Key Stage One Calculation Methods
Subtraction

Subtraction Vocabulary

- subtract
- minus
- leave
- less
- take away
- difference between

Counting on using fingers

19 - 5 = 14

Start from the first number in the calculation and count back using fingers. We might say to the children to put 19 in their head and count backwards 5 using fingers.

16

15

17

14

18

Taking aware groups of objects
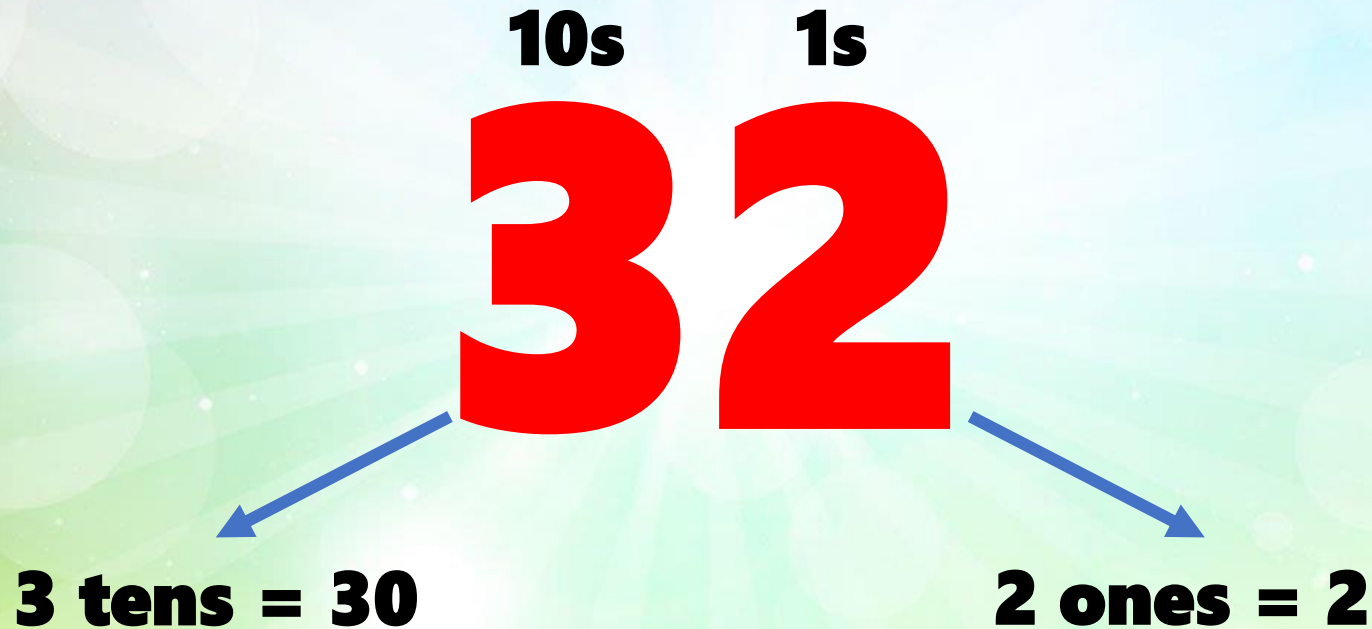
14 - 5 =   9

Counting on using a 100 square
37 - 9 = 28

Find the first number in the calculation and count back the second number. For example, start on 37 and count back 9 equals 28.

