Maths at Benhall St. Mary's C of E Primary School

Intent

Mathematics has shaped the course of human history. Just as words are the building blocks of literature, numbers are the language of scientists, architects, engineers and software developers. Without mathematics there would no Internet, skyscrapers, modern medicine or aeroplanes. Moreover, the economies of the world are driven by the complex mathematics of finance and business. Mathematics can be seen everywhere-from the arrangement of flower petals and the navigation systems of the bees that seek them, to the strategies of how to respond to a pandemic! A secure knowledge of mathematics is not only essential for people seeking employment, it is also key to being financially secure and to be able to engage with a modern, data-driven, technical world.

Implementation

Mathematics links to a vast variety of subjects across the curriculum: History, Art and Geography. The close link between mathematics and science enables children to develop understanding of the real world using both their knowledge of science and mathematics, strengthening their understanding across a variety of areas. Each key concept is studied throughout the year using small steps to ensure pupils look at the area in depth. All learning objectives are taught and revisited throughout the year, enabling children to develop their skills and confidence to ensure a positive attitude of the subject, so real world connections can be established. Maths Meetings and Can You Stills provide children with opportunities to recap previously taught areas, whilst arithmetic tests ensure pupils are confident with a range of methods. Within each of the aforementioned concepts, children will develop their skills in fluency and calculation; reasoning; and problem solving. In all these areas, children will be encouraged to represent the mathematics visually so they can move through these three areas (concrete, pictorial and abstract) to ensure confidence and positive attitudes towards mathematics. In EYFS, we place a significant emphasis on developing a strong grounding in number as this will allow them to excel in the subject as they navigate through school.

Impact

Teachers check for understanding in each session and quickly identify those children in need of additional teaching. We find that the most powerful feedback is given to children verbally during the lesson so that children can correct their work at the time. Self and peer assessment are also used when appropriate, although teachers will oversee this and acknowledge the work. If necessary teachers will adapt their planning if particular misconceptions need to be addressed or if children are over performing.

We use a range of low stakes testing approaches (Can You Still's and weekly arithmetic lessons) both to help children remember key information and to identify those in need of additional help and support. Some of these such as Timetables Rock Stars and Maths.co.uk are very pupil centred and give children instant feedback on their performance.

We assess children summatively at the end of each term. We use a combination of NFER tests and past SATs papers for this purpose. Data is entered into our online database Arbor and used to inform target setting and for reporting to parents. Our data is also collated at Trust level which enables benchmarking to take place between schools.