

# Mathematics and English

We prioritise the teaching of Mathematics and English as these are core and necessary skills, without which an individual will be socially disadvantaged.

We aim to teach these subjects well; to assess the children's learning effectively; to establish basic skills early, preferably by the end of Key-stage 1. We intervene to catch up any child who is falling behind the expected age-appropriate standard as soon as possible to ensure they can continue confidently on their learning journey.

We teach these subjects discreetly and we allocate sufficient time to do so. We apply the skills from these subjects in all other subject areas and this in turn recognises their value to children's lives in the wider context.

## Mathematics:

Mathematics is a proficiency, which involves confidence and competence with numbers and measures. It requires an understanding of the number system, a repertoire of computational skills and an inclination and ability to solve problems in a variety of contexts. Mathematics also demands practical understanding of the ways in which information is gathered by counting and measuring and is presented in graphs, diagrams, charts and tables.

At Downe, we aim to ensure that all children become fluent in the rudiments of Mathematics, are able to reason mathematically and can solve problems by applying their knowledge. These skills are carefully planned, embedded within lessons and developed consistently over time.

We are committed to ensuring that children are able to recognise the importance of Maths in the wider world and that they are also able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts. We want all children to enjoy Mathematics and to experience success in the subject.

To ensure consistency and progression in our approach, the school uses Abacus Mathematics, the White Rose Maths scheme and its own key stage 2 mixed-age plans. The large majority of children progress through the curriculum content at the same pace building on solid foundations. Differentiation is not just seen between year groups but by acknowledging deeper understanding and through individual support and intervention where appropriate. Teachers use precise questioning in class to test conceptual and procedural knowledge and assess children regularly to identify those requiring intervention, so that all children's needs are addressed.

New concepts are introduced within the context of an initial related problem, which children are able to discuss in partners. This initial problem-solving activity prompts discussion and reasoning, as well as promoting an awareness of maths in relatable real-life contexts that link to other areas of learning. In KS1, these problems are almost always presented with objects (concrete manipulatives) for children to use. Children are also encouraged to use manipulatives in KS2 where appropriate.

Teachers lead children through strategies for solving the problem starting with concrete, moving to pictorial and developing into abstract solutions.

Independent work provides the means for all children to develop their fluency further, before progressing to more complex related problems.

Mathematical topics are taught in blocks with objectives married carefully between year groups to enable the achievement of 'mastery' over time. Each lesson phase provides the means to achieve greater depth, with more able children being offered rich and sophisticated problems, as well as exploratory, investigative tasks, within the lesson as appropriate.

Regular and ongoing assessment informs teaching, as well as intervention, to support and enable the success of each child. These factors ensure that we are able to maintain high standards, with achievement at the end of KS2 consistently above the national average for many, many years and a number of children demonstrating greater depth, at the end of each phase.

## English:

We learn language through listening, thinking and talking; good communication is essential in education and in life.

We promote a love of reading. All classes have regular story-times, read-aloud sessions, and reading buddies from across the school with whom they enjoy shared reading sessions. We have a well-stocked and well-used school library, and attractive book corners in all classrooms. Underpinning this is a strong commitment to using high quality texts and literature. We use the Power of Reading resources (CLPE), across the school which are excellent and varied, exposing children to a wide selection of genre and text types; and age appropriate literature.

In Reception and KS1 we use the Read, Write Inc programme (Ruth Miskin) to provide a rigorous and systematic approach to phonics and reading. All the reading books are closely matched to the phonic knowledge of the child. The programme links the learning of reading and writing, consolidating early skills. All children have a daily interactive, differentiated phonics session. Staff have been trained to teach these, and this training is updated as necessary. Our aim is to produce confident and independent readers and writers that meet or exceed the National Curriculum standards in KS1 so they are fully prepared for the next stage of learning in KS2.

Literacy in KS2 is based around the Power of Reading books and resources. These well-chosen books are popular with all the children and this enjoyment promotes an exceptional engagement with the texts, resulting in high quality language skills. Children write for a range of purposes, incorporating ambitious vocabulary and grammatical elements taught through the texts. Techniques for teaching include discussion, debate, drama, drawing and exploring illustration, modelling and editing, and partner work and reflection. This promotes fluency in writing and advanced reading techniques.

Children become skilled at reading and extracting information from non-fiction texts too. They are also further enthused to read for pleasure, often asking to borrow books that have been read in class and wanting a sequel or to read more books by the same author.

More able readers and writers have the opportunity for further lessons in small groups. Teachers enable deeper discussion and comprehension of texts, and encourage pupils to produce higher level writing.

Our aim is to meet (or exceed) standards at Key Stage 2, so children are fully prepared for secondary school and later external examinations.

Our family atmosphere is fostered by our whole school shared book project. Every September at the start of the year, all children in the school, from Reception to Year 6, study the same book (with activities appropriate to their level of learning). This is enhanced by either a whole school trip or by inviting visitors to the school eg when we worked on *The Gorilla* by Anthony Browne we all visited Howletts Zoo to see the gorillas and had educational sessions there led by their education staff.

We apply English and mathematical skills in the other subjects of the curriculum. This provides cohesion and a context for the learning. The best primary schools achieve high standards in English and Mathematics by also engaging in learning and celebrating all subjects.