

Continuous provision: Odds, evens and doubles to 10

Maths area

Set up a 'Pairs and Doubles' corner in the maths area where children can test numbers of objects to 10 by pairing, doubling and sharing them between two plates, trays or egg boxes during their own play.

Resources

- Trays of up to 10 identical small objects (shells, pom-poms, conkers) for counting and pairing
- Double-sided counters (one colour each side) for making doubles
- Cardboard egg boxes cut down into strips of two for pairing counters
- Two matching plates, trays or hoops for sharing objects between two
- Numeral cards 0 to 10
- Interlocking cubes in two colours for building double towers
- Small world figures (such as teddies or toy animals) to share fairly between two friends

When you join the play

- Can every counter have a partner? Let's put them in pairs and see if any is left on its own.
- A double means the same amount again. If one tray has 3, what would double 3 look like in the other tray?
- Let's share these between the two plates. Does everyone get the same number each?
- How many are left over when we try to share 7 between two plates?
- Is 6 an odd number or an even number? How could we use pairs to find out?
- Can you build double 4 with your cubes, using two towers that match?

Look for

- Children lining up counters in twos and noticing whether one is left without a partner
- Children explaining that an even number pairs up exactly, with none left over
- Children building two equal groups to make a double, such as two groups of 5 to make double 5
- Children sharing objects one at a time between two plates and checking both plates match
- Children spotting and naming a leftover object when sharing an odd number, such as 9, between two

Construction

Turn the construction area into a 'Builders' Yard' where bricks, wheels and tools come in twos, so children meet odd, even, double and sharing ideas while they build. Set out bricks in two colours, nut-and-bolt pairs, and two builders' trays so pairing, doubling and fair sharing happen naturally as children construct towers, vehicles and bridges.

Resources

- Wooden or plastic construction bricks in two colours, enough to count out any amount from 0 to 10
- Small toy vehicles and loose wheels for children to check how many wheels and whether they all have a partner
- Large nuts and bolts (or bolts and washers) in a tub, for matching into pairs
- Two builders' trays or two small wheelbarrows, labelled for two different small-world builders, for sharing bricks between them
- Numeral cards 0 to 10 pegged along the edge of the construction area
- Small-world construction figures with varied names (for example Amara, Jakub and Priya) and hard hats, for role play about sharing jobs and tools
- A simple pairing mat or egg box with two rows, for standing bricks in pairs to check odd or even

When you join the play

- You've got 8 bricks there - can every brick find a partner, or will one be left out?
- Let's build a tower, then build another tower the same again next to it - that's double!
- If we share these bricks between the two builders, Amara and Jakub, how many will they each get?
- This vehicle has 4 wheels - can you check they all pair up, two and two?
- Is 9 an odd number or an even number? How could the bricks show us?
- You've shared 7 bolts between two builders - what happened? Did they get the same amount, or was there one left over?
- Can you find the numeral card that matches how many bricks are in your wall?

Look for

- Children lining bricks, wheels or bolts up in twos to check if every one has a partner
- Children building a tower and then another 'the same again' and describing it as doubling
- Children sharing bricks or tools between two builders and noticing when one is left over
- Children using the words odd, even, double, share or left over during their play, without being asked
- Children matching a numeral card to a group of bricks they have counted (0 to 10)
- Children with SEND or developing English joining in through the physical actions of pairing and sharing bricks, even before they use the vocabulary

Small world

Turn the small world area into 'Pairs at the Pond': a shallow tray landscape with a pond, a bridge and two little islands. Up to 10 small world ducks, frogs and boats live here so children pair them up crossing the bridge, send doubled loads across in the boats, and share creatures fairly between the two islands as they play.

Resources

- Small world pond tray or blue fabric 'water' with a wooden or card bridge joining two islands
- Up to 10 small world ducks, frogs or other pond creatures

- 2 small boats or leaf rafts for carrying creatures across the water
- 2 hoops or shallow trays marking the two islands for sharing games
- Numeral pebbles or stones 0 to 10 for labelling how many creatures are out
- A length of string or ribbon laid across the bridge to help children line creatures up in twos

When you join the play

- Let's walk the ducks across the bridge in twos. Does every duck have a partner, or is one left on its own?
- If 3 frogs hop into the boat, how many hop in when we send double that?
- We've got 7 creatures today. Can we share them fairly onto the two islands, or will someone get an extra one?
- How many ducks are swimming right now? Is that an odd number or an even number, and how do you know?
- You put 4 and 4 on the islands. Is that the same as double 4?

Look for

- Children lining creatures up in pairs on the bridge and checking whether one is left without a partner
- Children using or responding to the word 'double' as they add matching amounts to each boat
- Children sharing creatures one at a time between the two islands and noticing when one is left over
- Children naming a group of creatures as odd or even without being asked
- Children re-counting after sharing to check both islands really do have the same amount

Outdoors

An outdoor 'Pairs and Doubles Garden' enhancement to continuous provision: a low washing line with pegs for sorting odd and even collections, a loose-parts scooping station for making doubles, and a two-friends sharing mat, so children test odds, evens, doubles and fair sharing through open-ended outdoor play.

