

# 3D Shapes: A Step-by-Step Guide for Parents

This step-by-step explanation to 3D 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 3D 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 3D shapes are, or they are confident with 3D shapes and want to experiment further, 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.

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 However, please be aware that every child is different and information can quickly become out of date.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 3D Shapes?

3D shapes are solid shapes with three dimensions; length, width and depth. Common 3D shapes include cubes, cuboids, spheres, cylinders, pyramids and cones.

As your child progresses through years 1 and 2, they will be expected to recognise and name common 3D shapes as well as to describe their properties (statements that can be made about the shape, such as the number of edges, faces and vertices or corners it has). They will also be required to sort common 3D shapes and compare them with everyday objects.

In years 3 and 4, your child will be taught to use modelling materials to make 3D shapes. During years 5 and 6, they will begin to recognise and identify 3D shapes from 2D representations (known as nets); building their own 3D shapes as well as drawing their own nets to represent them.

You can use the resources in this category and the suggested keyword searches to help your child with 3D 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 local area. See if they can spot different 3D shapes in the environment, such as the roof of a house (triangular prism) or a garden shed (a cuboid). Can your child name the shape as well as its properties?

## 3D Shapes Card Game

Complete the missing information on **this 3D card game** then deal the cards to see which shape has more points than others. A fun way for children to become familiar with shape names and properties.

## Riddles

Read out the descriptions on **the riddle cards** game and encourage your child to try and think about what shape you are describing. A great activity for consolidating learning on 2D and 3D shapes.

## Bingo

Try playing **this fun bingo game** based on 3D shapes together. Read out a list of various 3D shapes for your child to cross off on their bingo card. Fantastic for learning the names and properties of different 3D shapes.



## Step 1

### 3D Shapes and Their Properties

From year 1, your child will learn how to recognise and name 3D shapes. From year 2, they will learn how to describe the properties belonging to the 3D shapes (e.g. the number of faces, edges and vertices each one has). You could display these posters to help your child consolidate their learning on 3D shape recognition.



### Sorting Shapes

In year 2, children are required to compare and sort common 2D and 3D shapes on the basis of their properties using mathematical vocabulary (such as edges, vertices and faces). You can use this pack of games and activities to help your child recognise 3D shapes and compare them to everyday objects they see around the home and outside.

## Step 2



## Step 3

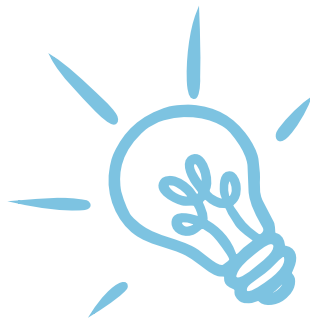
### Making 3D Shapes

From year 3, your child will make their own 3D shapes out of modelling materials, thinking carefully about what shape each face is and measuring edges and angles to be as accurate as possible. Why not use these challenge cards to create 3D shapes using modelling clay and drinking straws with your child?

### Nets of Shapes

Nets are 2D representations of 3D shapes which, when you cut them out and stick them together, make solid shapes. Your child will be introduced to nets in years 5 and 6 - you can encourage them to practise their shape recognition skills with these matching cards where players need to match the 3D shape with its correct net.

## Step 4



# 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.



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Book Club

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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.



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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.



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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.



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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!