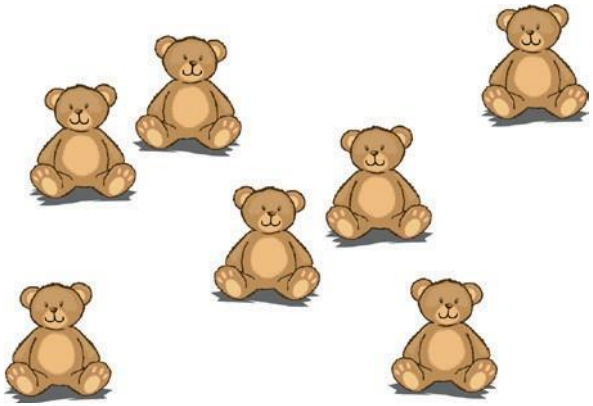
Overview of strategies and methods – Counting

Counting

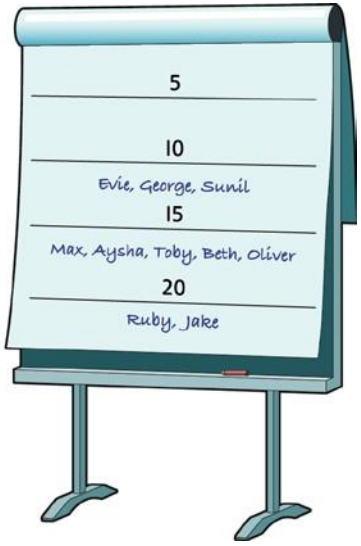
Reception

How many in a set?



Seven hand claps

Estimate, and encourage estimation, within a range

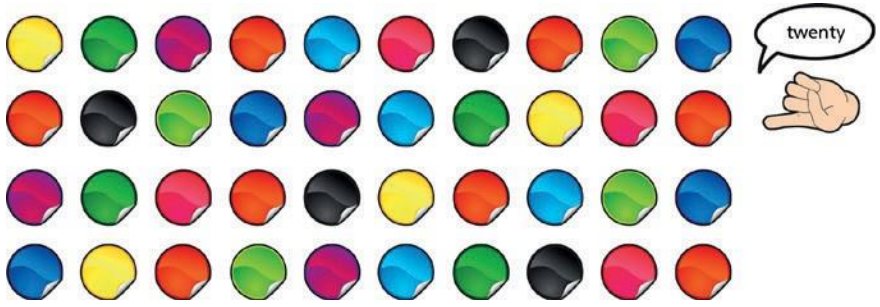


Year 1

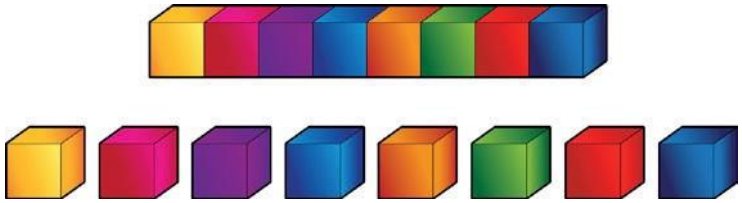
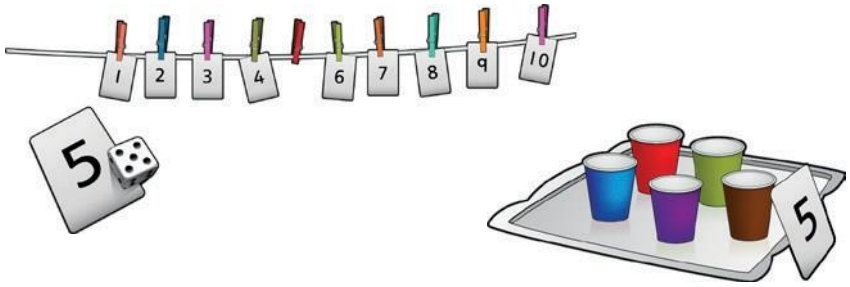
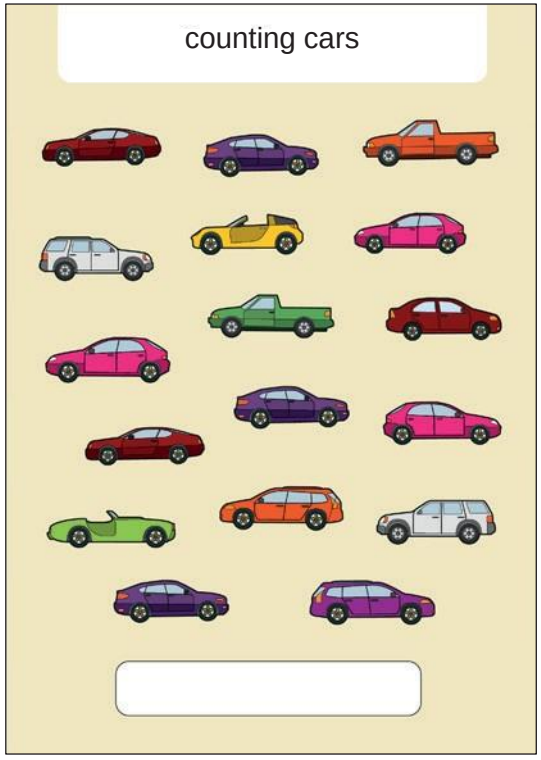
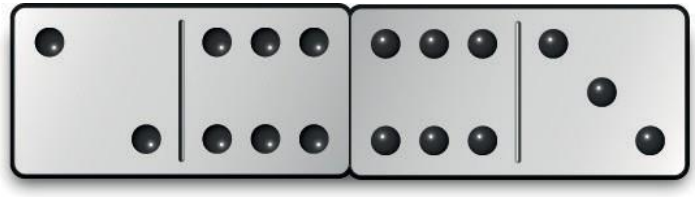
How many in a set?

