

Continuous provision: Counting beyond 20

Maths area

Turn the maths area into a 'counting past 20' investigation station: a floor number track from 0 to 30 that children walk, jump or peg numbers along, alongside pots of everyday objects for counting and grouping into tens and ones. Children choose how to count, check and record what they find, with an adult nearby to listen to their counting and nudge them past the twenty barrier.

Resources

- A long floor number track or number square marked 0 to 30, laid out on the maths area carpet or table
- A washing line with pegs and numeral cards 0 to 30, some cards missing for children to find and peg in the right place
- Pots and trays of everyday counting objects (conkers, shells, buttons, pebbles) in amounts between 20 and 30
- Bundles of ten lollipop sticks or straws (held with a band) plus loose ones, for grouping big amounts into tens and ones
- Bead strings threaded in rows of 10, up to 30 beads
- Small tens frames and loose counters
- Blank number cards and a whiteboard pen for children to make their own missing-number cards
- A basket of small world figures (for example toy animals or vehicles) to count, line up and check against the number track

When you join the play

- Let's count together as we jump along the track — what comes after 20?
- You've counted to 29. What do you think comes next?
- Can you find the number 21 on the washing line? How do you know it goes there?
- I wonder how many conkers are in this pot. Could we put them into groups of ten to help us count?
- You made 2 bundles of ten and 5 more. How many is that altogether?
- What number is one more than 29?
- What number is one less than 30?
- There's a card missing from the washing line — what number should go here, between 24 and 26?

Look for

- Children carrying on counting past 20 without stopping or starting again from 1
- Children saying the numbers 21 to 29 correctly, rather than saying 'twenty-ten' or 'twenty-eleven'
- Children noticing that the counting words repeat (one, two, three...) after twenty, then change at 30

- Children grouping a big pile of objects into tens and ones to count more accurately, for example 2 tens and 5 ones for 25
- Children finding or placing missing numbers correctly on the track or washing line, using what comes before and after
- Children working out one more or one less than a given number up to 30, for example knowing one more than 19 is 20
- Children counting back from 30, or from another number in the 20s, without missing numbers out

Construction

Turn construction into a 'Builders' Yard' that stretches past 20: a floor number track laid out in bricks from 0 to 30 for children to build along, count along and walk along as they move materials to their site.

Resources

- A long floor number track from 0 to 30, made from numbered wooden blocks or bricks laid end to end
- Crates of loose-parts building bricks sorted into tens (a crate of 10, a crate of 10, a crate of 10) plus a smaller crate of ones for children to combine
- Numbered planks or guttering pieces labelled 21 to 30 for extending a ramp or wall past twenty
- Hard hats and high-vis vests numbered 1 to 30 hung on pegs in order for children to take as they arrive
- A builder's tape measure marked with numerals to 30
- A site clipboard and chunky pencil for a 'site foreman' to point along the number track while counting aloud
- Small world diggers and dumper trucks for moving numbered bricks along the track

When you join the play

- You've built your wall up to 20 bricks — what comes after 20?
- Let's walk along the number track together, counting out loud as we go: ...18, 19, 20, 21...
- You've got 29 bricks in your tower. What's one more than 29?
- I heard you say 'twenty-ten' — shall we check the number track together and see what comes after twenty-nine?
- Your ramp reaches 25. Can you find the next brick to carry it on to 26?
- The digger has dropped off 10 and 10 and 10 bricks. How many crates is that altogether?
- If your crane lifts off one brick from 30, how many is left?

