# Year 5 Number and Place Value: A Step-by-Step Guide for Parents

This step-by-step explanation to year 5 place value and number 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 5 place value and number, 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 can find suggested activities that could 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.

| order and compare numbers | 🔍 |

**Click here**

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 However, please be aware that every child is different and information can quickly become out of date.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

# Number and Place Value

## What Is Number and Place Value?

Place value is the value given to a digit (written number) in a number based on its position. For example, the 5 in 543 represents five hundreds or 500. Having a strong knowledge of place value is a vital skill in primary maths; that's why it is often taught as the first topic at the start of the year.

In school, images and objects are often used to help children gain a deep understanding of place value, such as using blocks of hundreds, tens and ones.

| Hundreds | Tens | Ones |
|:---:|:---:|:---:|
| 1 | 3 | 4 |
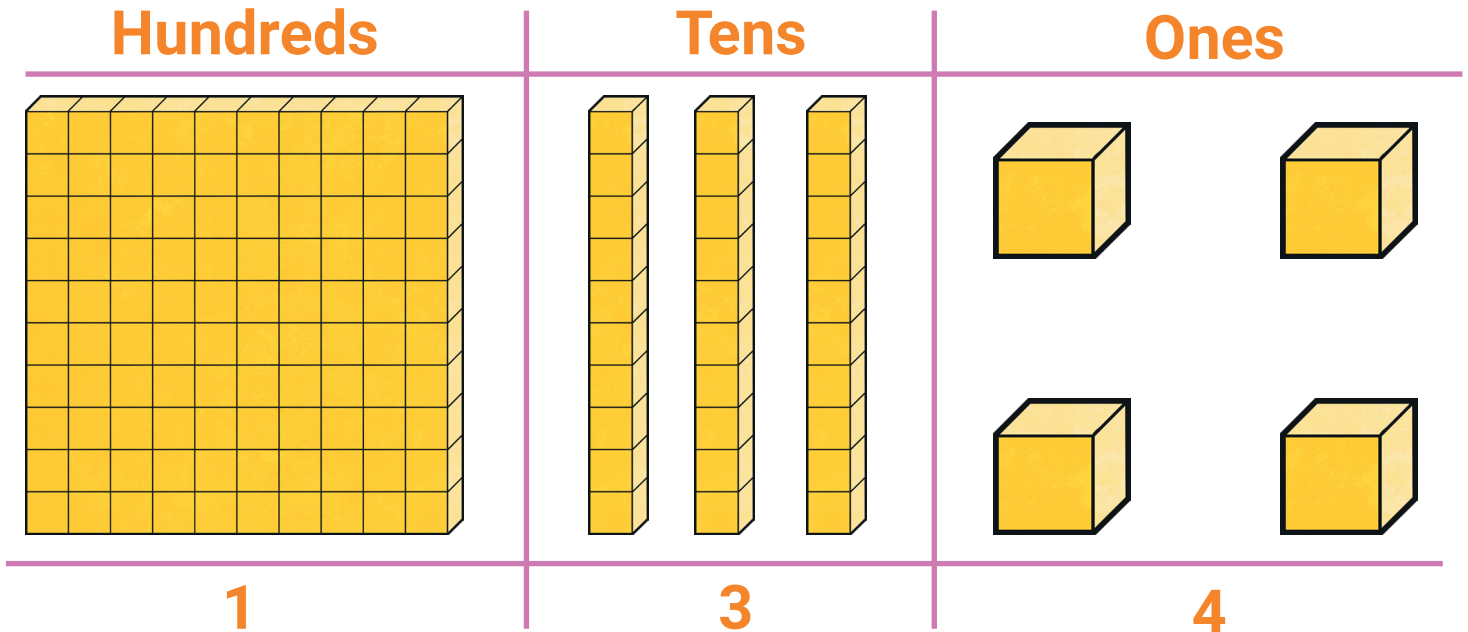
The number blocks above show the number 134. Children can clearly see that it is made up of one set of one hundred blocks, three blocks of ten and four individual cubes. The example above has been placed into a place value chart with the digits written below to show children how the number is represented in digits. Real objects, arrow cards, place value charts, toys and many other pictures and objects are used in school to reinforce this.

