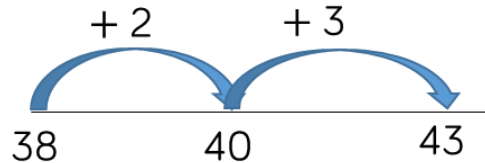| Skill: Add 1-digit and 2-digit numbers to 100	Year: 2/3

38

5

?

38

38 + 5 = 43

35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

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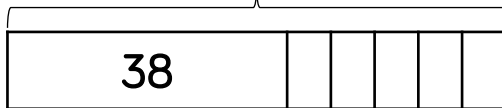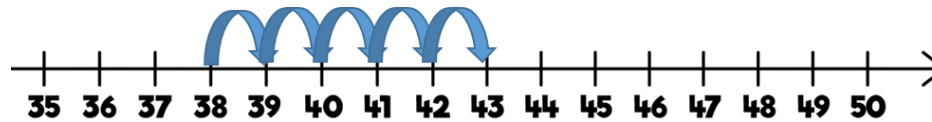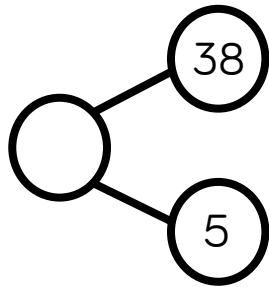
38   40   43
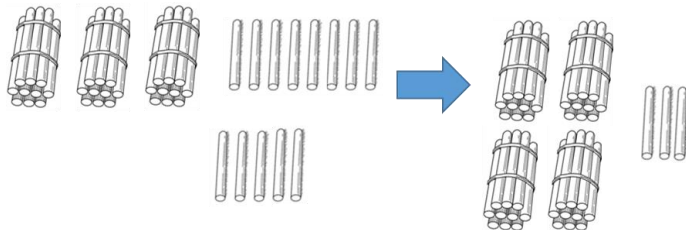
| 1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

When adding single digits to a two-digit number, children should be encouraged to count on from the larger number.

They should also apply their knowledge of number bonds to add more efficiently e.g. $8 + 5 = 13$ so $38 + 5 = 43$.

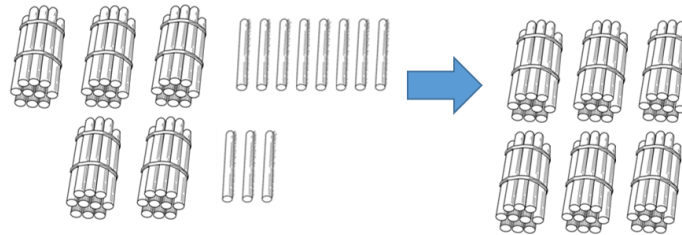Hundred squares and straws can support children to find the number bond to 10.
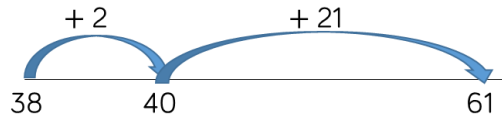
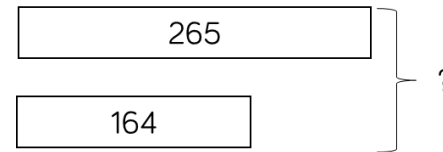| Skill: Add two 2-digit numbers to 100	Year: 2/3

38

23

?

