

Year 6 Number and Place Value: A Step-by-Step Guide for Parents

This step-by-step explanation to year 6 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 6 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.

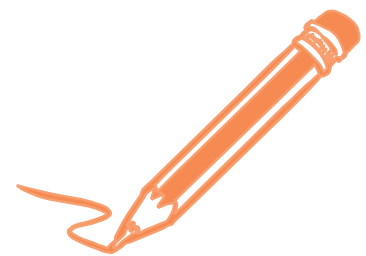
Within **this area of the website**, you will find a selection of resources intended to help your child learn about each step of this guide. Each step also contains a keyword or phrase that you can use to search the Twinkl site for more resources and activities, designed to support your child in achieving that stage. Simply type the keyword or phrase into the search bar and press enter to explore together.

Year 6 Number and Place Value



Step 1

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 However, please be aware that every child is different and information can quickly become out of date.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, in the number 2 394 495, the 3 represents 300 000 or three hundred thousand. Having a strong knowledge of place value is a vital skill in primary maths; by the end of year 6, children are expected to be able to read numbers up to 10 000 000, when written both numerically and in words.

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 number 1, 3 and 5 written together represent 100, 30 and 5, or 135.

In year 6, children will be dealing with large numbers up to 10 000 000. 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.

This guide can help you support the learning of times tables 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.

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.

Roll the Biggest Number

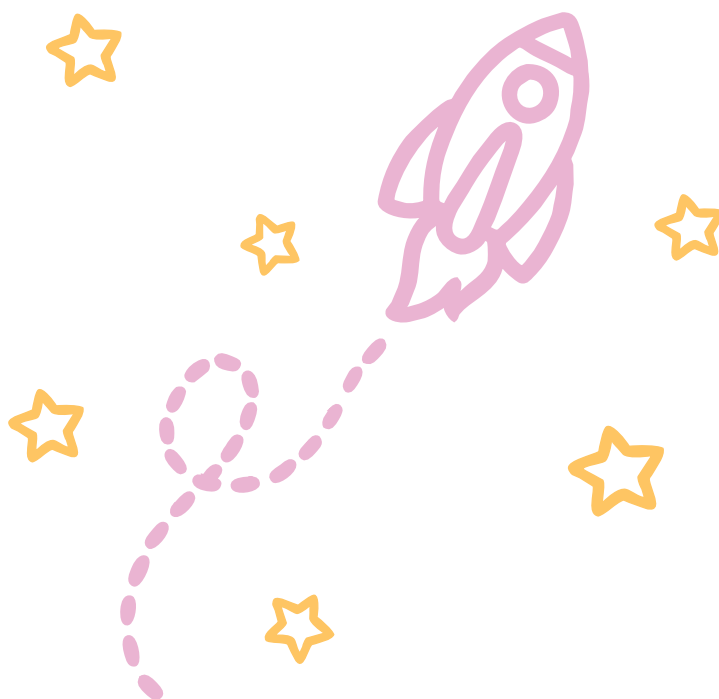
For this simple activity, you and your child both need a sheet of paper, a pencil and a dice. Each player must draw a place value chart up to one million (with a column for each digit of 1 000 000). Once done, take it in turns to roll the dice. Place the number you roll in one of the columns of the place value chart. Once you have both filled the place value chart, compare numbers. The player with the biggest number wins.

Round the Dice

For this activity, you will need a 9-sided die (these can be purchased in stationary shops or online). Alternatively, you can use an online number generator. Your child has to roll the dice seven times to generate a 7-digit number. Then, ask your child to round the dice to the nearest million, hundred thousand etc. You can repeat this process to help them practise rounding numbers.

Order the Cards

This activity requires a little preparation. On pieces of paper or card, write a range of 7-digit numbers (if you make these numbers similar, such as 7 897 543 and 7 987 543, it will make the activity trickier). Mix the cards and challenge your child to order the cards by size. They will have to use their knowledge of place value to order the cards.



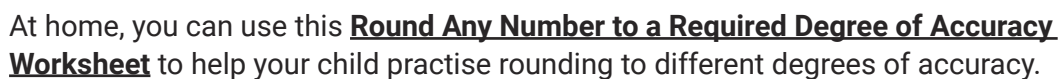
Place value charts are often used at school to help children understand the value of each digit in a number; these are charts where each column represents 10s, 100s, 1 000s etc. all the way up to 1 000 000. At home, you can use this **Place Value Support Desk Prompt** to help your child with understanding the value of each digit in a number. The linked place value worksheet can also be used to help your child practise recognising the value of digits in large numbers.

Step 2

This skill involves comparing a set of numbers and using knowledge of place value to order those numbers by size. At home, you can use this **Year 6 Numbers to 10 000 000 Teaching Pack** to help your child practise ordering and comparing large numbers. Using the worksheets in this pack, you can work with your child to help them practise ordering the numbers in each sequence.

Rounding is used to make rough calculations easier so that estimates can be given. 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:be worked out using times tables: $8 \times 4 = 32$.

Step 3



Step 4

In primary school, once children have a secure knowledge of place value and number, they will be challenged to use it to solve problems. They are also encouraged to reason – to explain how they solve problems or how they know if something is right or wrong. At home, your child can try these **Year 6 Place Value Number Problems Maths Mastery Challenge Cards** to help them practise solving problems.

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, one larger and one smaller, 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 diagonal line 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 green 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, one larger and one smaller, 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 teal speech bubble icons, one larger and one smaller, 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!