Look for

- Children counting on past 20 without stopping, continuing the sequence to 30
- Children using the 'twenty-ten' or 'twenty-eleven' error for 20 and 21, and whether an adult or peer helps them self-correct
- Children spotting that the ones pattern (one, two, three... nine) repeats after twenty before the word changes at thirty

- Children matching numeral bricks to the correct position on the floor track without needing an adult to check
- Children using the tens and ones crates to build towers and talking about having 'ten and ten and ten' or similar groupings
- Children finding one more or one less than a given number by moving along the track physically

Small world

Set up a small-world 'Number Street': a long road mat with houses or doors numbered 0 to 30 in a row, grouped so children can see three strips of ten (0 to 9, 10 to 19, 20 to 29) plus the final house, 30. Small-world figures, cars and a bus 'live' on the street and drive along it, stopping at each house in turn so children count on past 20 as they play, hearing and saying the pattern of the counting system rather than copying it from an adult.

Resources

- A long road mat or floor strip with houses/doors numbered 0 to 30, arranged in rows of ten so the tens pattern is visible
- Small-world figures (varied skin tones, some in wheelchairs or using walking aids) to post through doors or stand outside houses
- Small cars, a toy bus and a few lorries sized to travel along the road
- A set of loose number cards or tiles 0 to 30 for children to peg, post or match onto houses
- Small boxes or tubs holding loose parts (buttons, shells, pebbles) for children to count out and deliver to each house
- A simple bus stop sign and a toy garage at one end of the road for parking and counting vehicles

When you join the play

- Let's drive the bus along the street and count the houses as we pass them. What number comes after 20?
- I've parked my car outside house 19. Where should I park next if I want the very next house?
- Can you count all the way from 1 to 30 as your figure walks down the street?
- I wonder what happens to the numbers once we get past 20 to 29 - what do you notice?
- One of your figures lives at number 29. Which house is their next-door neighbour?
- Let's count backwards as the bus reverses from 30 back towards 20.

Look for

- Children counting on past 20 correctly in their play, including saying twenty-one, twenty-two, twenty-three without adult support
- Children self-correcting the classic errors 'twenty-ten' or 'twenty-eleven' as they move along the street
- Children noticing that the ones words (one, two, three) repeat after twenty, before thirty starts a new word
- Children matching number cards or figures accurately to the correct house as they move past 20
- Children working out one more or one less than a number, for example moving from house 9 to house 10, or house 19 to house 20

- Children counting backwards from 30 as vehicles reverse along the road

Outdoors

An outdoor number track and 'big counting' collection point, so counting past 20 happens inside running, jumping, pegging and tipping-out play rather than at a table.

Resources

- A number track of 31 stepping stones or tiles, numbered 0 to 30, laid in a path across the outdoor area
- A giant number square to 30 drawn in chalk on the ground, big enough for children to stand inside each square
- A washing line strung at child height between two posts, with pegs and number cards 1 to 30 (keep a few cards back so there are gaps to fill)
- Large tubs of loose parts (pinecones, pebbles, conkers, shells) in piles well over 20, with buckets and trays for tipping out and sorting
- Hoops labelled '10' for grouping loose parts into tens, with a tray for leftover ones
- Trikes or bikes with number plates 1 to 30 and a chalk car park with numbered bays
- Chalk and bean bags for marking and throwing to numbers on the track

When you join the play

- You're standing on 20 — what number comes next? Jump on and say it.
- Let's hop all the way along the track together, saying each number as we land. What happens after 29?
- You've tipped out a huge pile of conkers — how could we count them into groups of 10 so it's quicker?
- One more than 19 is... can you find that number on the number square?
- I can see pegs up to 28, then a gap, then 30 — which number is missing?
- Can you park your bike in the bay that comes just before 22?
- One less than 30 is... show me with a jump backwards on the track.

Look for

- Children carry on past 20 correctly — 21, 22, 23 and so on — without saying 'twenty-ten' or 'twenty-eleven'
- Children notice the tens word changes at 30 after the ones have repeated from 21 to 29
- Children count large piles of loose parts one at a time with care, keeping track past 20
- Children group loose parts into tens to help them count a big pile more efficiently
- Children spot a missing number on the washing line or number track and say which one is missing
- Children confidently give one more or one less than numbers near 10, 20 and 30

Malleable (playdough)

Turn the playdough table into a 'Rolling to Thirty' station. Children roll playdough balls and snakes to build numbers along a long counting strip that goes past 20, and press playdough into tens-and-ones

mats to show numbers as groups of ten plus ones, linking their hands-on counting to the pattern of the number square.

