

Year 6 Area and Perimeter: A Step-by-Step Guide for Parents

This step-by-step explanation of perimeter and area will help you support your child's learning at home. Each subject is broken down into manageable chunks, providing you with a simple guide to follow. Whether your child is still learning how to work out the area of rectangles or whether they have already progressed to triangles or more complicated **quadrilaterals**, there's a right step in this guide to meet your child's learning needs.

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 However, please be aware that every child is different and information can quickly become out of date.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

Area and Perimeter

How Do Children Learn to Calculate Area in Primary School?

Children start by counting the number of squares that a shape covers in order to find its area. In year 5, they learn how to use a formula to calculate the area of rectangles (including squares) by multiplying the length by the width. They also measure and calculate the area of shapes made from rectangles or squares joined together (known as rectilinear shapes). Towards the end of primary school, children are taught how to calculate the area of triangles and parallelograms.

What Is a Parallelogram?

A parallelogram is a quadrilateral (four-sided shape) with opposite sides that are **parallel** to each other and equal in length. Parallelograms are flat, 2D shapes, like all quadrilaterals. Children should be able to identify parallelograms and other quadrilaterals, including a rectangle, square, rhombus, trapezium or kite.

How Do You Calculate the Area of a Parallelogram?

The area of a parallelogram is calculated by multiplying its width by its vertical height. It is important that your child has a secure understanding of how to calculate the area of a rectangle (length \times width) before moving on to find the area of a parallelogram. This is because an extra measurement – the vertical height - needs to be found in order to calculate the area of a parallelogram.

Reading Areas

Find a selection of reading material from around the house - for example, books, magazines, comics and newspapers. Ask your child to measure the length and width of the front covers and use these measurements to calculate the area of each. Which type of reading material has a front cover with the greatest area? How about the smallest area?

Area of a Football

How can you measure the area (surface) of a football? Challenge your child to solve this problem. A strategy would be to wrap the ball in paper and then unwrap it and find the area of the paper used. How will you avoid overlaps? Might you try making a patchwork quilt out of paper by using pieces of paper or would tessellating shapes work? Enjoy solving this challenge together and use it to remind your child that area is the surface that a shape (even a 3D shape) covers.

Sporty Perimeters and Areas

Ask your child to find out the length and width of some different sports pitches or courts (for example, football, basketball and tennis). You may even be able to use your daily outdoor time to visit some of these together. If you are, then pace out the length and width. (Two paces will be approximately one metre.) Can you calculate the perimeter of each pitch and order them from smallest to greatest? Now, calculate the area of each and order them? Are the two lists the same or are there differences?

Step 1

Irregular Shapes

Try using some of your daily outdoor time to explore the area of irregular shapes. **This activity** explains how to practise estimating an area by marking out a rectangle with a similar area and measuring it.

Area of Rectangles

If your child finds calculating the area of a rectangle tricky, try this **interactive PowerPoint**. It will take them through the steps needed to calculate the area of a rectangle by multiplying the length by the width. If your child finds multiplication challenging, they could use a calculator so that they are able to focus on how to calculate the area, rather than worrying about the multiplication.

Step 3

Area of Triangles and Parallelograms

Once your child has mastered multiplying length by width (or base by height) to calculate a rectangle's area, they are ready to move on to triangles. To work out the area of a triangle, your child should multiply the base by the height and then divide their answer by two. Try using these **activity sheets** if your child needs to practise calculating the area of triangles. Make sure you leave parallelograms to a separate study session with your child when you can work through the relevant slides together and try the **parallelogram worksheets** that are included in the pack.

Area Problem Challenges

Word problems are a common feature of the year 6 maths curriculum and practising them using our challenge cards, set in real-life contexts, is a great way to engage your child. You don't need to print the cards. Instead, just try a couple of them in a session and remind your child that it is important to write the unit of measurement in their answers (for example, m^2).

Step 2

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.

The Twinkl Go! logo, featuring the word 'twinkl' in a blue cloud shape and 'Go!' in white text below it, all within a blue circle with an orange border. To the right of the circle are two lightbulb icons, one larger and one smaller, both with lines radiating from them to indicate they are lit.The Twinkl Book Club logo, featuring the word 'twinkl' in a blue cloud shape and 'Book Club' in a colorful, stylized font below it, all within a blue circle with a light blue border. To the left of the circle are three orange stars of increasing size.

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!

The Twinkl Boost logo, featuring the word 'twinkl' in a blue cloud shape and 'Boost' in white text below it, all within a blue circle with a pink border. To the right of the circle is a green rocket ship icon.

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.

The Twinkl Imagine logo, featuring the word 'twinkl' in a blue cloud shape and 'imagine' in a white, stylized font below it, all within a blue circle with a purple border. To the left of the circle are two purple heart icons.

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.

The Twinkl Originals logo, featuring the word 'twinkl' in a blue cloud shape and 'ORIGINALS' in white, all-caps text below it, all within a blue circle with a pink border.

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.

The Twinkl Kids' TV logo, featuring the word 'twinkl' in a blue cloud shape and 'KIDS' TV' in a colorful, stylized font below it, all within a blue circle with an orange border.

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!