Overview of strategies and methods – Counting

Foundation	Year 1

Counting

Foundation

How many in a set?
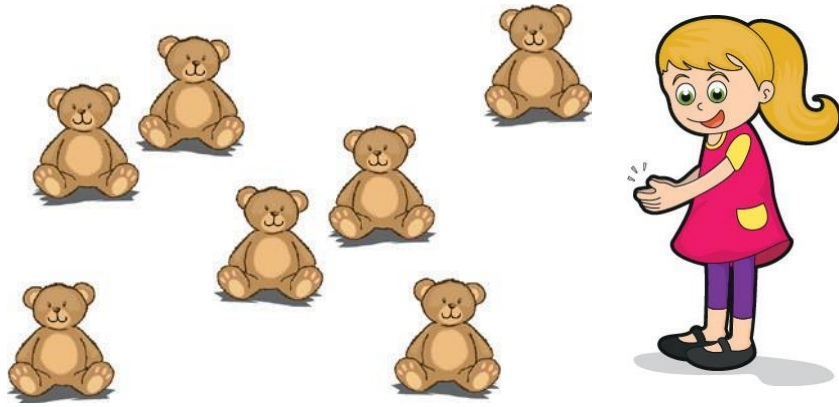
Seven hand claps

Estimate, and encourage estimation, within a range

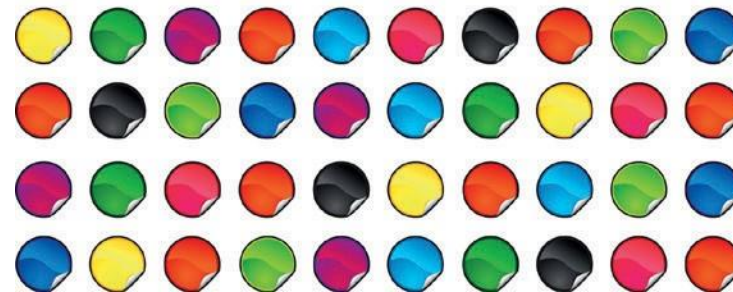| |
| --- |
| 5 |
| 10 |
| Evie, George, Sunil |
| 15 |
| Max, Aysha, Toby, Beth, Oliver |
| 20 |
| Ruby, Jake |

Year 1

How many in a set?

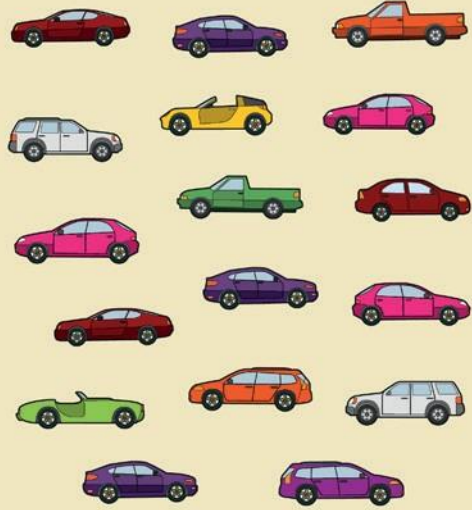Estimate, and encourage estimation, within a range

10
Aysha, Toby, Max
20
Sunril, Ruby, Jake, Beth, Oliver
30
Evie, George
40
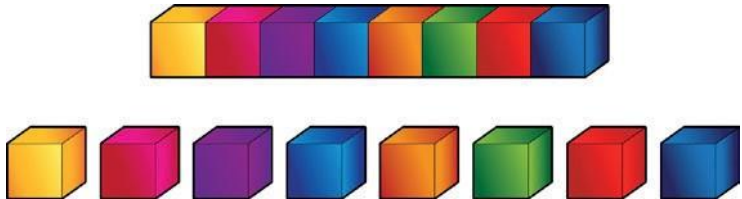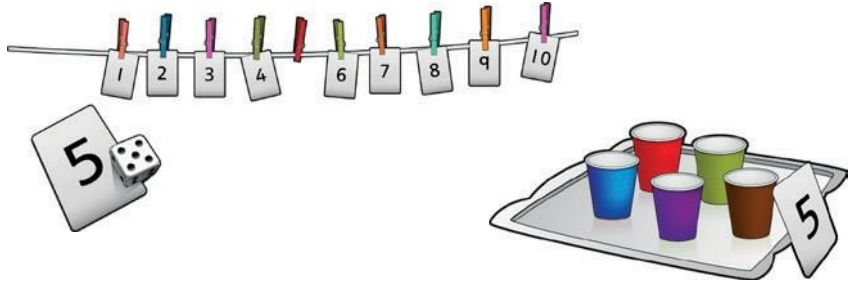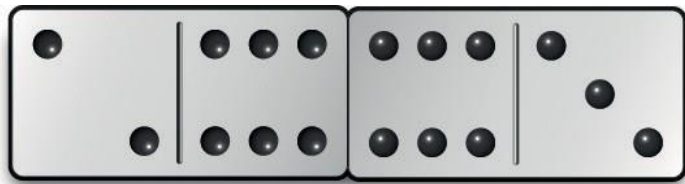
Count a large set of objects in 2s, 5s or 10s