## What Vocabulary Will My Child Need to Know?

When dealing with numbers, place value refers to where a number fits in with when compared with other numbers. You could think of this simply as ordering. If you give your child a range of different numbers written on cards, could they put them in the correct order? If they have a number line and are given a random number to insert, can they work out its place value?

You may find the word 'digits' used frequently in this guide and the corresponding worksheets and resources. Digits is the term used in school to represent the individual numbers, 0-9, that make up a written number. For example, the digits 1, 3 and 5 written together represent 100, 30 and 5, or 135.

In year 5, children will be dealing with large numbers up to 1 000 000. When dealing with numbers of that size, they will need to know about powers of 10 as well. Counting in powers of ten simply means being able to count in 10s, 100s, 1000s, 10 000s, 100 000s.

# What Are Children Taught About Place Value and Number in Year 5?

Throughout year 5, children are taught to:

• read, write, order and compare numbers up to 1 000 000.

• count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000.

• round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.

Children are also expected to be able to apply all of the above to solve a variety of maths problems.

This guide will help you support the learning of year 5 place value and number 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 place value and number, below are a few ideas for games and activities to help your child practise place value and number at home.

## Order Number Cards

Write a range of numbers up to one million on separate cards. Challenge your child to move the cards and place them in the correct order, ranking from smallest to largest. They will have to use their knowledge of place value to help them order the numbers correctly.

## Numbers Washing Line

On a washing line (or a piece of string hung up in your home), write a selection of numbers and place them in random order on the line. Ask your child to order the numbers from largest to smallest using their understanding of place value.

## Rounding Numbers Game

Write two numbers on sheets of paper and place them on a wall on either side of the room; these need to be two multiples of the number you are rounding to, e.g. if you're practising rounding to the nearest 10 000, it could be 30 000 and 40 000 on either wall. Ask your child to stand in the middle and say a number that comes between the two examples. Your child needs to 'splat' the number it would round to. For example, if you said, 'round 35 784 to the nearest 10 000', your child would have to use their hand to 'splat' the 40 000 poster. Repeat this several times and change the number posters to vary the game.

## Counting Games

This is a simple way to help your child practise counting in powers of ten. Simply choose a number to start at and decide what you will count up in (10s, 100s, 1000s, 10 000s or 100 000s). Take it in turns to work out and say the next step in the sequence. For instance, if starting at 1234 and counting in 10 000s, the sequence would be 1234, 11 234, 21 234 etc. Working together, see how high you can get.

## Step 1

### Read, Write, Order and Compare Numbers up to 1000 000

Building on their place value work in previous years, children in year 5 will learn to read and compare numbers up to one million. Comparing numbers involves looking at a set of numbers and using knowledge of place value to order the numbers by size. At home, you could try this Millions Place Value Game to help your child practise making and reading numbers up to a million.

## Step 2

### Count Forwards or Backwards in Steps of Powers of 10 for Any Given Number up to 1 000 000

Counting in powers of ten simply means being able to count in 10s, 100s, 1000s, 10 000s or 100 000s. In class, children often have to complete missing numbers in number sequences and describe the term-to-term rule e.g. add 10 each time or add 10 000 each time. At home, you can help your child to practise counting in powers of ten by using this simple Counting Forwards and Backwards worksheet.

## Step 3

### Round Any Number up to 1 000 000 to the Nearest Power of 10

Rounding is used to make rough calculations easier so that estimates can be given. In year 5, children will continue to develop the rounding skills learnt in year 4 by rounding larger numbers up to one million. Rounding is a way to change a number to the closest given amount. For example, if you were to round the number 17 378 to the nearest 10 000, the answer would be 20 000. That's because 17 378 is closer to 20 000 than it is to 10 000. This can be shown on a number line to help demonstrate:

**10 000**                    *17 378*    **20 000**

One way to round a number is to use place value. If the digit you are rounding to is followed by a 5 or above, you round up. If the digit is followed by 4 or below, you don't round up. In the example above, the digit to the right of the tens of thousands digit is 7 (17 378), therefore you round up to the next 10 000 which is 20 000.

At home, you can use this year 5 teaching pack to help your child practise rounding large numbers.