Estimate, and encourage estimation, within a range

Count a large set of objects in 2s, 5s or 10s



Overview of strategies and methods – Counting

	Reception	Year 1
Counting	Count, matching one-to-one  Conservation of number Match numerals to a set of objects, sounds or images  Subitise   *e.g. know there are 4 without counting*	Match numerals to a set of objects, sounds or images  Subitise *e.g. know there are 6 without counting* 

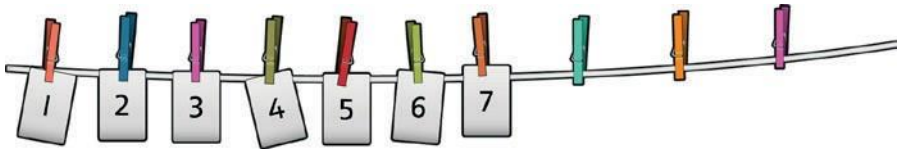
Overview of strategies and methods – Counting

Counting

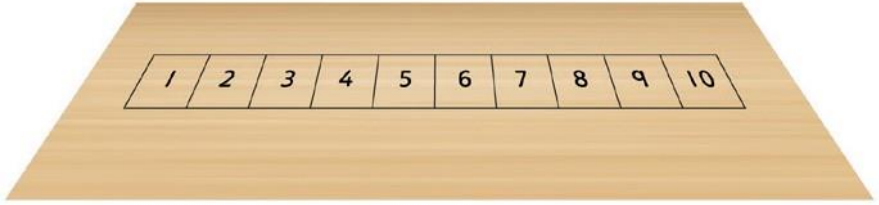
Reception

Numbers in a line or sequence

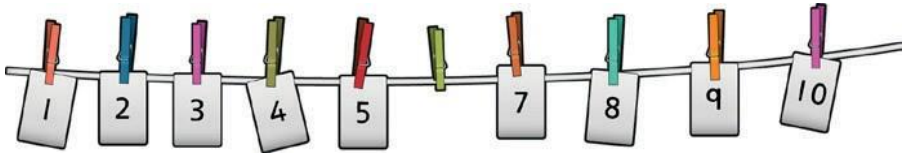
Recognise numerals



Count along a number line or track



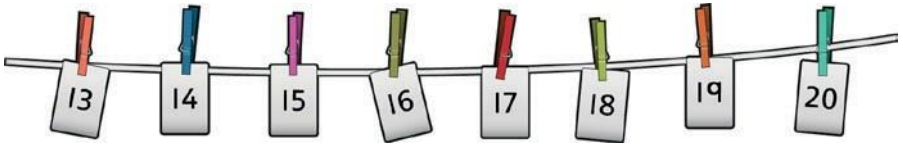
Spot missing numbers in the line



Year 1

Numbers in a line or sequence

Recognise numerals



Count along a 100-square, spotting missing numbers

