

Year 5 Fractions: A Step-by-Step Guide for Parents

This step-by-step explanation to learning fractions 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 whether your child is just learning to recognise equivalent fractions or they're already confident converting decimals and fractions, there's still a right step for your child in our guide.

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 However, please be aware that every child is different and information can quickly become out of date.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

Year 5 Fractions

What Does the Maths National Curriculum Say about Fractions in Year 5?

In year 5, children have usually been introduced to decimals and fractions and continued work is needed to understand the relationship between the two. Children move on to multiplication and division with fractions to complement their work in earlier years on addition and subtraction. They also start to learn how to work with fractions that do not have the same denominator (bottom number). Percentages (fractions out of 100) are also introduced in many English schools at this stage.

What Are Percentages?

Percentages are just a fraction out of 100. Most adults know that fifty percent is the same as $\frac{1}{2}$. That's because $\frac{50}{100}$ is a half too. We use the '%' sign which stands for per cent, which also means 'out of 100'. For example, 75% results in 75 out of 100.

How Are Decimals Changed into Percentages?

Percentages can be changed into decimals or the other way around. In order to change a percentage into a decimal, your child should divide by 100. To change a decimal into a percentage, your child needs to multiply the decimal by 100.

For example, $0.47 \times 100 = 47\%$.

Sale Time

Sale discounts are often labelled as percentages.

Capitalise on this and get your child to recognise the connection between 10% and $\frac{1}{10}$ or 25% and $\frac{1}{4}$.

Encourage them to calculate the discount.

Online Percentage Calculator

If you use a search engine to find a percentage calculator, you can use it to calculate discounts with your child. The calculator will let you work out any percentage of an amount at the touch of a key.

Try getting your child to mentally work out simple percentages, such as 25% of £40 and then use the online percentage calculator to check.

Fractions Board Game

If you're bored with fractions, then try our **Fractions Board Game**. Simply print and follow the instructions to practise the basics of unit fractions. Great if your child has found the earlier steps of fraction learning tricky before starting this year's steps.



Step 1

Compare and Order Fractions

To put fractions in order, your child must first be able to change them all so they're the same denominator (bottom number). You do this by finding the lowest common denominator for the set of fractions you're working with. You can then compare both of the fractions directly. This simple Twinkl resource sets the scene and helps your child to gain confidence with ordering basic fractions. If your child is already working with lowest common denominators, you might like to try our **trickier fractions ordering worksheet**.



Mixed Numbers and Improper Fractions

To start with, make sure you know how mixed numbers can be changed into improper fractions and the other way around. Then have a go at this step's resource, which is a puzzle to connect the right improper (top heavy) fractions to the right mixed number. If you master it, you could always have a go at playing our **Domino Game** that reinforces the same skills.

Step 2

Step 3

Adding and Subtracting Fractions (With Different Denominators)

Your child needs to first change the fraction(s) so that the denominators (bottom numbers) are the same. For example, if one denominator is 5 and the other is 10, they'll need to double both of the numbers on the fraction with the lower denominator so that both fractions are over 10, then they just need to add the numerators together to get the answer. If you find explaining this to your child tricky, why not use our **Maths Mastery Powerpoint**, which will explain step by step on your laptop screen how to work out this type of problem?



Multiplying Fractions

In year 5, most children learn how to multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.

Step 4

You can learn this alongside your child using our helpful **Multiplying Fraction** presentation. You'll explore several word problems. Simply click through the slides at a pace both you and your child can cope with and use the skills to check you can solve the problems. If you can solve these, then try this step's resource. To multiply two fractions:

1. Simplify the fractions into their lowest form
2. Multiply the numerators together
3. Multiply the denominators together
4. Write the answer to the numerators being multiplied as the new numerator and the answer to the denominators being multiplied as the new denominator.

An example of multiplying fractions would be:

$$\frac{2}{5} \times \frac{1}{2} = \frac{2}{10}$$

This is because, $2 \times 1 = 2$ and $5 \times 2 = 10$

You can (if you're able) simplify $\frac{2}{10}$ because both the numerator and denominator can be divided by 2, so $\frac{2}{10}$ can be written $\frac{1}{5}$.