| 38 | 23 |

+ 2   + 21

38   40   61

38 + 23 = 61

Tens	Ones

38
+ 23
61
1
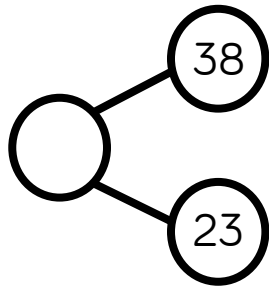
Tens	Ones

Children can use a blank number line and other representations to count on to find the total. Encourage them to jump to multiples of 10 to become more efficient. From Year 3, encourage children to use the formal column method when calculating alongside straws, base 10 or place value counters. As numbers become larger, straws become less efficient.
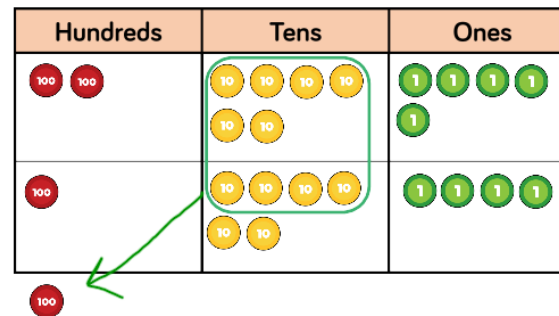
Skill: Add numbers with up to 3 digits	Year: 3
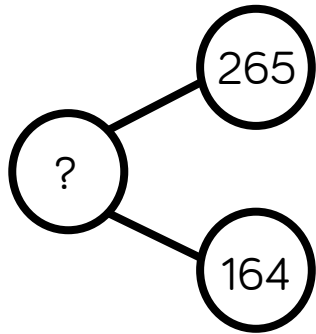
265

?

164

?

265 | 164

265

164

?

$$265 + 164 = 429$$

Hundreds	Tens	Ones

265
+ 164
—————
429
  1

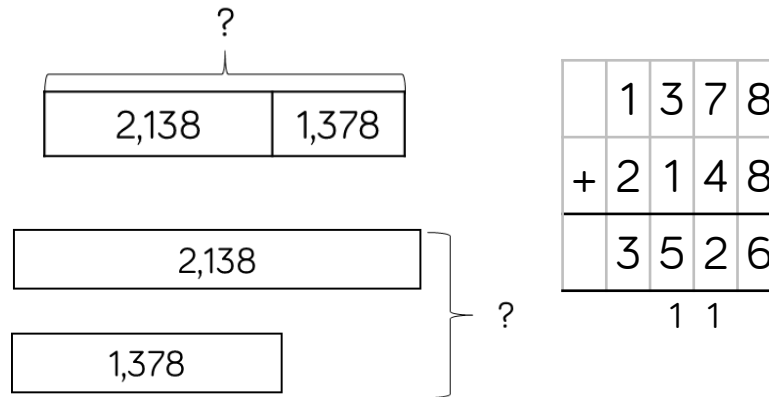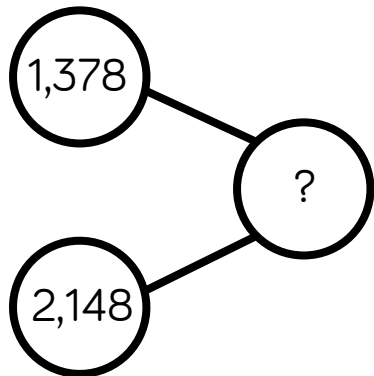| Hundreds	Tens	Ones

Base 10 and place value counters are the most effective manipulatives when adding numbers with up to 3 digits.

Ensure children write out their calculation alongside any concrete resources so they can see the links to the written column method.
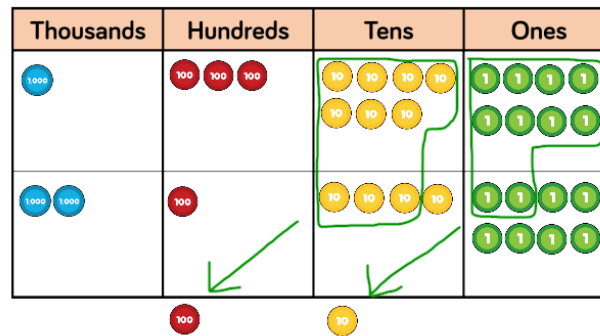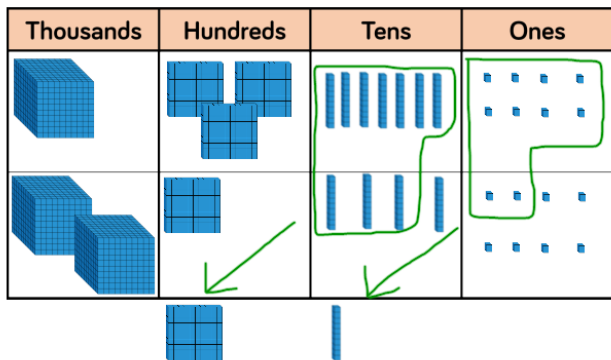
Plain counters on a place value grid can also be used to support learning.

