Mathematics Statement

BELFORD PRIMARY SCHOOL
make believe learn achieve

INTENT

At Belford Primary School, we are committed to providing our children with a curriculum that is creative and engaging and impacts positively upon their needs. All children are expected to succeed in mathematics and make progress from their starting points. Our teachers provide quality modelling and set high expectations in all lessons. We aim to teach for secure and deep understanding of concepts through small, manageable steps, providing many practical opportunities and variation within lessons. High-quality activities are delivered with a focus on fluency, reasoning and problem solving, providing each child with the level of challenge to reach their maximum potential.

The teaching of fluency

We intend for all pupils to develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. This is achieved through varied and frequent practise of number facts, number bonds and multiplication (and related division) facts.

The teaching of reasoning

We intend for all pupils to reason mathematically, using the correct mathematical language to give an explanation for decisions, presenting these with confidence.

The teaching of problem solving

We intend for all pupils to solve problems by applying their mathematics to a variety of problems with increasing difficulty, including breaking down problems into a series of simpler steps. Children are taught to make use of the range of resources available to help better their understanding and make links between the mathematical concepts they are solving.

We intend to create a vocabulary rich environment, where talk for maths is a key learning tool for all pupils. Children are taught to use key vocabulary to reason and explain their workings mathematically. A wide range of mathematical resources are used to better children's understanding and children are taught to show their workings in a concrete, pictorial and abstract form wherever suitable. By exposing children to a variety of manipulatives, children are encouraged to make links with their mathematical thinking. Mistakes and misconceptions are used to help build children's resilience and create a positive attitude towards challenge and problem solving.

IMPLEMENTATION

EYFS

Our EYFS maths curriculum is planned around Broadbent Maths which provides a wealth of resources and practical teaching ideas to make maths enjoyable and memorable for the children in their early stages of education. The NCETM progression document is also used alongside this to break down the learning into small, achievable steps to gain a deeper understanding of the learning.

White Rose Scheme-

Year 1 to Year 6 follow the White Rose scheme of learning which is based on the National Curriculum. This scheme provides children with the opportunity to develop their maths skills, vocabulary and knowledge by encouraging a concrete, pictorial and abstract sequence to help develop a deeper understanding of the maths concept and mastering their skills. Alongside this scheme we chunk the learning even further into smaller steps, using the NCETM which also helps to develop mastery teaching and learning in the classroom. We ensure that lessons are adapted where needed to meet individual pupil's needs

Practical resources

At Belford Primary, we have a wide range of practical resources, such as Numicon, tens frames, place value counters, denes and many other materials that help our children understand the basics in maths. We use these resources regularly with all abilities, as these help children to grasp the concepts which allow them to move on and deepen their learning further.

Fluency

Additional fluency is taught in all classes throughout the week, to help develop children's confidence and speed when recalling number facts and solving the four operations of number. Some of the methods we use are 5 a day, mental maths sessions, number bond and times table challenges, Power of 1 and 2, plus a range of computing apps such as Numbots, Splash maths, Hit the Button and Times table Rockstar.

Pre and Post Teaching

At Belford, we understand that all children are individuals who learn at different paces and have different learning styles that best suit them. As a result of this, we provide pre and post teaching opportunities for the children who may need additional time spent grasping the maths concept or skill. This will ensure that children are given the best opportunity to understand the learning and achieve the maths objectives from the Curriculum.

Assessments

Through our teaching, we continuously monitor pupils' progress against expected attainment for their age, making formative assessment notes where appropriate and using these to inform teaching. Summative assessments are completed at the beginning of each maths unit to assess the children's knowledge, to inform planning, and at the end of the unit to track progress made. We assess the children at the end of each term using PUMA (Progress in Understanding Mathematics Assessment), which then gives us an overall judgement in the progress that the children have made at this stage in the year. These results form discussions in our termly Pupil Progress Meetings which then informs teaching and supports decision making when planning interventions.

IMPACT

Children will show confidence in their maths learning and believe that they can apply the knowledge and skills they have been taught in maths throughout the year. They will talk enthusiastically about their maths lessons and will be able to articulate the context in which maths is being taught.

Children will show they have mastered concepts of skills when they can show it in multiple ways, using the mathematical language to explain their ideas, and independently apply the concept to new problems in unfamiliar situations.

At the end of each year, we expect the children to have achieved Age Related Expectations (ARE) for their year group with some children progressing further and achieving greater depth (GD). The children who have gaps in their mathematical knowledge will receive appropriate support and intervention to help develop a better understanding and close the learning gaps.

By the end of KS1, we aim for children to show they are fluent when using number bonds, the 2, 5 and 10 times tables and using a range of methods to help solve the four operations of number. The children will begin to make connections with their learning and use their learnt strategies to help solve mathematical problems and give reasoning for their thinking.

By the end of KS2, we aim for children to be fluent in the fundamentals of mathematics and show the ability to recall and apply their knowledge rapidly and accurately. They should have the skills to solve more complex problems by applying their mathematical skills to a variety of situations, including unfamiliar contexts. Children will be able to reason with confidence, giving justification or proof and using mathematical language.