Curriculum statement for Mathematics

Subject aims: what do we want the children to learn and why

At Whipton Barton, our aim is for pupils to become fluent in the fundamental skills of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. Pupils are able to solve problems by applying their mathematics to a variety of problems with increasing confidence, including in unfamiliar contexts and to model real-life scenarios. They can reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language. Pupils have an appreciation of number and an efficient working memory, enabling them to manipulate numbers with accuracy, working methodically through a broad range of problems.

How the subject is organised and taught

We want to design a curriculum that is accessible to all and will maximise the development of every child's ability and academic achievement**.** We follow the 'White Rose' scheme of mathematics when planning lessons and timetabling how they are blocked throughout the year. Teachers are able to manipulate how they deliver each block depending on the needs of their specific class or cohort rather than sticking to it as a rigid structure. Maths lessons consist of a 1 hour session in the morning, followed by a 20 minute mental maths session which directly focusses on the skills of fluency. We value the use of imagery to support learning and supplement the 'White Rose' scheme of mathematics with the 'I See Maths' resource as it provides a rich range of problems which challenge pupils' thinking. We use mistakes and misconceptions as an essential part of learning and provide opportunities for pupils to unpick their own errors as a result of verbal and written feedback. To support the children with their multiplication practice, we use 'Times Table Rockstars' as an online learning platform; it can be accesses in school and at home and allows for healthy competition between pupils.

What subject-specific characteristics do we want children to develop?

We strive for our pupils to become independent, reflective thinkers, whose skills not only liberate them in mathematics but also support them across the curriculum. We want our pupils to demonstrate resilience and perseverance when faced with challenges and embrace them as obstacles to overcome, not treat them as something that should be feared. We want children to appreciate that mathematics is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. As our pupils progress, we intend them to be able to understand the world, have the ability to reason mathematically, and gain a sense of enjoyment and curiosity about the subject.