Skill: Add numbers with up to 4 digits	Year: 4

1,378

?

2,148

?

2,138	1,378

2,138

1,378

?

	1	3	7	8
+	2	1	4	8
	3	5	2	6

1　1

$$1{,}378 + 2{,}148 = 3{,}526$$

Thousands	Hundreds	Tens	Ones

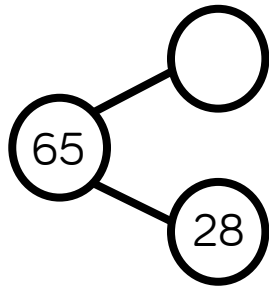| Thousands	Hundreds	Tens	Ones

Base 10 and place value counters are the most effective manipulatives when adding numbers with up to 4 digits.

Ensure children write out their calculation alongside any concrete resources so they can see the links to the written column method.
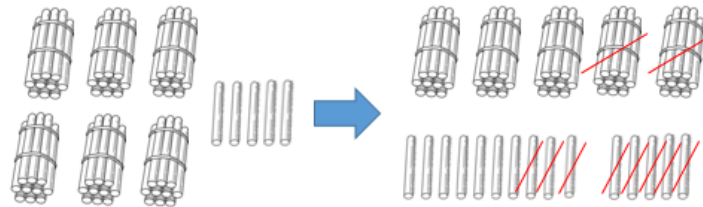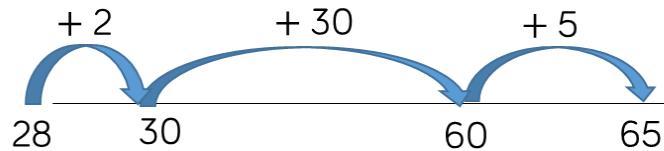
Plain counters on a place value grid can also be used to support learning.
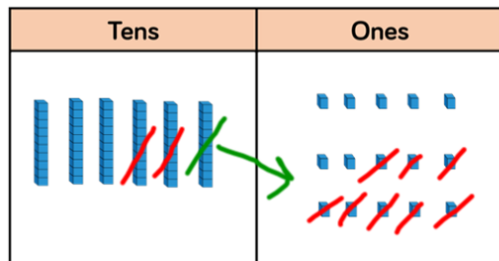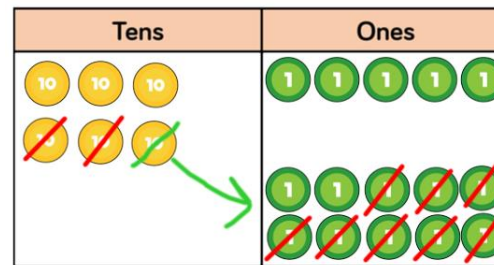
Skill: Subtract 1 and 2-digit numbers to 100	Year: 2/3

