

Count within 20

Notes and guidance

In the Autumn term, children learnt the numbers to 10. In this small step, they extend that learning to count to 20

Provide regular opportunities for children to verbally count to 20, for example counting how many children are present or how many beanbags there are in a bucket. Children can find counting through the teen numbers difficult, as the number names do not have the same regular 1 to 9 pattern that they hear once they count beyond 20. Use concrete resources to support children to see the “10-and-a-bit” structure of teen numbers.

Number tracks can support children in counting on and back to 20. “I count, you count” activities allow children to practise continuing the count from different starting points.

Things to look out for

- Children may find the numbers 11, 12, 13 and 15 confusing, as they cannot hear the 1, 2, 3 and 5 within them.
- Children may find writing teen numbers tricky, in particular reversing the digits. For example, when saying 16, they hear the 6 first, so may write 61

Key questions

- What number comes after _____?
- What number comes before _____?
- Which numbers sound different? Why?
- Which numbers after 10 do not include “teen”?
- How can you count 20 cubes/counters/pencils/glue sticks?
- What songs do you know that count to 20?

Possible sentence stems

- The number that comes after _____ is _____
- The number that comes before _____ is _____
- There are _____ cubes.

National Curriculum links

- Count to and across 100, forwards and backwards, beginning with zero or 1, or from any given number
- Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least

Add by counting on within 20

Notes and guidance

In this small step, children build on their learning from earlier in the year as they explore addition by counting on from a given number within 20

The use of ten frames and counters or cubes is particularly useful, together with bar models. Children should begin to understand that addition is commutative (although they do not need to formally know the word), and that it is more efficient to start from the greater number than the smaller number. For example, when working out $1 + 13$, it is quicker to add 1 to 13 than to add 13 to 1. A number line is a particularly useful tool to exemplify this point, as children see the benefit of drawing just 1 jump rather than drawing 13 jumps.

It is important that children see that they are not just counting the total of two separate numbers or items; rather, they are adding to what they already have.

Things to look out for

- Children may count all the items, starting from 1, rather than counting on from one of the numbers in the addition.
- Children may always start from the first number in the addition, rather than starting from the greater number.

Key questions

- What number did you start with? Then what happened? Now what do you have?
- Is it quicker to add 4 to 9 or to add 9 to 4? Is the answer the same?
- How can you use a number line to count on from _____?
- How do the counters show the question?
- How can you use a bar model or a number line to show counting on?

Possible sentence stems

- First, I had _____
Then I counted on _____
Now I have _____
- To work out _____ + _____, I will count on from _____

National Curriculum links

- Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs
- Add and subtract 1-digit and 2-digit numbers to 20, including zero