

Mathematics is a universal language that enables a clearer understanding of the world. At Darley Dene Primary School, we strive to ensure that children develop a love and understanding of mathematics. We aim to nurture the development of a logical and methodical mind-set which provides important tools for later life. We want children to feel confident and competent when using mathematics to enable them to make sense of the world around them and to solve problems in real life contexts.

Throughout our school, there is **ambition for all children** who are given a multitude of different opportunities to engage in practical work using a range of equipment as well as becoming fluent in number and calculating.

Throughout the school, children are taught mathematics during a daily lesson ranging from 15 minutes in EYFS to 1 hour in Key Stage 2. All children are taught by their class teacher in mixed ability classes. In addition to this, our Reception, Year 1 and Year 2 children also have 15 minute 'Mastering Number' sessions four times a week. In Key Stage 2, children have additional daily timestable or arithmetic lessons.

Darley Dene follows the **White Rose Maths Curriculum** to ensure progression, coverage and depth of knowledge for all learners. The White Rose supports a mastery approach to teaching and learning and encourages the 3 main aims of the Maths National Curriculum; **fluency, reasoning and problem solving**. It also promotes the use of concrete, pictorial and abstract learning experiences to embed understanding.



Please refer to the White Rose scheme of work for further details by clicking on the link below.
<https://whiterosemaths.com/schemes-of-learning/primary-sols/>

As a school, we also follow our own calculation policies for the four number operations (addition, subtraction, multiplication and division). You will see how each learning objective is taught through concrete, pictorial and abstract experiences.
Please **click here** to find the policies.

EYFS (Nursery, Reception and Owls)

At Darley Dene, we know how important it is that our youngest children develop a strong sense of numbers to 10. This will stand them in good stead for the mathematics that follows as they move through school.

This includes:

- Understanding the link between numbers and quantity (representing numbers in many ways)
- Investigating how quantities are composed of smaller parts (6 can be two 3s or three 2s or 4 and two ones or 5 and 1 etc.)
- Knowing how numbers relate to one another and being able to compare and order them.
- Exploring how quantities change when you add more items or take items away.

The children may already be able to recite the number names to twenty and beyond but a sense of what those numbers mean develops gradually with repeated experiences in different contexts.

We also understand the importance of providing practical opportunities for our children to visualise and recognise many different representations in order to develop and apply their mathematical knowledge. Through short whole class teaching sessions, exploration and play, children are motivated to think critically, ask questions and begin to solve everyday problems. Our EYFS teaching teams are skilled in dialogic teaching; using precise and purposeful questioning and dialog to extend learning further.

Another great way of exposing children in EYFS to a range of mathematics is through story telling. Please click on the link to find a list of books that you may want to read at home with your child.

<https://nrich.maths.org/14360>

Key Stage 1 (Years 1 and 2)

The main focus in Key Stage 1 is to ensure that pupils develop confidence and mental fluency within whole numbers up to 100, counting and place value and also to begin to embed these skills in their problem solving. This involves working with numerals, words and the four operations (addition, subtraction, multiplication and division). Children are always encouraged to use the correct mathematical vocabulary when discussing and explaining their thinking.

Children in KS1 are encouraged to use the White Rose '1-Minute Maths' app at home. It is designed to help children build greater number confidence and fluency in one minute chunks. Parents are encouraged to download it on a smart phone. Children are encouraged to practise little and often – we recommend 5 minutes a day.



Key Stage 2 (Years 3, 4, 5 and 6)

In Key Stage 2, children continue strengthening their knowledge and understanding of the four operations with much larger numbers and apply this knowledge in a variety of ways when solving complex problems and completing investigations.

At Darley Dene, we acknowledge the importance of children being able to apply mathematical knowledge to real life experiences; **it is essential, therefore, that children develop strong mental maths skills to achieve this.** To become confident in developing mental maths strategies, children must know their times tables off by heart. The National Curriculum expects that by the end of Year 4, children will know all the times tables facts up to 12 x 12. **Timestable Rockstars** is used both in school and as part of children's home learning - they are encouraged to complete 5-10 minutes daily practise at home.



<https://trockstars.com/>

Yearly Maths Events

Throughout the year, Darley Dene celebrates **Maths Week England** in November and raises money by taking part in **NSPCC Number Day** in February. We also compete each half term in Timestables Rockstar Battles against the other four schools in the Lumen Learning Trust.