How Mathematics SHINES - Our Vision

The Shine Curriculum in Mathematics

S -Stimulating enquiring minds by providing rich and relevant experiences, purposeful and connected learning, and creative thinking.

- Offering children inspiring Mathematical experiences such as break-out rooms and helping children to understand a better financial future with lessons from NatWest bank.
- A cumulative curriculum, so that once a topic is covered it is met many times again in other contexts, often relating to real-life situations that children may encounter.
- Providing children with simulative questions to promote creative thinking and problem-solving skills.
- Giving pupils the opportunity to use and apply mathematics in a variety of everyday contexts, in practical tasks and as a powerful tool in other subjects.
- Questions are set to replicate problems that children may encounter in real life (E.G- Money, Time, Measurement.)
- Using role play in EYFS to apply Maths in real-life contexts

H -High expectations and excellence delivered rigorously through well sequenced subjects, progression in generative knowledge, rich vocabulary, concepts and skills, so pupils know more and remember more.

- Following a mastery approach to Mathematics sets high expectations for all children – building on mathematical skills in small steps allows for all children to progress each lesson, leaving no child behind.
- Rich vocabulary is built into each lesson and is displayed in all classrooms to ensure that children understand the terminology and don't see vocabulary as a barrier to their learning.
- Following the concrete, pictorial and abstract (CPA) approach, allows for differentiated support during lessons with the use of physical and visual aids, building on children's understanding allowing them to remember more.
- Allowing the pupil to develop mathematical language, so that they can communicate ideas, solve problems and explain results.
- Using maths meetings at the beginning of the day to build on retrieval skills, allowing children to remember more.
- Displaying and promoting excellence in Maths throughout school. Using this as a tool to showcase and boost expectations across all key stages.

I – Inclusivity and flexibility which allows us to cater for individual needs, abilities and interests.

- Focusing on one small step at a time, with the use of models and images, ensures lessons are inclusive to pupils with special educational needs and disabilities.
- Mixed ability seating encourages support and modelling for children throughout the lessons
- Following the concrete, pictorial and abstract (CPA) approach, allows for differentiated support during lessons with the use of physical and visual aids, building on children's understanding allowing them to remember more.
- Quality first teaching allows the teacher to address common misconceptions within the class straight away.

N -Nurturing strong, lifelong learning behaviours- resilience, risk taking, independence, perseverance, and pride in success.

- Our children are encouraged to take on challenges, reflect on their own practice, take risks when problem solving (trial and improvement) and to persevere when things get difficult.
- We encourage children to discuss problems with their peers finding different ways to answer questions before independently finding the most efficient method for themselves.
- By becoming confident in the communication of maths - pupils can ask and answer questions, openly share work and learn from mistakes.
- Children use the end of block assessments to see their progress throughout a unit and can take pride from their results, as well as identify their own areas to develop.

E -Encompassing the whole child- developing their faith, values, spirituality, health and well-being and understanding the world we live in, their future in our culturally diverse community and country where equality and tolerance is promoted.

- We aim to stimulate a thirst for further learning and knowledge by building up a body of mathematical knowledge and understanding.
- Build an understanding of well-known mathematicians, that have contributed to the way that we understand the world as it relates to numbers.
- Developing personal qualities in lessons, such as cooperation, independence in thought and action, persistence, logical and systematic thinking, creativity and flexibility.
- Using natural everyday objects in EYFS helps the children to understand the world we live in and apply maths to real-life concepts.