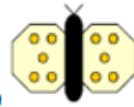


## Addition

### Stage 4

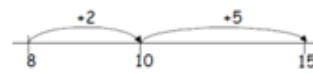
- ✓ Count along a number track or numbered or number line to add numbers together
- ✓ Know doubles of numbers to 10
- ✓ Know by heart all pairs of numbers that total 10



$10 = 5 + 5$   
 $10 = 1 + 9$

### Stage 5

- ✓ Add two single digit numbers that bridge 10
- ✓ Begin to partition numbers in order to add
- ✓ Add 10 to any number and know which digits change

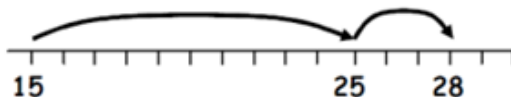


$$15 + 10 = 25$$



### Stage 6

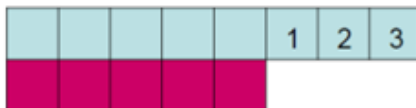
- ✓ Add two two digit numbers by adding 10 and then adding units (without bridging)
- ✓ Add two two digit numbers by partitioning and recombining
- ✓ Know by heart all pairs of numbers that total 20



## Subtraction

### Stage 3

- ✓ Begin to use  $-$  and  $=$  symbol to record a calculation using numbers up to 10, whilst still using practical apparatus
- ✓ Compare two sets to find the numerical 'difference'
- ✓ Subtract numbers when solving problems in a range of contexts by understanding related vocabulary



Maria had six sweets and she ate four. How many did she have left?



### Stage 4

- ✓ Within the range of 0–30, say 1 or 10 less than a given number
- ✓ Know by heart subtraction facts for numbers up to 10 (including the inverse – see picture)

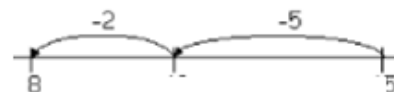


$$\begin{array}{l} 6 + ? = 10 \\ 10 - 6 = ? \end{array} \quad \begin{array}{l} ? + 6 = 10 \\ 10 - 4 = 6 \end{array}$$

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

### Stage 5

- ✓ Subtract single digit numbers by bridging through 10
- ✓ Subtract 1 from a two digit number
- ✓ Begin to find the difference by counting up from the smallest number
- ✓ Subtract 10 from a two digit number
- ✓ Subtract multiples of 10 from any number



### Stage 6

- ✓ Begin to partition numbers in order to take away (taking away 10 or multiples of 10 and then the units)



$$43 - 20 = 23$$

$$43 - 20 = 23$$

$$23 - 3 = 20$$

# Multiplication

**Stage 3**

- ✓ Understand multiplication as repeated addition
- ✓ Represent repeated addition on a number line
- ✓ Understand multiplication as an array
- ✓ Represent arrays on a number line

$2 + 2 + 2 + 2$

$2 + 2 + 2 + 2 = 8$   
 $4 \times 2 = 10$   
 2 multiplied by 4  
 4 lots of 2

$4 \times 2 = 8$   
 $2 \times 4 = 8$

**Stage 4**

- ✓ To know by heart multiplication facts for the 2x, 5x and 10x tables
- ✓ Use known facts and place value to carry out mental multiplication

Twice as many  
 $12 \times 2 = 24$

**Stage 5**

- ✓ Use place value apparatus to support  $Tu \times u$
- ✓ Use place value apparatus alongside the 'grid' method to support  $Tu \times u$

	10	3
4	40	12

$40 + 12 = 52$

# Division

**Stage 3**

- ✓ Understand division as sharing
- ✓ Understand division as grouping

**Stage 4**

- ✓ Reinforce division as grouping through use of arrays

**Stage 5**

- ✓ Represent 'groups' for division on a number line alongside apparatus
- ✓ Represent 'groups' for division on a number line
- ✓ Represent 'groups' for division on a number line including remainders