

Teacher notes: Counting beyond 20

Over about 3 weeks children extend verbal counting past 20 up to 30, discovering that the counting system follows a pattern rather than needing to be learned number by number. Sessions move from counting on past 20, to exploring a number square to 30, to counting larger groups by organising them into tens and ones, and finally to counting back and spotting missing numbers in the 0 to 30 range.

eyfs.ma.patterns.1 Verbally count beyond 20, recognising the pattern of the counting system.

Prior knowledge

- Children can count a small group of objects reliably, touching or moving each one once (one-to-one correspondence), up to 20.
- Children can say the counting numbers in order from 1 to 20 and recognise some numerals to 20.
- Children know that one more than a number means the next number said when counting, and one less means the number said just before.

Key vocabulary

count on, count back, one more, one less, pattern, tens, ones, number square, missing number, twenty-one, thirty

Common misconceptions

Children say 'twenty-ten' or 'twenty-eleven' after twenty-nine instead of 'thirty'.

Model the correct sequence slowly, pointing along the number square to 30 as you say twenty-eight, twenty-nine, thirty. Point out that the tens word changes to a brand new word once the ones have gone all the way round from one to nine.

Children think the ones pattern (one, two, three...) only works up to twenty and expect a completely new set of words for each number in the twenties.

Use the number square to 30 to show that twenty-one, twenty-two, twenty-three and so on repeat the same one to nine pattern children already know, just with 'twenty' in front. Chant the twenties together, clapping on the 'twenty' part each time.

When counting back from 30, children skip a number, for example going straight from 30 to 28.

Slow the count down and use the number square to 30 as a visual guide, pointing to each number as it is said. Practise counting back with a physical action, such as a step back or putting down a finger, for every single number said.

Assessing through observation

During carpet time and continuous provision, listen to children counting aloud past 20 without support, noting whether they use the correct pattern through the twenties and into thirty. Watch children working with large groups of objects or pictures to see whether they organise them into tens and ones to help them count, and whether they can find a missing number on a number square to 30. Observe counting back from a given number up to 30 to check the sequence is kept in the right order with no numbers skipped or repeated.

What comes next

Children move on to counting confidently beyond 30, continuing to apply the same pattern of the counting system to larger numbers. They begin to use their secure counting to support early addition and subtraction, such as counting on and back to solve simple problems.