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

Overview of strategies and methods – Counting

Counting

Reception

Chant numbers in order to 10 and 20

Match the units to fingers

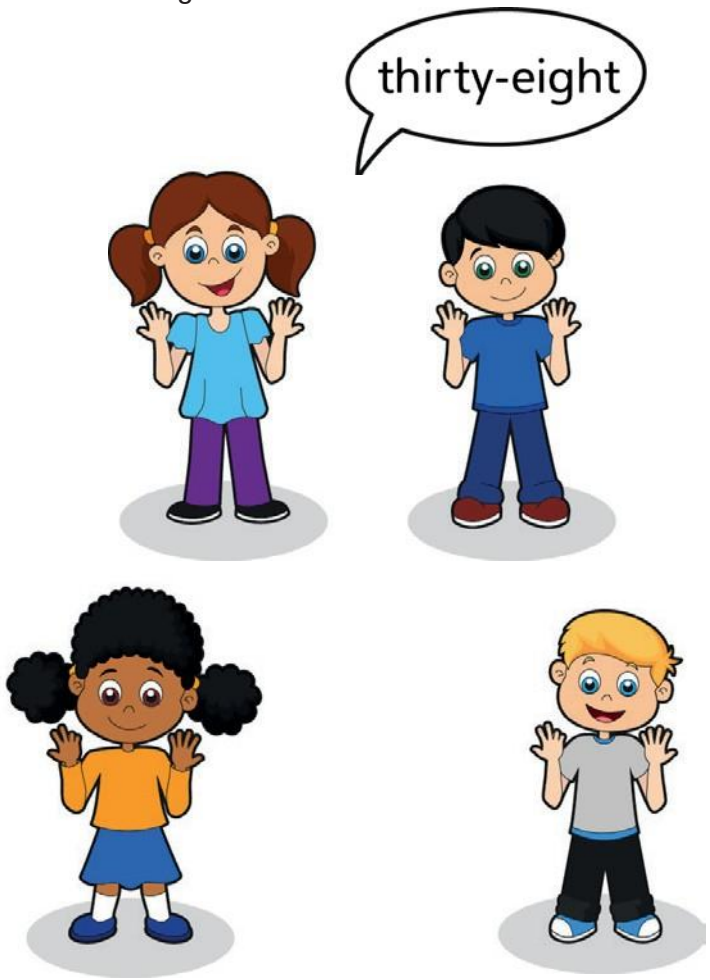
Chant numbers in order to 100

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 1

Chant numbers in order to 100

Match the units to fingers



Overview of strategies and methods – Counting

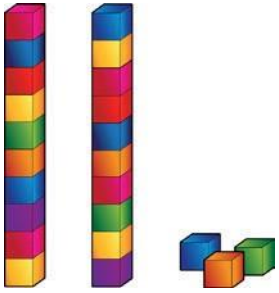
Counting

Reception

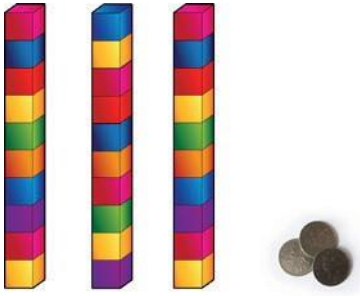
Place value

Understand ‘teen’ numbers (10 to 20)

Begin to recognise 2-digit numbers



Begin to count in 10s

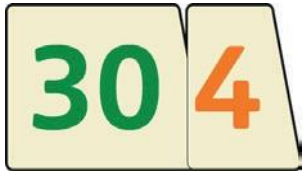


Year 1

Place value

Understand ‘teen’ numbers (10 to 20)

Recognise place value in 2-digit numbers



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

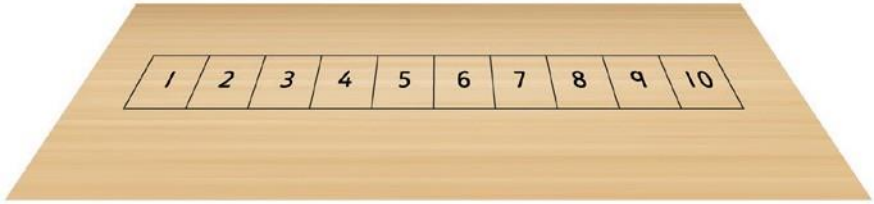
Overview of strategies and methods – Addition