Resources

- Playdough in several colours, on individual boards
- Rolling pins and small hand rollers
- A long laminated counting strip or washing line numbered 1 to 30, with pegs
- Numeral stamps or numeral cutters for 0 to 30
- Small wooden or laminated number pebbles, 1 to 30
- Playdough mats printed with a 'tens rod' outline and ten 'ones ball' outlines
- A number square to 30 propped up at the table for reference
- Small trays or pots for grouping playdough balls into tens
- Picture cards of everyday objects in sets (e.g. shells, buttons) for counting prompts

When you join the play

- Let's roll a playdough ball for every number as we count together — what comes after 20?
- You've rolled twenty-nine balls. Can you roll one more? What number is that?
- Can you press a long playdough rod for a ten, and then roll the extra ones? How many tens and ones is that altogether?
- I heard 'twenty-ten' — let's check the number square together. What really comes after nineteen?
- Can you peg your playdough ball next to the matching number on our counting line?
- What is one less than 30? Can you take a playdough ball away to show me?
- Let's stamp the numeral next to your playdough balls so we remember how many we counted.

Look for

- Children counting on past 20 aloud, saying twenty-one, twenty-two, twenty-three and so on without stopping
- Children self-correcting the classic errors 'twenty-ten' or 'twenty-eleven', especially when checking the number square
- Children matching a rolled or stamped numeral to the correct quantity of playdough balls, including numbers above 20
- Children grouping playdough into a ten and some ones and explaining how many that makes altogether
- Children using 'one more' and 'one less' language correctly, for example knowing one more than 29 is 30
- Children spotting the repeating pattern of ones (one to nine) within the twenties on the counting strip

Role play shop

Turn the role play shop into a busy market stall that needs big piles of stock counted out, bagged and priced, so children count past 20 as part of selling and restocking rather than sitting with a sheet.

Stock baskets hold more than 20 of each item, so children must keep going past 20 to count a whole basket, and a number square to 30 on the shop wall lets them check the pattern for themselves mid-count.

Resources

- A number square to 30 fixed at child height on the shop wall, so children can point and check as they count
- Stock baskets each containing between 21 and 30 loose-parts items (for example shells, pom-poms, plastic fruit, bottle tops) so children must count past 20 to find out how many are in the basket
- Blank price tags and a pen so children can write the numeral for how many items are in a bag (0 to 30)
- A till area with a strip number line from 0 to 30 taped along the counter
- Small bags or trays for children to count items into in groups, ready to check the total against the number square
- Large numeral cards for 20 and 30 to mark these as landmark numbers near the stock display
- Shopping baskets or trolleys sized so a 'big order' naturally holds more than 20 items

When you join the play

- You've put 20 lemons in the bag, what comes after 20?
- Let's count the whole basket together and see if we get past 20.
- I can see 29 buttons in your till. What comes after 29?
- The number square says 21, 22, 23... what do you think comes next?
- You've got one less than 30 in your bag, how many is that?
- Shall we check on the number square to see if twenty-ten is really a number?
- How many more do you need to count to reach 30?

Look for

- Children carrying on counting past 20 without stopping, saying 21, 22, 23 and so on
- Children making the classic 'twenty-ten' or 'twenty-eleven' error after 29, and whether they self-correct using the number square
- Children spotting that the pattern of the counting words repeats (twenty-one, twenty-two... twenty-nine) before the tens word changes to thirty
- Children using the number square to check or continue a count rather than guessing
- Children recognising 30 as one more than 29, and 20 as one more than 19, when they reach these landmark numbers
- Children writing price tags using numerals or a hyphen for numbers above 20, such as 21 or twenty-one