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

Partitioning numbers
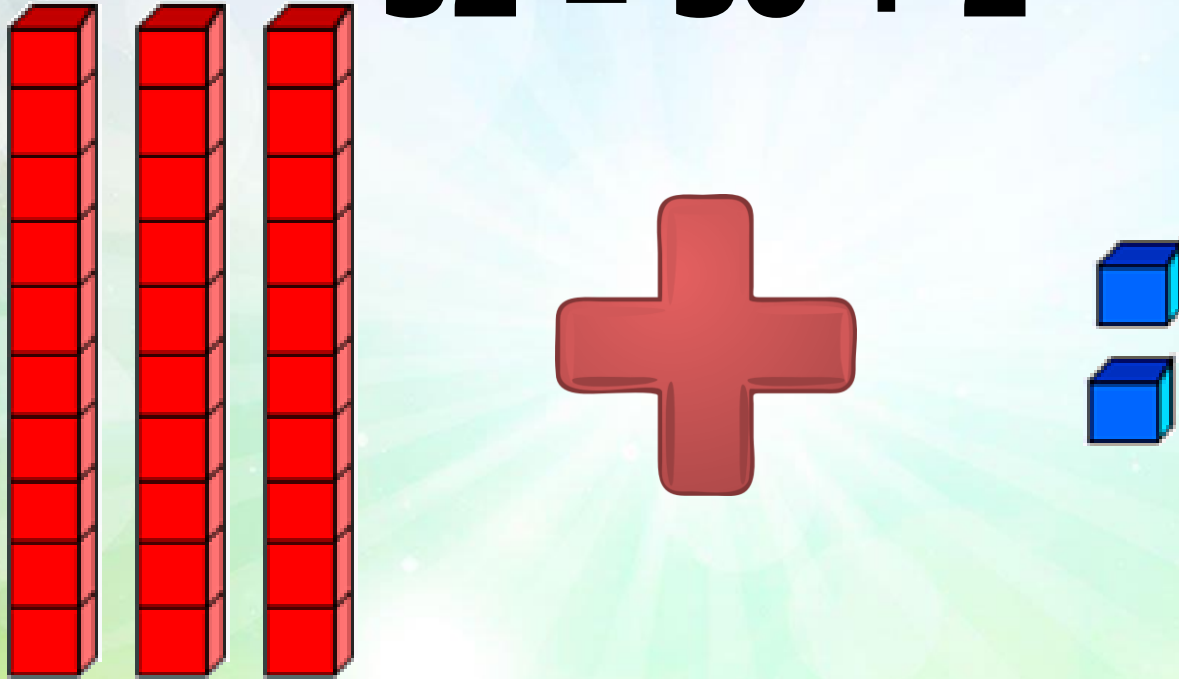
32 = 30 + 2

10s   1s

32

3 tens = 30   2 ones = 2

To help understand place value we can partition numbers into tens and ones. This also makes the numbers easier to manage when performing calculations.
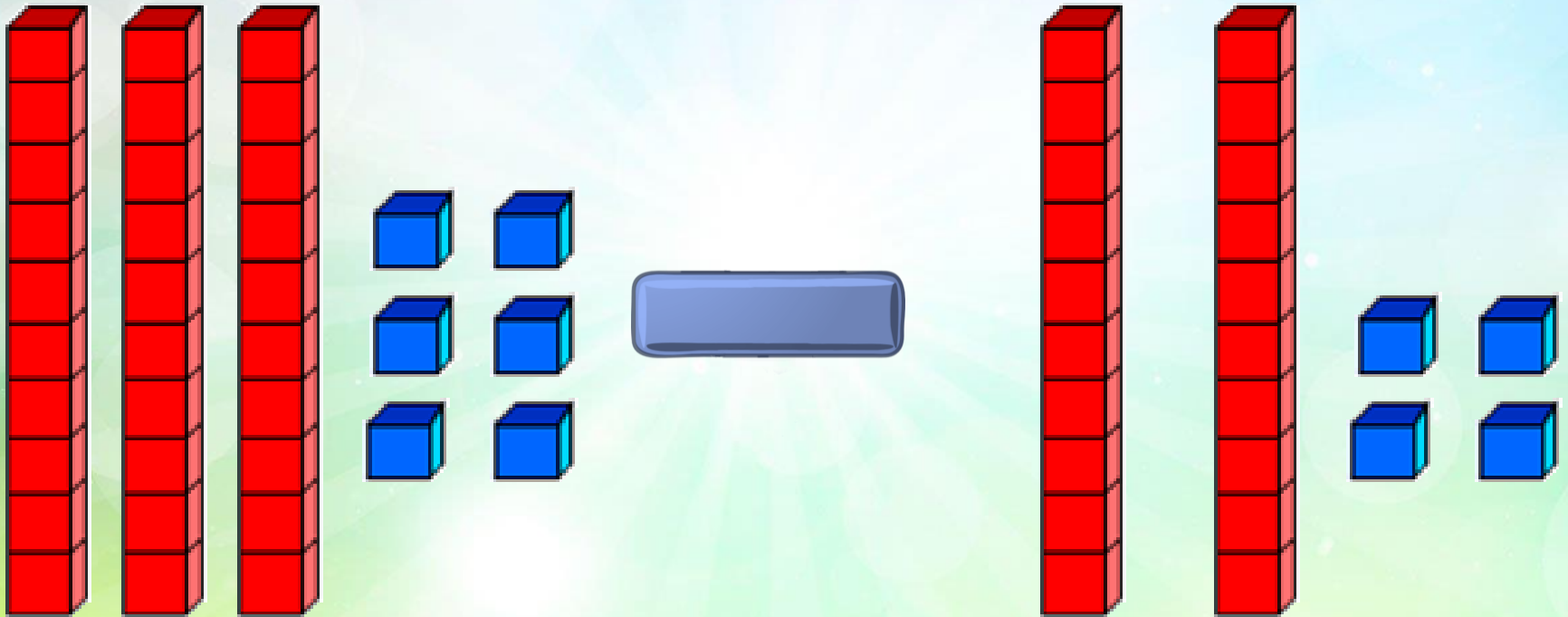
Partitioning using Dienes