twenty

Overview of strategies and methods – Counting

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

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

counting cars

Subitise
e.g. know there are 6 without counting

Foundation	Year 1

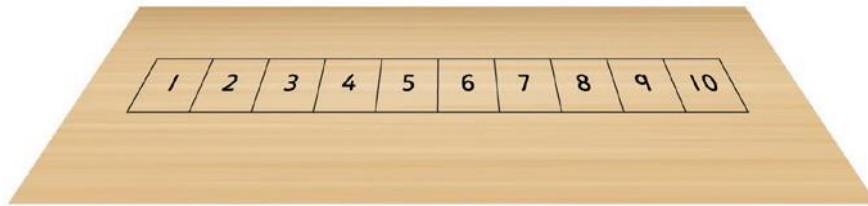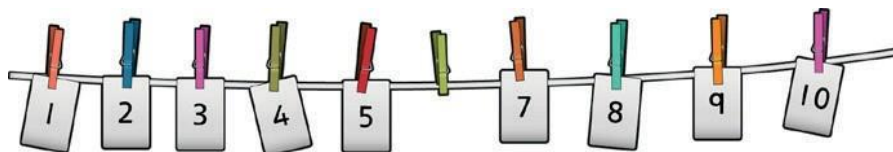**Counting**

Numbers in a line or sequence

Recognise numerals

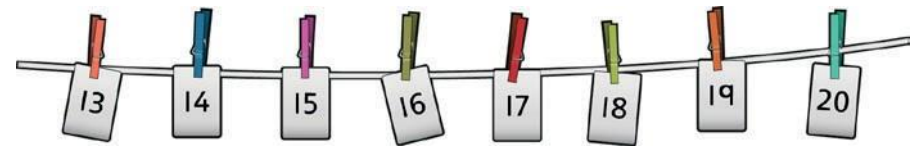Count along a number line or track

Spot missing numbers in the line

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

Foundation	Year 1

Counting

Foundation

Chant numbers in order to 10 and 20

Match the units to fingers

seventeen

Chant numbers in order to 100

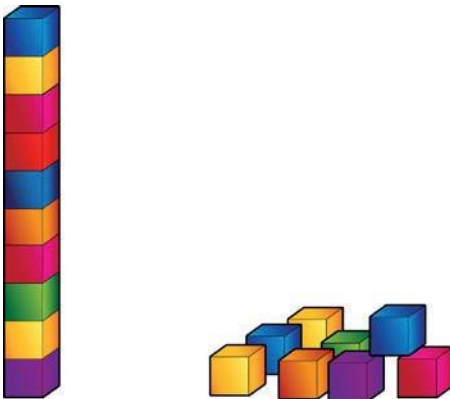| 1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
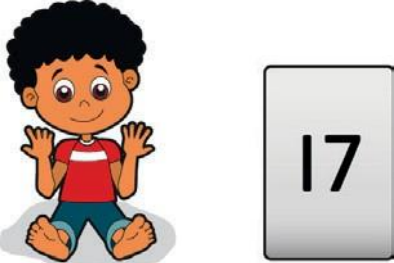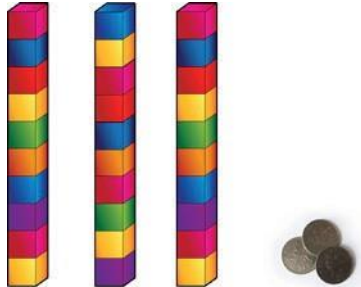
Year 1

