Addition – Reception – Year 6

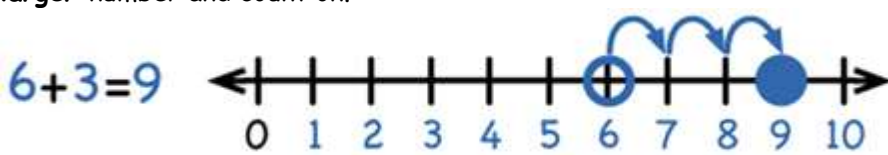**Reception** To say a number that is 1 more than a given.

To add by combining two sets of objects into one group (5 cubes and 3 cubes)

Children should:
- Have access to a wide range of counting equipment, everyday objects, number tracks, numicon, numberlines, related stories and songs.

Year 1 Add with numbers up to 20

Use numbered number lines to add, by counting on in ones. Encourage children to start with the **larger** number and count on.
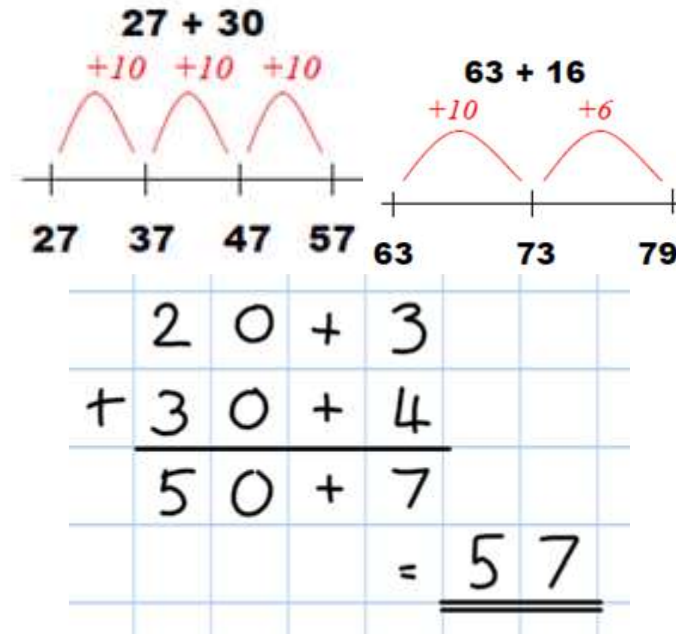
$6 + 3 = 9$

Children should:
- Have access to a wide range of counting equipment, everyday objects, number tracks and number lines, and be shown numbers in different contexts.

- Read and write the addition (+) and equals (=) signs within number sentences.

- Interpret addition number sentences and solve missing box problems, using concrete objects and number line addition to solve them: 8 + 3 = ⬜ 15 + 4 = ⬜ 5 + 3 + 1 = ⬜ ⬜ + ⬜ = 6

Year 2 Add with 2-digit numbers
Developing mental fluency with addition and place value involving 2-digit numbers, then establish more formal methods.

To support understanding, pupils may physically make and carry out the calculation with Dienes Base 10 apparatus or place value counters, then compare their practical version to the written form, to help them to build an understanding of it.

27 + 30

+10 +10 +10

27 37 47 57

63 + 16

+10   +6

63   73   79

$$
\begin{array}{r}
2\;0 + 3 \\
+\;3\;0 + 4 \\
\hline
5\;0 + 7 \\
= \underline{5\;7}
\end{array}
$$

Year 3 Add numbers with up to 3-digits
Introduce the expanded column addition method:

In order to carry out this method of addition:
- Children need to recognise the value of the hundreds, tens and units without recording the partitioning.

- Pupils need to be able to add in columns.

$$
\begin{array}{r}
2\;3\;6 \\
+\quad 7\;3 \\
\hline
9 \\
1\;0\;0 \\
\end{array}
$$

Year 4 Add numbers with up to 4 digits

Move from expanded addition to the compact column method, **adding units first**, and "carrying" numbers **underneath** the calculation. Also include money and measures contexts.

$$
\begin{array}{r}
3\ 5\ 1\ 7 \\
+\ \ \ 3\ 9\ 6 \\
\hline
3\ 9\ 1\ 3 \\
\end{array}
$$

Add **units** first.

Carry numbers underneath the bottom line.

Year 5 Add numbers with more than 4 digits

$$
\begin{array}{r}
£\ 2\ 3\ .\ 5\ 9 \\
+\ £\ 7\ .\ 5\ 5 \\
\hline
£\ 3\ 1\ .\ 1\ 4 \\
\end{array}
$$

The decimal point should be aligned in the same way as the other place value columns, and must remain in the same column in the answer row.

```
    2 3 . 3 6 1
        9 . 0 8
    5 9 . 7 7
  +     1 . 3
  ─────────────
    9 3 . 5 1 1
    2 1     2
```

Empty decimal places should be filled with zero to show the place value in each column.

```
    8 1 , 0 5 9
        3 , 6 6 8
      1 5 , 3 0 1
  + 2 0 , 5 5 1
  ─────────────────
  1 2 0 , 5 7 9
      1   1   1   1
```

Adding several numbers with more than 4 digits.