

Year 6 Multiplication and Division: A Step-by-Step Guide for Parents

This step-by-step explanation to learning multiplication and division can 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 when exploring multiplication and division. Whether your child is still practising prime numbers or they're ready to perfect long multiplication and work with remainders in formal division methods, there'll be a right step in this guide for you.

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.

Long Multiplication



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 However, please be aware that every child is different and information can quickly become out of date.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

Addition and Subtraction

What Are Children Taught about Addition and Subtraction in Year 6?

In year 6, children keep practising long multiplication and formal division. Long division is often added at this stage and children are expected to be able to deal with remainders (answers to division calculations which are not whole number). Skills of estimation and rounding answers to a required degree of accuracy are also often introduced in year 6.

What Skills Support Children with Multiplication and Division?

In terms of number properties, children usually practise prime numbers, common factors and multiples and are encouraged to do a range of mixed calculations in their heads, especially where small numbers are involved. Some of these calculations will use mixed operations, sometimes called BIDMAS or **BODMAS** which teaches your child which order they should work out an answer in. Problem solving and maths reasoning continue to be important and alongside the formal calculations, your child will be likely to practise these in readiness for the year 6 SAT tests.

When Do Children Learn about Long Division?

Long division is often introduced in year 6 in the English national curriculum. It allows children to divide two digit numbers into larger numbers using their times tables to make the method work. It is important that children are proficient in times tables before attempting tricky long division, at least up to 10×10 as these number facts are vital to making the long division method work.



Multiplication and Division Board Game

Download and print out this colourful **board game**; it's great for keeping your year 6 child engaged with tables and the inverse divisions. Repeated opportunities to practise these skills helps to make children more confident in mental arithmetic and maths papers in the year 6 SATs.

Magnetic Darts

Treat your child to a magnetic dart board, or a real one if your child is able to use it safely. Darts lets your child practise doubling and trebling numbers up to 20 and random subtractions, both of which are critical skills in year 6 where mental skills pay great benefits in mental tests.

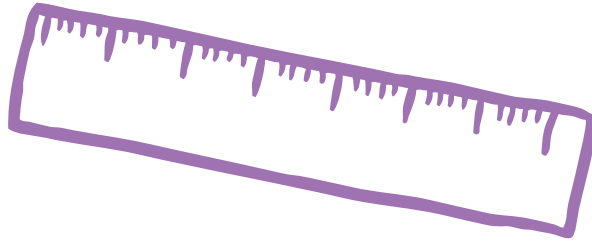
Tricky Tables Bingo

This **Bingo game** deals with the trickier times tables that some year 6 children still find tough. Turn Bingo into a family event, appoint a caller for numbers and try it with one or two bingo cards per person. Use pasta or counters to cover the calculations on the card so you can re-use the cards, rather than crossing out the numbers.

Step 1

Short Division

By the time your child's in year 6, s/he will have met short division before. However, it's a great idea to build confidence in year 6 as a preparation for newer work on long division. You can talk through this selection of resources with your child. If your child finds division tricky, start them off with the one-star worksheet. If they are confident to start with a higher level sheet then begin there.



Long Multiplication

Long multiplication can be answered using the Grid Method or the Double Decker Method. If you need support, you can go through the **long multiplication tutorial** in our pack from our Year 5 Step-by-Step Multiplication and Division Guide. It's a good reminder before starting work on this activity sheet.

