Sides and Corners: Describing 2D Shapes in Year 1 Maths

In Year 1, children learn to describe and compare 2D shapes — the flat shapes like squares, rectangles, triangles and circles. Instead of just naming them, children count sides (the edges) and corners (where two sides meet), spot straight or curved lines, and sort shapes by their properties. This builds the vocabulary and thinking they need for geometry later on, and helps them understand that a shape stays a square whether it is small or large, or turned around.

What it is

Learning about 2D shapes in Year 1 is about describing what shapes look like and noticing how they are different. Children learn the words 'side' (an edge of a shape) and 'corner' (where two sides meet), and spot whether a shape has straight edges or curved edges. The shapes your child will work with are mostly squares, rectangles, triangles and circles. The goal is not just to memorise shape names, but to understand that shapes have properties — features that describe them — and that these stay the same whether a shape is big or small, or turned a different way. This builds the foundation for learning about shapes throughout their school life.

What happens

In lessons, your child's teacher starts with real shapes — objects from around the classroom, cardboard templates, or printed shape cards that children can touch and turn around. Children count the sides and corners, feel whether lines are straight or curved, and sort shapes into groups. Teachers often use shape hunts, sorting games, and simple drawing activities. Your child might match shapes, place them in the right pile, or explain what is the same or different about two shapes. This hands-on, playful approach helps children move beyond simply knowing shape names to really understanding what makes each shape unique.

What it means for your child

Your child is building the language and thinking skills they need for all future maths. Understanding shape properties helps them notice patterns and differences, which are the roots of mathematical thinking. It also prepares them for Year 2, when they will meet 3D shapes (shapes with depth, like cubes and spheres) and more complex comparisons. Some children find this easy; others need more time with real, hands-on shapes. Both are fine. Shape learning sometimes reveals misunderstandings — for example, a child might think a tilted square is not really a square. These are valuable teaching moments; your child's teacher will gently help them see what is true.

How you can help at home

You need no special materials. Everyday shapes are everywhere: doors and windows are rectangles, plates are circles, a slice of cheese or toast might be a triangle. Ask your child simple questions as you go about your day — 'How many corners does that shape have?' 'Are the sides straight or curved?' — and let them explore. If you have paper and pencils, drawing simple shapes and counting corners together is both playful and useful. You might make shapes with string or tape on the floor for your child to walk around, or cut simple shapes from cardstock to sort into piles. Keep it short and relaxed — a few moments now and then works better than long sessions. Shape games and toys already in your home are perfect too.

Questions parents often ask

'Will my child be behind if they don't know shape names yet?' No. Knowing the name comes naturally once your child grasps the properties. What matters now is the counting, noticing and talking. **'Is it OK if my child gets the properties wrong?'** Completely. Saying a triangle has four sides or thinking a tilted square is a different shape is normal and part of learning. Gently point it out, and your child will understand. **'What about shapes that don't have equal sides?'** Your child will mostly work with 'regular' shapes in Year 1 — shapes with equal sides. Irregular shapes come later. For now, focus on: how many sides, how many corners, straight or curved? **'Why does the teacher ask questions instead of just telling the answer?'** Because children learn maths best by noticing and explaining things themselves, not memorising.

Sources

- Department for Education: National Curriculum in England: Mathematics Programmes of Study (Key Stage 1)
- GOV.UK: Primary curriculum