

2D Shapes: A Step-by-Step Guide for Parents

This step-by-step explanation to 2D shapes can help you support your child's learning at home. The subject is broken down into manageable chunks, providing you with a simple guide to follow when exploring 2D shapes together, either as part of homework or if you decide to give your child some extra support. Whether your child is only just beginning to explore what 2D shapes are, or they are confident with 2D shapes and want to find out more, you will find a step that matches your child's level as well as some ideas for where to go next.

Within this area of the website, you will find a selection of resources intended to help your child learn about each step of this guide. Each step also contains a keyword or phrase that you can use to search the Twinkl site for more resources and activities designed to support your child in achieving that stage. Simply type the keyword or phrase into the search bar and press enter to explore together.

lines of symmetry in shapes



Click here



We hope you find the information on our website and resources useful. The contents of this resource are for general, informational purposes only. This guide is intended to offer parents general guidance on what subject areas tend to be covered in their child's year group and where they could support their children at home. However, please be aware that every child is different and information can quickly become out of date. There are some subject areas that we have intentionally not covered due to the nature of how they are taught or because a trained professional needs to teach these areas. We try to ensure that the information in our resources is correct but every school teaches the national curriculum in its own way. If you would like further guidance or are unsure in any way, we recommend that you speak to your child's teacher or another suitably qualified professional.

What are 2D Shapes?

2D shapes are flat shapes with two dimensions only; length and width. Common 2D shapes include circles, triangles, squares, rectangles, pentagons, hexagons and octagons.

As your child progresses through years 1 and 2, they will be expected to recognise, name and sort 2D shapes as well as to describe their properties (statements that can be said about the shape, such as the number of sides) and recognise lines of symmetry (where a shape can be folded onto itself exactly or reflected exactly on a mirror line).

By years 5 and 6, your child will have learnt how to recognise parallel, perpendicular, - horizontal and vertical lines. They will be able to compare quadrilaterals and triangles, find missing lengths of rectangles and distinguish between regular and irregular polygons (2D shapes with three or more straight sides). In year 6, children learn how to find unknown angles in triangles, quadrilaterals (four-sided shapes) and regular polygons, draw 2D shapes using given angles and dimensions and also name parts of a circle, for example the diameter and circumference.

You can use the resources in this category and the keyword searches to help your child with 2D shapes. A few ideas for games and activities to help your child learn more about different shapes and their properties are outlined below.

Go on a Shape Hunt

Encourage your child to look around the house or garden. See if they can spot different shapes, for example a picture frame (a rectangle), a wheel on a car (a circle). Can they describe each shape's properties?

Pattern Shapes

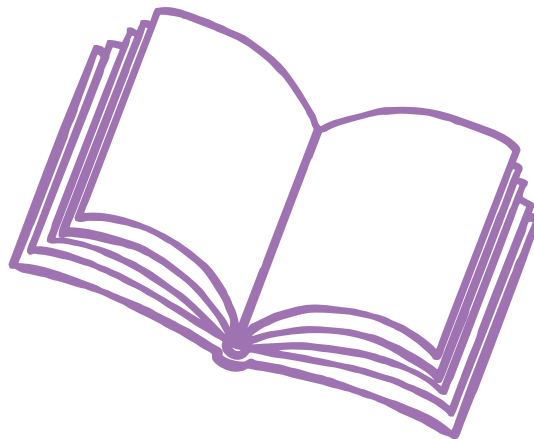
Challenge your child to make patterns by fitting 2D shapes together (known as tessellations). Start by fitting the same kind of shape together then experiment with multiple shapes. Alternatively, try making pictures with different shapes.

2D Shape Sudoku

Children can explore triangles, circles, squares and hexagons with **this fun sudoku puzzle**. Make sure there is only one of each shape in each of the rows, columns and 2x2 grids.

Bingo

Try playing **this fun bingo game** based on 2D shapes together. Read out a list of various 2D shapes for your child to cross off on their bingo card if they have it. A fantastic game for helping children with shape recognition.



Step 1

2D Shapes and Their Properties

From year 1, your child will learn how to recognise and name 2D shapes and from year 2 they will learn how to describe properties belonging to each one, for example the number of sides and vertices (corners). This poster summarises the key features of a selection of common 2D shapes.

Lines of Symmetry in Shapes

In year 2, children are taught how to recognise line symmetry in shapes on a vertical (top to bottom) line. By year 4, your child will learn how to spot lines of symmetry in 2D shapes in different orientations. These cards can help your child recognise lines of symmetry in various 2D shapes, helping them to practise and consolidate their learning in class.

Step 2

Step 3

Identifying Parallel and Perpendicular Lines

Parallel lines are lines that are going in the same direction but never meet, like train tracks. Perpendicular lines are lines that are at right angles to each other. You could try this activity pack with your child to help them practise their understanding of these different types of lines.

Regular and Irregular Shapes

A regular shape is one where all the sides are equal in length and all the internal angles are equal, for example a square. An irregular shape doesn't have equal sides or angles. In year 5, your child will be taught how to distinguish between regular and irregular shapes. Try playing this shape sorting game together to encourage your child to practise this skill.

Step 4

Step 5

Drawing 2D Shapes

By year 6, your child will be required to draw 2D shapes accurately using dimensions and angles that they've been given. You can download this presentation for tips on and advice on how to do this at home.

Naming Parts of a Circle

In year 6, your child will be asked to recognise and point out parts of a circle, for example the diameter (a line drawn all the way across and through the centre of a circle), the radius (a line from the edge to the centre of a circle) and the circumference (the distance around the edge of a circle). This poster acts as a handy point of reference to consolidate your child's learning in this area.

Step 6

Explore and Discover More

Twinkl Go! is a digital platform, hosting interactive content such as videos, games, audiobooks and more. Twinkl Go! enables digital content to be streamed to your computer or mobile device.



twinkl
Go!



twinkl
Book Club

Twinkl Book Club is our book subscription service. Enjoy our original works of fiction in beautiful printed form, delivered to you each half-term and yours to keep!



twinkl
Boost

Twinkl Boost is a range of intervention resources, created to support and lift learning with children at every level. These include our easy-to-use SATs and Phonics Screening resources.



twinkl
imagine

Imagine resources are designed to help your children to think creatively, question and imagine. Every week, a new topic consisting of five photos, each with related activities, is created.



twinkl
ORIGINALS

Twinkl Originals are engaging stories written to inspire pupils from EYFS to KS2. Designed to encourage a love of reading and help curriculum-wide learning through accompanying resources.



twinkl
KIDS' TV

Twinkl Kids' TV is our wonderful YouTube channel dedicated to fun and informative video-style resources full of new and creative activities you can try at home!