Step 2

Step 3

Long Division

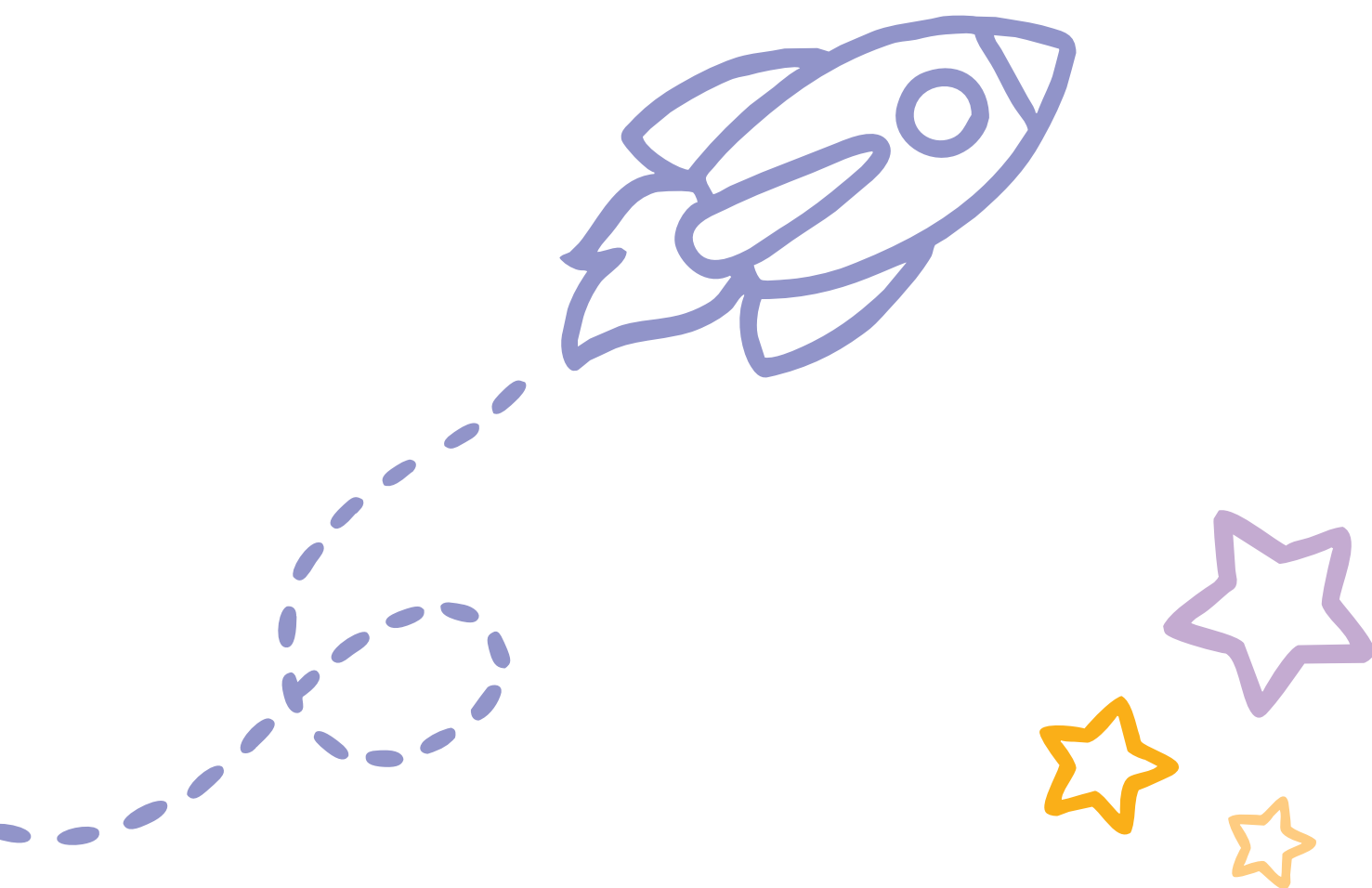
Use this long division Powerpoint to help you take the small steps needed to perfect the long division method. Each step is explained on-screen and working through with your child slowly, writing the calculation down on paper as you go will be really helpful. If you need more practice to be sure your child has mastered this method, then use this well-prepared **long division activity sheet**.



Step 4

Mastery Challenges

In year 6 it's important, if your child is a confident mathematician, to focus on some problem-solving and mathematical reasoning. This PowerPoint presents challenges with multiplication and division that are ideal to motivate your child towards a problem solving approach to mathematics. The problems are set in interesting contexts. Ideally, get your child to just try one challenge at a sitting; it is better to have lots of short challenges than to endure long home learning sessions, especially if the SATs are approaching.

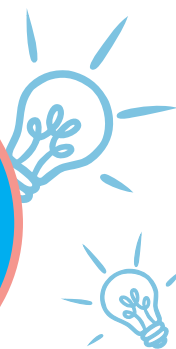


Explore and Discover More

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 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
Boost



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



twinkl
ORIGINALS



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!

