Odd One Out: Sorting Objects by One Property in Reception Maths

In Reception, children learn to sort and group everyday objects by a single property – like colour, size or shape – and spot which item doesn't belong. This builds their reasoning and early maths thinking, laying the foundation for working with groups of objects and patterns.

What it is

Sorting means grouping objects that share something in common – perhaps they're all red, or all big, or all round. The 'odd one out' game goes one step further: children spot which object doesn't belong to a group. For example, if you have four red buttons and one blue button, the blue one is the odd one out because it's a different colour. This simple activity teaches children to notice what objects have in common and what makes them different – skills that will help them throughout their learning, from understanding numbers to spotting patterns in the world around them.

What happens in Reception

Children explore sorting through playful activities with objects they can handle and look at closely. A teacher might spread out some buttons, shells, or toy animals and ask 'Can we put all the big ones together?' or 'Which one is different?' Children pick up the objects, group them, and explain their thinking – perhaps 'This one is different because it's yellow.' There's no pressure to be quick or to sort in a particular way. Teachers listen carefully to understand how children are thinking. These activities happen throughout the day, often mixed into play and everyday routines, so sorting feels natural and fun rather than like a test.

What it means for your child

Sorting develops the thinking that will help your child understand groups and patterns – thinking they'll need for learning about numbers, addition and subtraction, and later for reading information in charts and graphs. Sorting teaches children to observe carefully, compare objects, and explain their reasoning – all important for solving problems. It also builds confidence: your child learns that they can notice patterns, make decisions, and explain why they've done something. The real value isn't being fast at sorting; it's developing the reasoning skills and confidence to think about how things are alike and different.

How you can help at home

You don't need special resources – sorting happens naturally during everyday routines. When tidying, ask 'Shall we put all the socks together?' or 'Can you find all the red things?' Let your child take the lead and celebrate what they notice: 'You've put all the big toys in one pile – that's clever sorting!' When cooking, play with it: sort pasta by shape, group fruit by colour, or put big spoons together. In the bath, collect some toys and ask 'Which one is different – three ducks and one car?' Keep activities playful and short – a few minutes is plenty. The goal is to have fun noticing and talking about what makes things the same and different.

Questions parents often ask

Does my child need to be fast at this? No – taking time to think and explain is what matters most. **What if my child always sorts the same way?** That's fine and quite normal. They might always sort by colour at first, then gradually discover they can sort by size instead. **How often should we practise?** Little and often works best – a few minutes during everyday routines teaches more than a long session. **What if they sort differently than I expected?** Ask 'Tell me why you put these together' – you'll hear their thinking and might learn something unexpected. There's rarely a 'wrong' answer at this stage; different thinking is valuable.

Sources

- Department for Education, Statutory Framework for the Early Years Foundation Stage
- GOV.UK, Early years foundation stage (EYFS)