

Year 3 Decimals: A Step-by-Step Guide for Parents

What Is This Guide?

This step-by-step explanation to year 3 decimal numbers 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 learning about year 3 decimal numbers and fractions either to support your child's homework or if you decide to give your child some extra support. In this guide, you will find a step that matches your child's level of understanding and then have suggested activities which can be used to support that step.

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.

counting up and down in tenths



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 However, please be aware that every child is different and information can quickly become out of date.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

Decimals

What Are Children Taught about Decimal Numbers in Year 3?

In year 3, children will prepare to learn about decimals by first learning that when an object or amount is divided into 10 equal parts, each part is $\frac{1}{10}$ (one tenth). This helps them to understand the concept of tenths in preparation for relating a tenth to decimals in year 4. Children in year 3 will learn:

- to count up and down in tenths;
- and to recognise that tenths arise when you divide an object into 10 equal parts or when dividing quantities by ten.

This guide can help you support the learning of year 3 decimal numbers at home. Each step contains an explanation to that stage and a link to an appropriate resource which can be used at home to support your child's learning.

As well as using the resources in this category, and the keyword searches to help your child with decimal numbers, below are a few ideas for games and activities to help your child practise learning decimal numbers at home.

Food for Thought

Fractions can be modelled with food at home. Look for opportunities to make fractions with foods that can be cut into smaller pieces such as cakes and pizzas. Try to cut things into 10 pieces and discuss the fraction with your child (each piece is $\frac{1}{10}$). State what fraction you have eaten and then ask your child to do the same. For example, if you have eaten 3 slices of the pizza, you could say, 'I have eaten $\frac{3}{10}$ of a pizza'.

Fraction Counting

A very simple activity is to practise counting in tenths with your child. This can be done anywhere and at any time. Simply take it in turns at saying the next tenth in the sequence. For example: 8 tenths, 9 tenths, 1 whole, 1 whole and 1 tenth, etc.

One More / One Less

This is another really simple activity you can do with your child to help them think about tenths. Say a tenth out loud (such as 3 tenths) and ask your child, 'What would 1 tenth more be?'. You could also ask, 'What would 1 tenth less be?'.

Ordering Tenths

Using small squares of card or paper, write down several different fractions with tenths.

For example:

$$\frac{3}{10} \quad \frac{11}{10} \quad \frac{5}{10} \quad 2 \frac{4}{10}$$

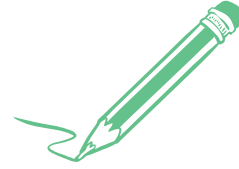
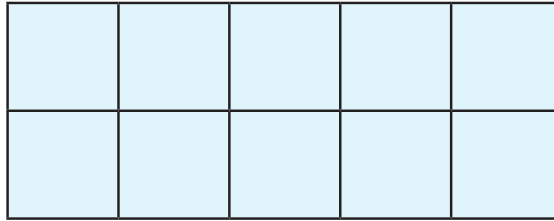
Ask your child to order the numbers from smallest to largest. This could also be made into a 'top trumps' style of game where you each take an equal number of cards, lay them down one at a time and see who has the highest number each time. The winner of each round keeps both the cards.



Step 1

Identifying That Tenths Are Made by Dividing an Object, or Number, into 10 Equal Parts

A common way to teach the concept of tenths in year 3 is to use lots of visual diagrams. These help children to understand that tenths arise when an object, or number, is divided into 10 equal parts. For example:



The rectangle has been separated into 10 equal parts – each part is $\frac{1}{10}$ (or one tenth) of the whole. So, 2 squares would be $\frac{2}{10}$, 3 squares would be $\frac{3}{10}$ and so forth until we had one whole or $\frac{10}{10}$.

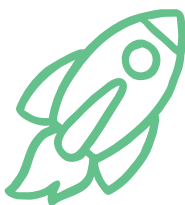
At home, try this **Year 3 Fractions (Tenths) Teaching Pack** to help your child to recognise and use tenths.

Counting Up and Down in Tenths

In year 3, children will use different representations to help them practise counting up and down in tenths. At home, you can use this **Counting in Tenths Number Line** to help your child practice counting or you could try this **Counting Up and Down in Tenths Worksheet** to help your child visually see the tenths on a number stick and write down how many tenths are represented.

It is useful to discuss with your child what comes after $\frac{10}{10}$. You can help them to understand that if another $\frac{1}{10}$ is added to $\frac{10}{10}$, we can say we have 1 whole and $\frac{1}{10}$ or we can say we have $\frac{11}{10}$.

Step 2



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 circular background.Two simple line-art lightbulbs with rays emanating from them, positioned to the right of the Twinkl Go! logo.The Twinkl Book Club logo, featuring the word 'twinkl' in a blue cloud shape and 'Book Club' in a colorful, blocky font below it, all within a blue circular background.Three orange stars of varying sizes, arranged in a cluster to the left of the Twinkl Book Club logo.

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 circular background.A simple line-art rocket ship with a flame trail, positioned to the right of the Twinkl Boost logo.

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, lowercase font below it, all within a blue circular background.Two purple hearts of different sizes, positioned to the left of the Twinkl Imagine logo.

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.

The Twinkl Originals logo, featuring the word 'twinkl' in a blue cloud shape and 'ORIGINALS' in a white, all-caps font below it, all within a blue circular background.The Twinkl Kids' TV logo, featuring the word 'twinkl' in a blue cloud shape and 'KIDS' TV' in a colorful, blocky font below it, all within a blue circular background.Two simple line-art speech bubbles, one above the other, positioned to the right of the Twinkl Kids' TV logo.

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!