(Jesus said) "You are the light of the world. A town built on a hill cannot be hidden. Neither do people light a lamp and put it under a bowl. Instead they put it on a stand, and it gives light to everyone in the house. In the same way, let your light shine before others, that they may see your good deeds and glorify your father in Heaven. (Matthew 5: 14- 16) (taken from the Sermon on the Mount)

Maths at Abbey CofE Infant and Nursery School

Shine Brightly

What is Mastery of Maths?

At Abbey Infant School we believe all children can master Maths. Mastery is when children have a secure and deep understanding of mathematical skills and can apply these skills in a range of contexts, enabling them to be able to move onto more complex mathematics. We believe mastery of Maths is something **ALL** pupils can achieve.

Children will be able to reason mathematically: talking confidently about their Maths and explain how they have worked. Pupils will be able to solve problems and support other children in the class to achieve.

Mastery in Maths at Abbey

Across the school we develop a 'can do' attitude… giving all the children the belief that they can achieve. The staff make sure children have an understanding that it is OK to make mistakes and that's how we learn. "We may not be there yet…. but we will get there in the end."

What does Maths look like at Abbey?

- Whole class teaching - where the majority of pupils in their group work on the same focus/content.

- Some children will have activities which have been adapted or their learning may be supported by an adult

- Same day intervention is delivered to support children who have not securely grasped concepts in that days lesson, ensuring that they can keep up with the learning and work with the rest of the class the next day.

- Some children may be supported in a pre-teach group if they have been absent or require further support to embed skills.

- Concepts are taught, through an Anchor task in clear simple, sequential steps with objectives broken down into smaller steps. Significant time is spent developing a deep knowledge. Therefore pace of lessons is slower and a unit of work is taught over a longer period of time. We DO NOT move on unless the children's learning is secure.

- Stem sentences are used to support children to talk about their maths and to explain how they have solved a problem.

- Practise is vital to ensure confidence and fluency in mathematical skills.

- Pupils who are not sufficiently fluent with earlier skills and material should consolidate their understanding, through additional practice before moving on.

- Pupils who demonstrate that they have a secure, fluent understanding of key concepts will be given challenges and mathematical problems to extend and take their learning to a greater depth. These challenges can involve reasoning, problem solving or prove it activities. Children will be asked to apply their newly learnt skills in different contexts.

- All children will have opportunities to reason and solve problems within each lesson.

- Teaching follows a Concrete, Pictorial and Abstract structure. All children use resources when they are acquiring newly taught skills. Resources are available throughout the lessons.

- Children are introduced to a range of strategies which are consistently used across the school (e.g. Bar model and Part, part whole model)

- Links and connections within Maths are emphasised e.g. knowing the inverse operations for addition/subtraction and multiplication/division. Knowing that division and fractions can be linked, using arrays to support multiplication, division and fractions. These links help pupils develop a deep understanding.

- Key facts such as multiplication tables and addition facts are learnt automatically to avoid cognitive overload in the working memory and enable pupils to focus on new concepts.

- Skills are used across the curriculum.

How do we know a child has mastered a new skill?

Pupils demonstrate that they securely understand a concept when they can:

Describe it in his / her own words

Represent it in a variety of ways

Explain it or teach it to someone else

Make up their own examples of questions and problems

See connections between facts and concepts

Recognise and apply learning in a new or different situation

Solve problems of greater complexity

Systematically explain and generalise the Maths

Planning for Maths

Each year group has a yearly overview and termly planning maps. Topics are planned in a long block to ensure children gain a deep understanding.

Staff do not move on with the learning until children are secure and plans are used as working documents; reflecting learning and adapted to meet need.

Staff use the White Rose Hub materials to support their planning and lesson activities.

Assessing Maths

Pupils are assessed at three points in the year. White Rose assessments are used to support teachers to identify gaps in learning. Progress is discussed in Pupil Progress meetings each half term and children who are not making progress are discussed with the SENCo so interventions and support can be put in place.