Chant numbers in order to 100

Match the units to fingers

thirty-eight

Overview of strategies and methods – Counting

| Foundation	Year 1

Counting

Foundation

Place value

Understand 'teen' numbers (10 to 20)

17

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

30 4

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

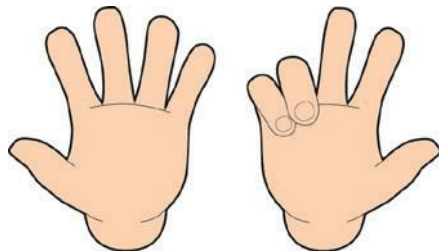| Foundation	Year 1

Addition

Foundation

Counting on

Count on one more, saying the next number
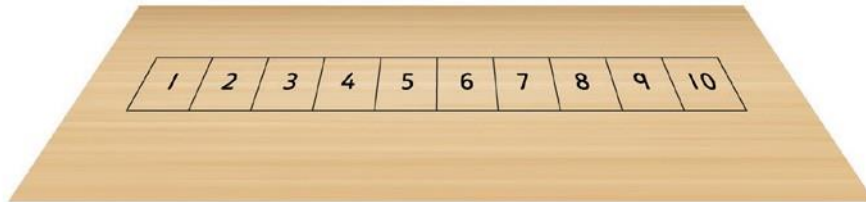
$$7 + 1 = 8$$

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

Add 10 to any given 2-digit number

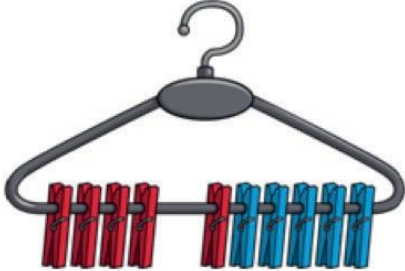**Counting on**

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

8, 9, 10, 11 ...

Overview of strategies and methods – Addition

Foundation	Year 1

Addition

Foundation

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

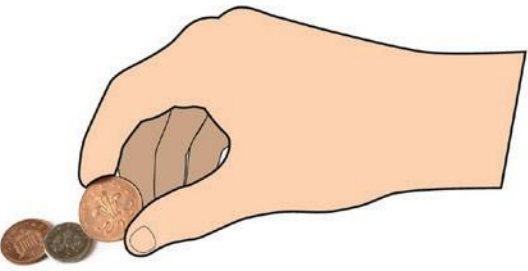| Foundation	Year 1

Counting back
 	
Count back 1 less, saying the number before
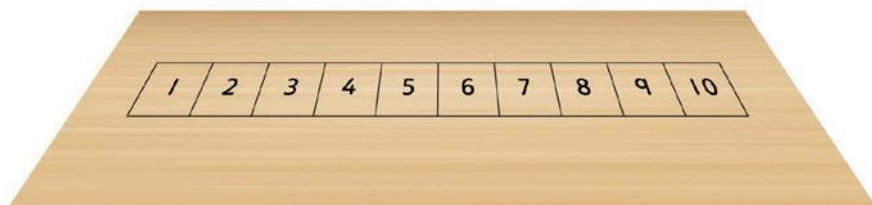 	
$$7 - 1 = 6$$
 	
Take away 2 or 3 or 4 from any number up to 10
 	
$$5 - 2 = 3$$
 	
$$7 - 1 = 6$$
	Using place value
	
	Count back in 1s
	  e.g. know 53 – 1
	Count back in 10s
	  e.g. know 53 – 10 without counting back in 1s
	
	Taking away
	
	Count back in 1s
	  e.g. 11 – 3 as 11, 10, 9, 8
	  e.g. 14 – 3 as 14, 13, 12, 11
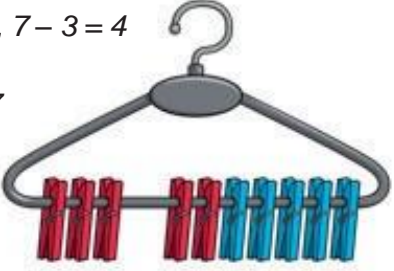	
	14, 13, 12, 11
	