Addition

Reception

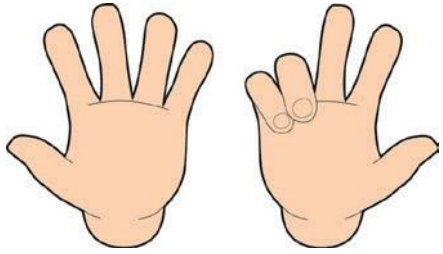
Counting on

Count on one more, saying the next number



7 + 1 = 8

Count on 2 or 3 or 4 more from any number up to 10



5 + 3 = 8

Year 1

Using place value

Count in 1s
e.g. 45 + 1

Count in 10s
e.g. 45 + 10 without counting on in 1s

34	35	36
44		46
54	55	56

Add 10 to any given 2-digit number

Counting on

Count on in 1s
e.g. 8 + 3 as 8, 9, 10, 11

Add, putting the larger number first
Count on in 10s
e.g. 45 + 20 as 45, 55, 65

Overview of strategies and methods – Addition

Addition

Reception

Number bonds

Subitise

Split sets into bonds

4 + 2 = 6

4 + 3 = 7

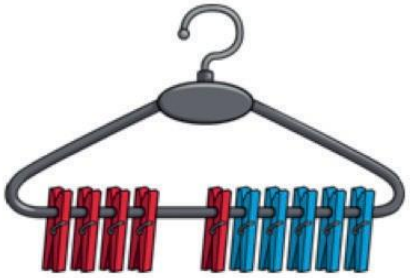
Make small amounts

Year 1

Using number facts

'Story' of 4, 5, 6, 7, 8 and 9
e.g. 7 = 7 + 0, 6 + 1, 5 + 2, 4 + 3

Number bonds to 10
e.g. 5 + 5, 6 + 4, 7 + 3, 8 + 2, 9 + 1, 10 + 0



4 + 6 = 10

Use patterns based on known facts when adding
e.g. 4 + 3 = 7 so we know 24 + 3, 44 + 3, 74 + 3

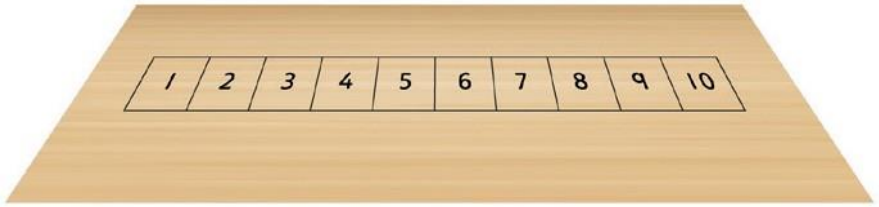
Overview of strategies and methods – Subtraction

Subtraction

Reception

Counting back

Count back 1 less, saying the number before



7 − 1 = 6

Take away 2 or 3 or 4 from any number up to 10

5 − 2 = 3

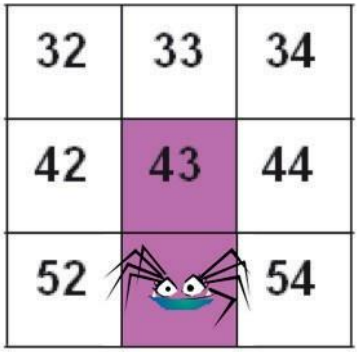
7 − 1 = 6

Year 1

Using place value

Count back in 1s
e.g. know 53 – 1

Count back in 10s
e.g. know 53 – 10 without counting back in 1s



Taking away

Count back in 1s
e.g. 11 – 3 as 11, 10, 9, 8
e.g. 14 – 3 as 14, 13, 12, 11

Count back in 10s
e.g. 53 – 20 as 53, 43, 33

Overview of strategies and methods – Subtraction

Subtraction

Reception

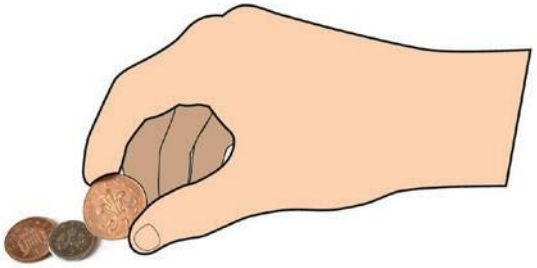
Number bonds

Subitise

Split sets into bonds

6 − 2 = 4

7 − 4 = 3



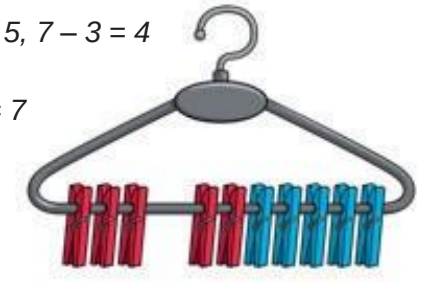
Use money

Year 1

Using number facts

'Story' of 4, 5, 6, 7, 8 and 9
e.g. 'Story' of 7 is 7 – 1 = 6, 7 – 2 = 5, 7 – 3 = 4