65

28

$+2$ $+30$ $+5$

28   30   60   65

65

?	28

$$65 - 28 = 37$$

Tens	Ones

$$\begin{array}{r} {}^{5}\!6^{1}\!5 \\ -\ 28 \\ \hline 37 \end{array}$$

Tens	Ones
10 10 10	1 1 1 1 1

Children can also use a blank number line to count back to find the difference. Encourage them to jump to multiples of 10 to become more efficient.
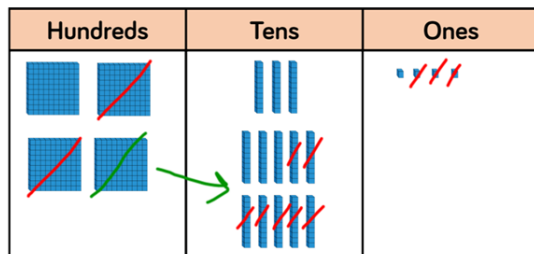
From Year 3, encourage children to use the formal column method when calculating alongside straws, base 10 or place value counters. As numbers become larger, straws become less efficient.
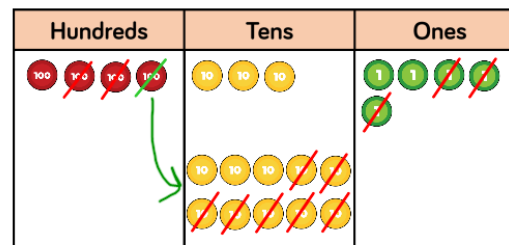
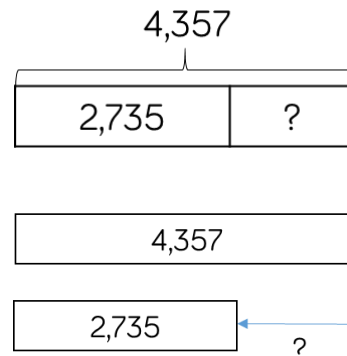| Skill: Subtract numbers with up to 3 digits	Year: 3
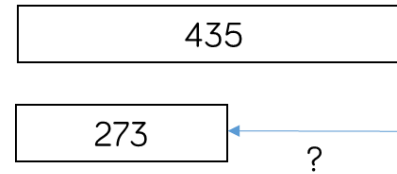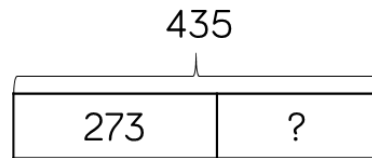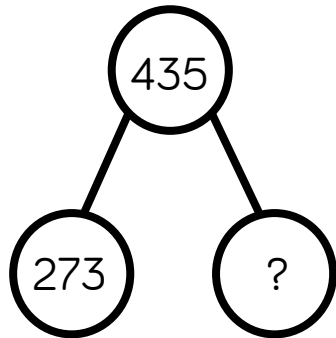
$$435 - 273 = 162$$

Base 10 and place value counters are the most effective manipulative when subtracting numbers with up to 3 digits.

Ensure children write out their calculation alongside any concrete resources so they can see the links to the written column method.

Plain counters on a place value grid can also be used to support learning.

Skill: Subtract numbers with up to 4 digits	Year: 4

4,357

2,735   ?

4,357

| 2,735 | ? |

4,357

| 2,735 |

?

$$\overset{3\;\;1}{\cancel{4}}357$$
$$-\;2735$$
$$\overline{1622}$$

$$4{,}357 - 2{,}735 = 1{,}622$$

Thousands	Hundreds	Tens	Ones

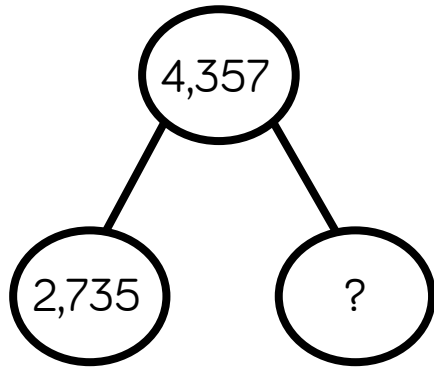| Thousands	Hundreds	Tens	Ones

Base 10 and place value counters are the most effective manipulatives when subtracting numbers with up to 4 digits.

Ensure children write out their calculation alongside any concrete resources so they can see the links to the written column method.

Plain counters on a place value grid can also be used to support learning.