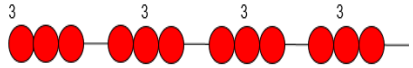
Grouping:

Here are 6 sweets, how many people can have 2 sweets each?

Repeated subtraction:

12 ÷ 3 = 4

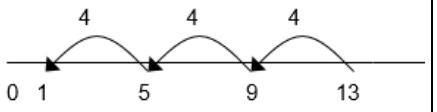




The bead bar will help children with interpreting division calculations such as 12 ÷ 3 as 'How many 3s make 12?'

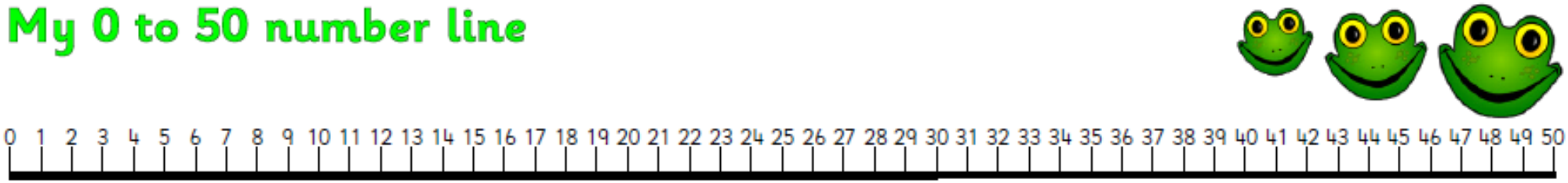
Children should also move onto calculations involving remainders:

13 ÷ 4 = 3 r 1



Resources:

My 0 to 50 number line



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