Number bonds to 10
e.g. 10 – 1 = 9, 10 – 2 = 8, 10 – 3 = 7



10 − 7 = 3

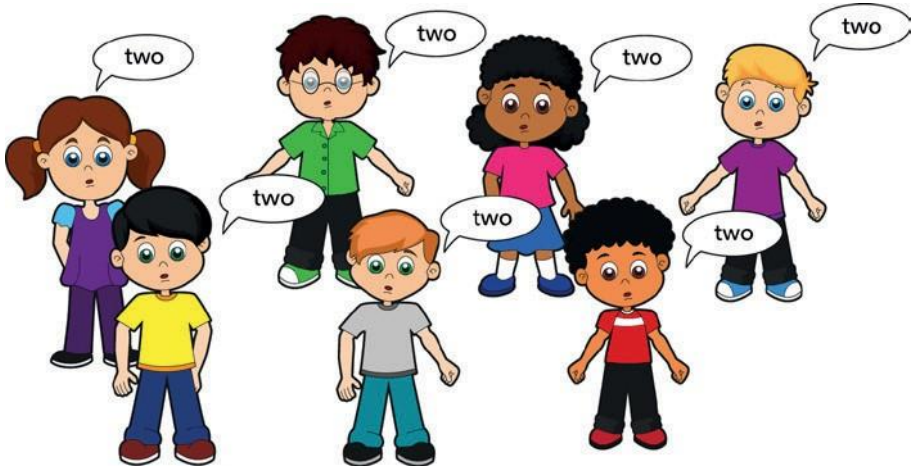
Subtract using patterns of known facts
e.g. 7 – 3 = 4 so we know 27 – 3 = 24, 47 – 3 = 44, 77 – 3 = 74

Multiplication and division

Reception

Counting in steps ('clever counting')

Begin to count in 2s



Two, four, six...

Begin to count in 5s

Five, ten, fifteen, twenty...

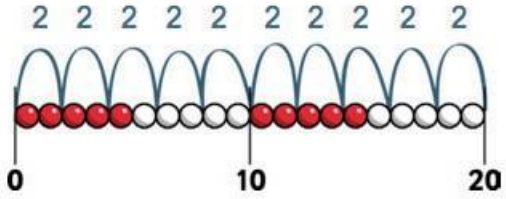
Begin to count in 10s

Ten, twenty, thirty...

Year 1

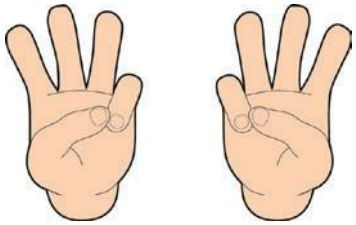
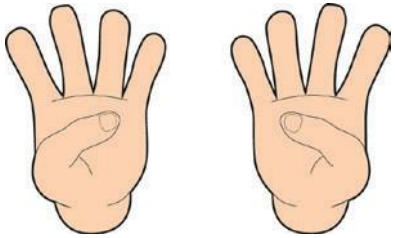
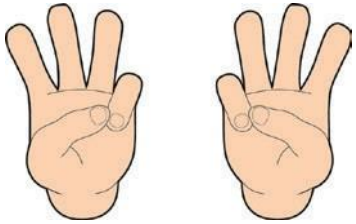
Counting in steps ('clever counting')

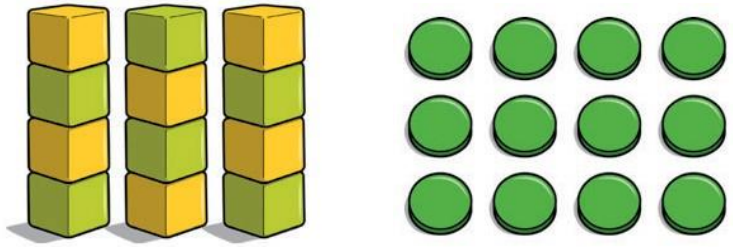
Counting in 2s



Count in 10s

1	2	3	4	5	6	7	8	9	
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

	Reception	Year 1
Multiplication and division	**Doubling and halving** Double numbers to 5  Double 3 is 6 Halve even numbers to 10  Half of 8 is 4	**Doubling and halving** Find doubles to double 5 using fingers *e.g. double 3*  Find half of even numbers up to 12, including realising that it is hard to halve an odd number

	Reception	Year 1
Multiplication and division	**Sharing** Share multiples of 2 and 4 into halves and quarters 	**Grouping** Begin to use visual and concrete arrays and sets of objects to find the answers to 'three lots of four' or 'two lots of five' *e.g. three lots of four*  Begin to use visual and concrete arrays and sets of objects to find the answers to questions such as *'How many towers of three can I make with twelve cubes?'* **Sharing** Begin to find half of a quantity using sharing *e.g. find half of 16 cubes by giving one each repeatedly to two children*