Step 5

Converting Decimals and Fractions Activity Pack

This wonderful, colourful pack has a fantastic array of activities to help your child to convert decimals and fractions. From loop games and posters to show the conversions, to fortune teller games so your child can check their own understanding, you'll find this challenging topic presented in a huge variety of ways to keep your child engaged. Start by sharing the colourful fractions, decimals and percentages poster and then get your child to try some of the independent activities, such as making the fortune teller and completing the loop game.

Step 6

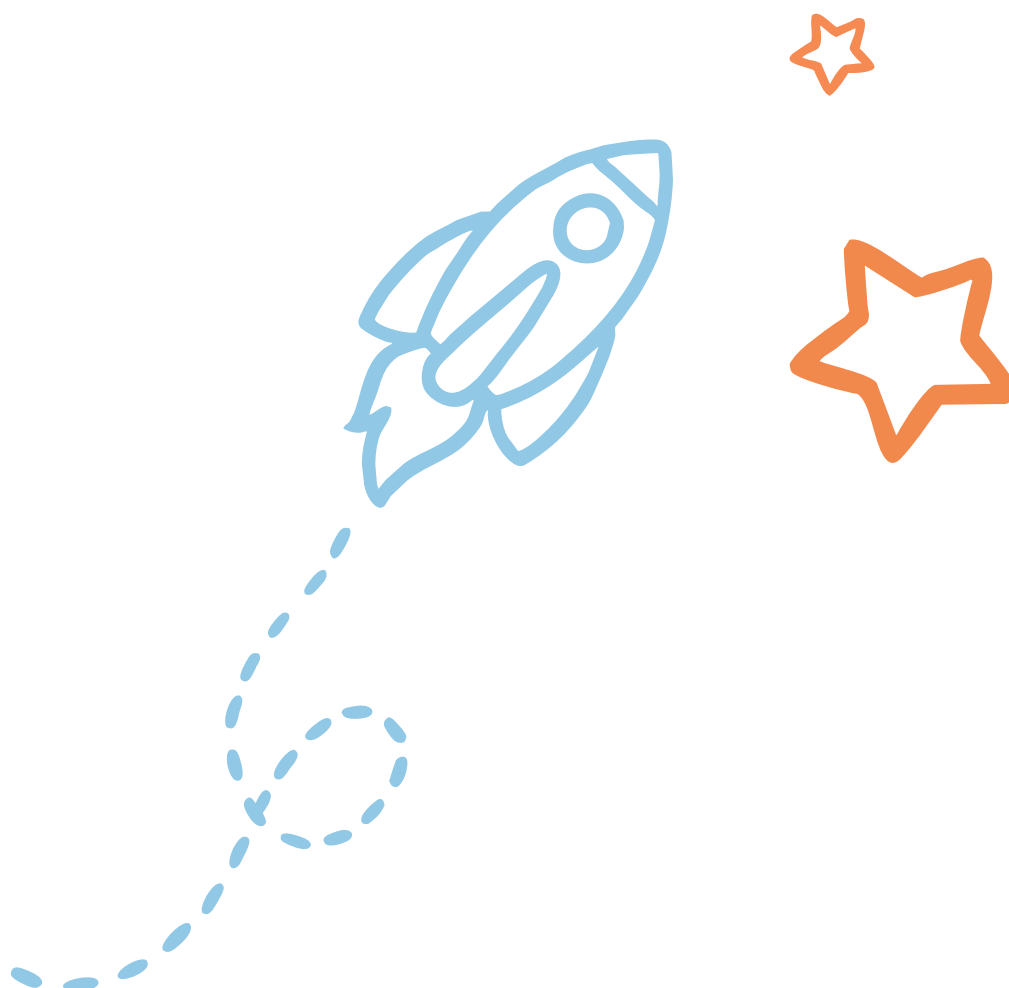
Percentages

Although percentages are really just fractions out of 100, lots of children do find them tricky. The best thing you can do supporting your child at home is to give your child a strong understanding of the connection between fractions, decimals and percentages, which this worksheet helps to do in a straightforward, visual way.

Decimals and Percentages Problems

Children often find word problems difficult. This Christmas-themed set of fractions/decimals word problems are great for getting the cogs whirring. Rather than setting them to your child as tasks, try one challenge a night as a family group, talking about the problem and how you'd solve it. This helps to reduce the fear around maths and the panic that needing to personally generate the 'right answer' can bring.

Step 7



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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Go!



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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!



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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 children 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!