32 = 30 + 2

Dienes are a physical resource that we use in school. They are made up of little cubes that represent 1 and rods that represent 10. We can use these to partition numbers into tens and ones to show the place value. This also helps with adding and subtracting later on.
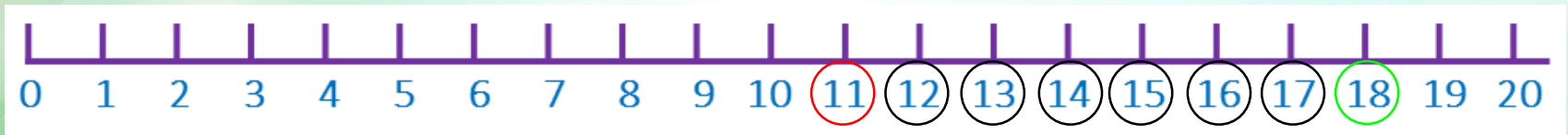
Subtracting with Dienes

36 - 24 =

Dienes are a physical resource that we use in school. They are made up of little cubes that represent 1 and rods that represent 10.
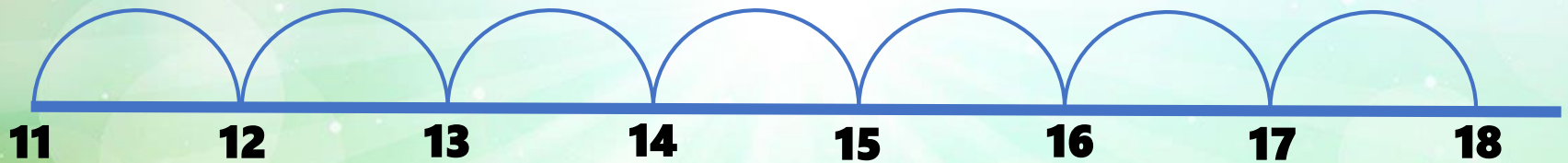
Counting on using a number track

$$18 - 7 = 11$$

Start on the first number in the calculation. Count back the second number as 'jumps'. For example, find 18 and count back 7 jumps equals 11.