	Count back in 10s
	  e.g. 53 – 20 as 53, 43, 33

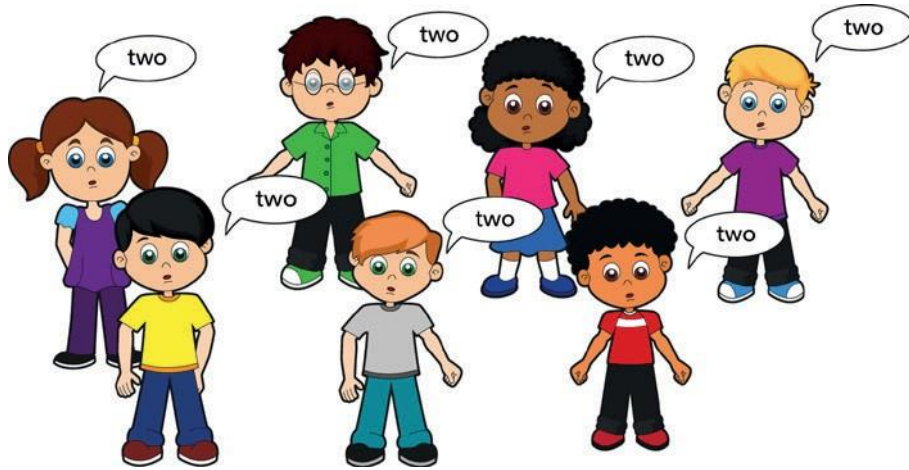*Subtraction*

Overview of strategies and methods – Subtraction

Foundation	Year 1

Number bonds
 	
Subitise
 	
Split sets into bonds
 	
$6 - 2 = 4$
 	
$7 - 4 = 3$
 	
Use money
	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 $27 - 3 = 24$, $47 - 3 = 44$, $77 - 3 = 74$

Subtraction

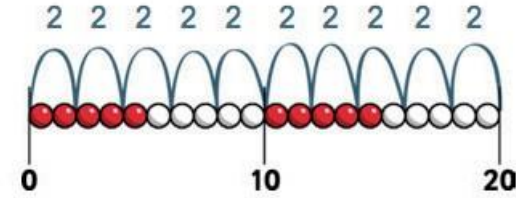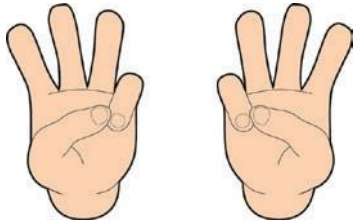|	Foundation	Year 1
Multiplication and division	**Counting in steps ('clever counting')** Begin to count in 2s Two, four, six... Begin to count in 5s Five, ten, fifteen, twenty... Begin to count in 10s Ten, twenty, thirty...	**Counting in steps ('clever counting')** Counting in 2s Count in 10s

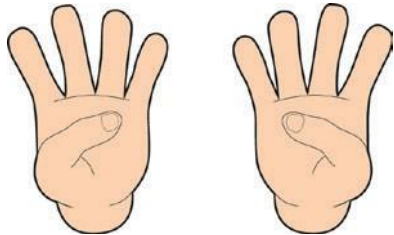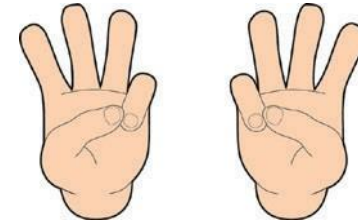| Foundation	Year 1
Doubling and halving Double numbers to 5 Double 3 is 6 Halve even numbers to 10 Half of 8 is 4	**Doubling and halving** Find doubles to double 5 using fingers *e.g. double 3* Find half of even numbers up to 12, including realising that it is hard to halve an odd number

Multiplication and division

Foundation	Year 1

Multiplication and division

Foundation

Sharing

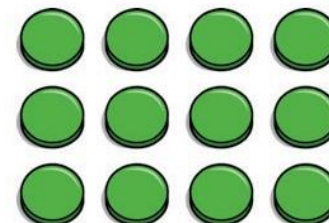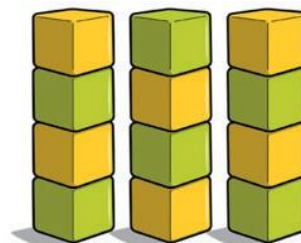Share multiples of 2 and 4 into halves and quarters

Year 1

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