Resources

- A low washing line strung at child height with wooden pegs
- Baskets of everyday items to peg in groups up to 10: socks, gloves, mittens, scarves
- A builders' tray or guttering with natural loose parts: pebbles, conkers, pine cones, leaves (up to 10 of each)
- A tuff tray with mud, sand or water, plus matching scoops and small pots for making 'the same again'
- Two garden friend puppets or toys (for example two hedgehogs) with a mat for sharing
- Hoops for grouping objects into pairs
- A weatherproof chalkboard and chalk fixed to the fence for marking what children find
- Number pegs or painted pebbles showing 0 to 10

When you join the play

- Can every peg on the line find a partner? Let's line them up in twos and see.
- You scooped one pot full of mud – can you scoop the same again to make a double?
- We have 7 conkers for our two hedgehogs. If we share them fairly, will there be any left over?
- How many pegs are on your line? Is that an odd number or an even number – how do you know?
- You doubled 3 pebbles and got 6 – can you show me how you did that with your hands?
- If we had 1 more peg, would the line still be even, or would it become odd?

Look for

- Children pairing pegs, socks or pebbles into twos and noticing when one is left without a partner
- Children repeating a scoop or action to make 'the same again' without adult direction, showing early understanding of doubling
- Children sharing items between the two garden friends and commenting when one has 1 left over rather than ignoring it
- Children beginning to use the words odd, even, double, share and left over during their own play
- Children with SEND or learning English showing understanding through matching and pointing (lining objects side by side, pointing to the leftover one) even before they use the vocabulary

Malleable (playdough)

Set up a 'Playdough Pairs Café' in the malleable area: children roll playdough into small balls or snails, then arrange them on two-sided mats and in little pots to find out if their amount can make matching pairs (even) or always has one left over (odd), to make a double by pressing two equal pieces together, and to share a lump of dough fairly between two toy characters.

Resources

- Playdough in several colours, enough for small groups
- Rolling pins, small cutters and blunt modelling tools
- Pairing mats, each printed with two matching sections side by side
- Small plates or pots, two per child or pair of children, for sharing dough
- Two soft toy characters (for example two teddies) to 'give' shared playdough to
- Number cards showing single numerals 0 to 10
- Small trays or tuff tray for rolling and sorting playdough balls
- Shallow baskets to hold finished playdough balls, snails and cakes

When you join the play

- Shall we roll out that many playdough balls? Let's put them in pairs on the mat and see if every ball has a partner.
- Is there one ball left on its own with no partner, or did they all pair up?
- Can you make a double? Roll one ball, then make another one the same, and squash them together — how many is that altogether?
- You've made 6 playdough cakes. Can you share them fairly between the two teddies so they get the same amount each?
- You shared 7 cakes between the two teddies — what happened? Is there one left over?

- Which numbers to 10 always share perfectly into two plates with none left over?
- Can you find a numeral card to match how many balls you've rolled?

Look for

- Children lining up playdough balls in twos to check whether every ball has a partner
- Children identifying when one ball is left without a partner and calling the amount odd
- Children making a double unprompted by copying an amount of dough and combining it
- Children sharing dough onto two plates one at a time, going back and forth between the plates
- Children noticing and commenting when a shared amount leaves one piece over
- Children matching a numeral card to a group of playdough balls they have made
- Children using the words odd, even, double, share or left over during play, in English or another home language

Role play shop

Turn the role play shop into a place where buying, selling and stocking shelves naturally brings up odds, evens, doubles and fair sharing. Stock shelves with items in matching pairs so children check whether every item has a partner, add a doubling till offer, and give the shop two purses and two puppet customers so children share goods fairly between two and notice when one is left over.

Resources

- Pairs of shop items such as wellies, gloves, socks and mittens, so children can line them up and check every one has a partner
- Small baskets and trays holding up to 10 pieces of play fruit, vegetables or tins
- Price labels numbered 0 to 10 for shelves, baskets and the till
- Two egg boxes or muffin trays (10 holes each) for sorting shop items into pairs
- A till with two purses, each with a small set of coins, for paying and giving change
- Two plates or trays marked 'customer 1' and 'customer 2' for sharing items fairly at the till
- Two teddies or puppets who come to the shop together as paying customers
- A 'double it!' offer sign at the till with cards showing 1 to 5 items, for a buy-one-get-the-same-again deal
- A large 0 to 10 number line or number track fixed near the till

When you join the play

- You've got 7 apples in your basket. If you share them between you and your friend, will you both get the same? What happens to the one that's left?
- Can every welly on the shelf find a partner? How could we check without counting them all again?
- Priya is using the double offer and buying 4 oranges. How many will she carry home altogether?
- Jakub has 9 buttons to share between his two customers. Can he share them exactly, or will someone get more?
- Is 6 an odd number or an even number? How could we find out using the coins in the till?
- You've lined up 5 pairs of socks. How many socks is that altogether?

Look for

- Children lining up shop items in twos and spotting when one is left without a partner
- Children using the word 'double' when they add the same amount of stock again
- Children dealing out items one at a time between two customers or puppets and checking both piles match
- Children sorting items or price labels into 'odd' and 'even' groups
- Children noticing when sharing leaves one item over and deciding what to do with it
- Children using their fingers, the number line or coins to check whether a number can be shared exactly between two