

Teacher notes: Comparing quantities to 10

This three-week unit extends children's comparison skills from earlier in Reception, moving from comparing small groups up to numbers to 10. Across four sessions, children line up two groups to see which has more, fewer or the same, work out how many more or fewer one group has than another, practise making two unequal groups the same, and finally match numerals to 10 with groups they are comparing. Throughout, the practitioner models lining groups up one to one so that comparisons are based on quantity, not on how long or spread out a group looks.

eyfs.ma.patterns.2 Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.

Prior knowledge

- Children have compared small groups of objects (within 5), using words such as more and fewer during continuous provision and carpet time.
- Children can count a group of objects accurately to 10, touching or moving each item once as they say the number.
- Children have begun matching numerals to the quantities they represent.
- Children have practised one-to-one correspondence, for example setting one plate for each teddy or one peg for each coat.

Key vocabulary

more than, fewer than, the same as, compare, line up, match, group, one-to-one, how many more, how many fewer, numeral

Common misconceptions

Children judge which group has more by how long or spread out it looks, rather than by the number of items in it.

Model lining both groups up directly next to each other, one item matched under or beside each other, so the comparison is based on counting, not on the space a group takes up. Say aloud, for example, 'Let's line them up and match them so we can see fairly which group has more.'

Children use 'bigger' and 'smaller' instead of 'more than' and 'fewer than' when comparing groups of objects.

Consistently narrate comparisons using the correct vocabulary and gently recast the child's words, for example 'Yes, this group is more than that group' and remind children to say 'fewer' rather than 'less' or 'smaller' for things they can count.

Children assume the group made of physically larger objects has more, even when it has fewer items.

Line the two groups up one to one regardless of object size, pointing out that we are counting how many, not how big each thing is. Choose practical examples where small objects outnumber large ones to make this explicit.

When finding how many more or how many fewer, children recount the whole group from 1 instead of matching the groups and counting only the leftover items.

Model matching one item to one item across the two lined-up groups, then point to the items left over and count only those, saying, for example, 'These two are left with nothing to match, so there are 2 more.'

Assessing through observation

Assess mainly through observation during carpet time sessions and continuous provision rather than recorded tasks. Watch whether children spontaneously line groups up one to one when comparing, rather than judging by spread or size, and listen for accurate use of more than, fewer than and the same as. During s2, note whether children match items and count the leftover group to find how many more or fewer, rather than recounting from 1. During s3, observe whether children can make two groups the same by adding to the smaller group or removing from the larger group. During s4, note whether children can match a numeral to 10 to the correct quantity and use it to compare two groups confidently.

What comes next

This unit prepares children for combining two groups together and for noticing that adding to a group makes it more while taking away makes it fewer, which supports the next steps in addition and subtraction within the EYFS numerical patterns strand. The one-to-one lining up and matching skills practised here also underpin later work on ordering numbers to 10.