

Subtraction: Orange (Y1)

Mental Work
 Work mentally (with jottings if needed)

- subtract a pair of single-digit numbers, e.g. $8 - 3$ (count back in ones)
- subtract a single-digit number from a teens number, e.g. $17 - 3$ (count back in ones or partition and combine tens and ones)
- subtract a single-digit from 10, e.g. $10 - 7$ (know number bonds to 10)
- Count back from a given number

Vocabulary

Practical work
 Children need to understand the difference between 'taking away' and 'finding the difference'.

To support the understanding of 'taking away'

- take away - children can remove and count what is left.

To support the understanding of one more/one less

- Children move on to compare two sets of objects to understand the concept of more and less. Identify which set has more or less using physical objects.

To support the understanding of 'difference'

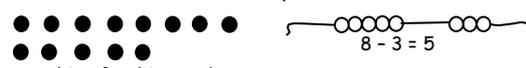
- Ask 'What is the difference?' As children compare like for like and remove one from each set they will see how many more one set had etc...
- Find the difference between - we encourage children to count on to find what is between 2 numbers.

To support bridging through 10

- Use bead strings, e.g. $13 - 5$, count back 3 then count back another 2

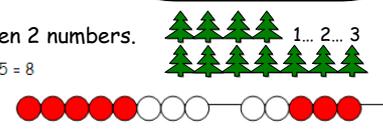


physically take away



The difference between 8 and 5 is 3.

$13 - 5 = 8$



Number lines
 Use number lines to support calculation, with teachers regularly demonstrating its use.
 Reminder: use numbers the children can work with easily so that they can focus on the setting out of the method.

$6 - 3 = 3$

Take away

Less than One less than 6 is 5

The number line should also be used to show that $6 - 3$ means the 'difference between 6 and 3' or 'the difference between 3 and 6' and how many jumps they are apart.
 Number lines are useful when the answer cannot be calculated mentally.

$13 - 5 = 8$

Subtraction - worked out by **counting back** (at this stage)
Difference - worked out by **counting up**

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

Children start by drawing on prepared number lines then move on to constructing their own lines.

Recording
 When children have been introduced to the symbol for subtraction this can be used with pictures and numbers in a sentence.
 Arrows can be used initially.

Children would progress to recording their written calculations using the digits, subtraction symbol and the = sign.

Stage 1: use concrete objects and work on single digit numbers, initially within 5 and then within 10, e.g. $4 - 3 = 1$, $9 - 4 = 5$

Stage 2: move onto writing a number sentence without using objects within 10 (using, e.g. a number line, fingers or knowledge of number bonds to 10)

Stage 3: once confident, use numbers within 20; start with no bridging then start bridging 10, encouraging children to start partitioning, e.g. $12 - 5$ ($12 - 2$ then take away another 3).

Missing number calculations

$7 - 3 = \square$ $\square = 7 - 3$
 $7 - \square = 4$ $4 = \square - 3$
 $\square - 3 = 4$ $4 = 7 - \square$
 $\square - 7 = 4$ $4 = \square - 7$

Use visual support and moveable objects

$7 - 4 = 3$

$13 - 8 = 5$

CHILDREN SHOULD NOT MOVE ON TO THE NEXT STAGE IF:

- 1) they are not ready
- 2) they are not confident