Counting back using an empty number line

18 - 7 = 11


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   11        12        13        14        15        16        17        18
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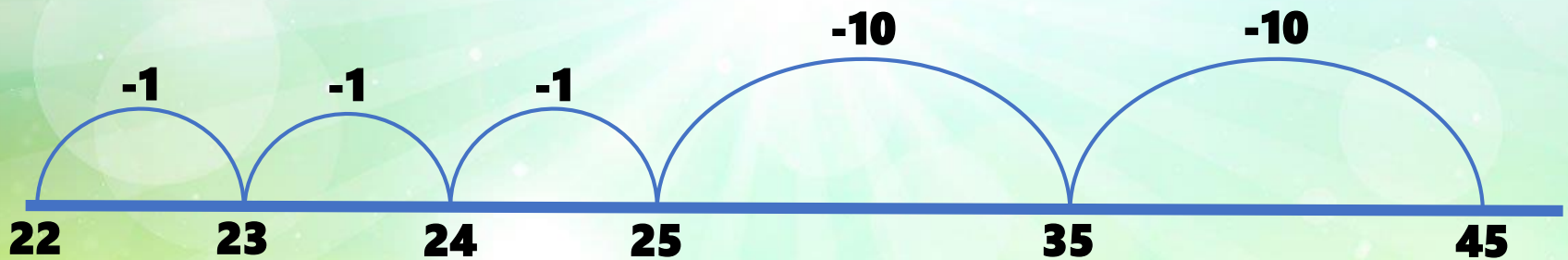
Start on the first number in the calculation.
Count back the second number as 'jumps'.
For example, write 18 on the right end of the
line and count back 7 jumps equals 11.

Jumps back 10 using an empty number line

$$45 - 23 =$$
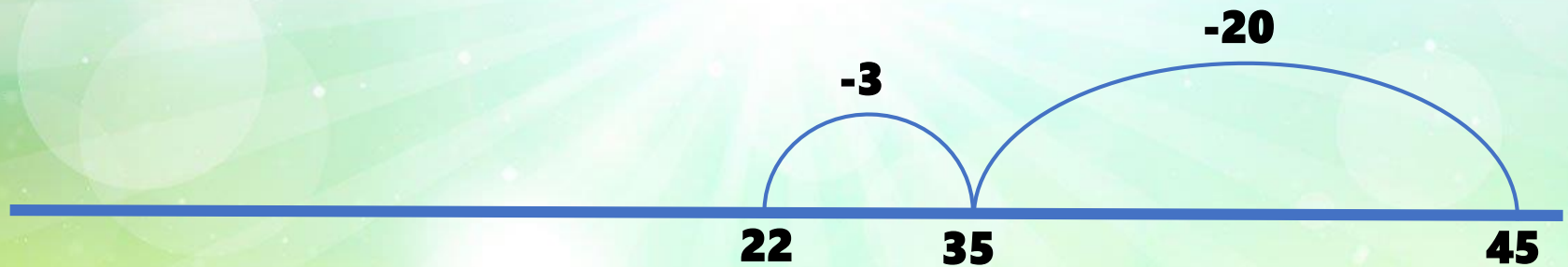
$$45 - 20 - 3 = 22$$

Start on the first number in the calculation. Partition the second number into tens and ones. Take away the tens in jumps of ten, then take away the ones in jumps of one.

Jumps of 10 using an empty number line

45 - **23** =

45 - **20** - **3** = 22

Start on the first number in the calculation. Partition the second number into tens and ones. We take away the tens number (20) and then take away the ones number (3).

Bar modelling

$$58 - 35 = 23$$
$$58 - 23 = 35$$

35	23
58	

Expanded column method

58 - 23 = 35

$$50 + 8$$
$$- \quad 20 + 3$$
$$\overline{30 + 5 = 35}$$

Column method

58 - 23 = 35

$$\begin{array}{r} 58 \\ - \ 23 \\ \hline 35 \\ \hline \end{array}$$

Column method

$$53 - 28 = 25$$

$$
\begin{array}{r}
{}^{4}\cancel{5}{}^{1}3 \\
-\ 2\ 8 \\
\hline
2\ 5 \\
\hline
\end{array}
$$