Elkesley Primary and Nursery School

Intent, Implementation, Impact

Mathematics

Intent:

We believe that mathematics teaches us how to make sense of the world around us through developing a child's ability to calculate, to reason and to solve problems and aim to:

- Seek to equip our children with key mathematical skills and knowledge that will prepare them for the next stage in their learning and provide them with the necessary numerical foundations to be successful in adult life.
- Build a Mathematics curriculum which develops learning and results in the acquisition of knowledge and skills so that all pupils know more, remember more.
- Enable every pupil to view themselves as Mathematicians.
- Use high-quality questioning to develop critical thinkers.
- Deliver all the requirements of the national curriculum in relation to Mathematics.
- Ensure all maths lessons include opportunities to develop mathematical vocabulary.
- Make pupils aware of and apply the maths transferable skills required when linked to other subjects, as well as other aspects of their life.
- Help children to understand and appreciate number, statistics, measures and geometry.
- Support children to develop these key and fundamental skills through a teaching for mastery approach.
- The children are expected to explore and deepen their understanding of mathematics in progressive, small step lessons.
- Support children in building upon previous knowledge and known facts to reason, make connections and develop their understanding of the curriculum.
- Ensure that all pupils become fluent, reason mathematically and solve problems.

Implementation:

As part of the planning process, teachers plan the following:

- We implement our approach through high quality teaching delivering appropriately challenging work for all individuals.
- Every class from EYFS to Y6 follows the WhiteRose scheme of learning which is based on the National Curriculum. Lessons are personalised to address the individual needs and requirements for a class but coverage is maintained. Primary Stars is used to support delivery of WhiteRose resources in Key Stage 1.
- Lessons provide children with the opportunity to access varied fluency, reasoning and problem solving questions about each concept taught.
- We also use a range of planning resources including those provided by the NCETM and NRICH to enrich our children's maths diet.
- Children from EYFS through to Year 6 are taught key vocabulary which enables them to develop the confidence to explain mathematically.
- We have a range of mathematical resources in classrooms including Numicon, Base10 and counters (concrete equipment). When children have grasped a concept using concrete equipment, images and diagrams are used (pictorial) prior to moving to abstract questions. Abstract maths relies on the children understanding a concept thoroughly and being able to use their knowledge and understanding to answer and solve maths without equipment or images.
- Each half term, a key skill is taught discretely using the schools Key Instant Recall Fact planning to allow key skills to be embedded.
- In order to advance individual children's maths skills in school and at home, we utilise Times Tables Rock Stars for multiplication practise, application and consolidation; we use 10 ticks to encourage further practice and deeper understanding.
- Maths is taught across the curriculum ensuring that skills taught in these lessons are applied in other subjects.
- We have a whole school calculation policy which builds upon and extends previous methods; as children move through the school and within each new area of learning, children are taught, and expected, to apply known skills and approaches to new areas of learning.
- We celebrate National Maths Day and have whole school maths themed days.

Impact:

- Children will make at least good progress in maths from their last point of statutory assessment and from their starting point in Reception.
- Children will use their mathematical knowledge and skills, in all curriculum areas, to enable them to know more, remember more and understand more.
- Children will retain knowledge that is pertinent to applying maths with a real life context.
- Children know and remember more instant recall facts and the rules of arithmetic to enable them to solve a wide range of new problems.
- All children view themselves as a mathematician and use and apply this skill across the curriculum.