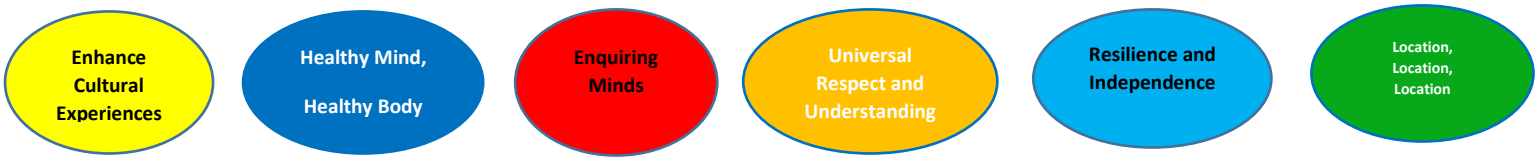
Mathematics Policy



Curriculum Statement

Mathematics provides a foundation to understanding the world in which we live and is essential to everyday life. We aim to provide a high quality maths education so that children enjoy and thrive on maths, are well prepared for their next stage of education as well as attaining a mastery of all key concepts. We want all children to become fluent in their mathematical ability so that they can reason their skills in a range of contexts and are able to retain and use knowledge and skills at the deepest level of learning.

Intent

At Richard Durning's we intend to:

- Ensure that our children have access to a wide range of high quality maths curriculum and teaching that is both challenging and enjoyable.
- Provide our children with a range of mental and written strategies which follow a carefully planned scheme of progression.
- Use a wide variety of maths opportunities which will enable the children to make the connections in learning needed to enjoy greater depth in maths.
- Remember key knowledge and skills by repeating and revisiting concepts on a regular basis so that children are able to embed these into long term memory.
- Develop a deep understanding of Place Value as this will support their mathematical understanding across a wide range of concepts.
- Apply skills and knowledge to a wide range of situations.
- Fully develop independent learners with inquisitive minds who have secure mathematical foundations and an interest in self-improvement.
- Ensure our children can solve a wide variety of problems and be confident is selecting the mathematical skills needed.
- Ensure all children enjoy mathematics and become confident in their own ability of mathematics. Be able to show resilience when solving problems and have the confidence to keep going.
- Encourage children to make links across the mathematical curriculum.
- Ensure children are exposed to a wide variety of mathematical vocabulary and are able to communicate this vocabulary in mathematical discussions. Be able to explain and use a high level of mathematical vocabulary.

- Be ready for Key Stage 3 maths by the time they leave at the end of Year 6.

Implementation

- The EYFS curriculum provides the starting point for all mathematical knowledge and skills. The outdoor environment supplements the indoor classroom and learning within maths. Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistake. The EYFS teacher is supported with planning and teaching using White Rose teaching plans for reception. Mathematical vocabulary progression document supports the first stage of children learning and understanding mathematical terms.
- We teach maths daily for approximately an hour with an additional session timetabled for KS2 – approximately 30/40 minutes.
- Teachers use White Rose Maths Planning to support their delivery. We use their medium-term plan to guide our coverage and order. Teaching PowerPoints and daily workbooks are used to ensure children have good progression through the steps of their learning.
- White Rose Calculation Policies are adhered to in order to ensure good progression through school and new learning builds on previously taught and used strategies.
- Every maths lesson begins with multiplication tables work, including number bonds for Y1/2.
- After their tables work there is a starter activity which revisits previous learning.
- Within each lesson a range of strategies are used for example, discussion, practice, use of whiteboards, physical maths, practical work with resources, using and applying activities, computers and IPads, problem solving and reasoning.
- Staff use a variety of other resources to ensure skills are taught, practised, embedded and applied in reasoning problems.
- Children will be introduced to maths concepts in a variety of ways – concrete, pictorial and abstract.
- Children are supported with number development through using a wide variety of resources and are able to use a wide range of resources to help develop their understanding.
- We use a range of online maths websites and apps to help support mathematical development – Rockstars, LBQ, Mathletics, NumberBots and Maths Seeds.
- Children correct misconceptions after marking and regularly self-evaluate their work.

- All children have a maths workbook to show their methods, complete additional work to practise fluency or deepen their understanding which works alongside their White Rose maths books.
- Children are given "fix it" time frequently.
- Each classroom has a maths working wall which reinforces the week's learning.
- Correct maths vocabulary is promoted and shared to ensure children understand the key words and able to use them confidently.
- All children have their own Knowledge Journal where the children add key mathematical vocabulary and methods. This further enhances their confidence, memory and knowledge of maths vocabulary.
- Children repeat fundamental skills to ensure that they are embedded within long term memory. This occurs on a weekly basis as well as on a repeating pattern each half term.
- Within each week children apply their learning and skills to a wide variety of using and applying / reasoning activities.
- Homework is given as part of our Homework Policy in KS2 and every other week in KS1 to reinforce concepts covered in lessons.
- Parents are supported in knowing how to help their child through annual maths workshops at the beginning of the academic year as well as a range of resources sent home.
- Children are offered the chance to take part in both internal and external maths competitions to further enhance their love of maths.
- Regular recall/revisit sessions are used to help the children remember their mathematical facts and concepts.
- A range of strategies are used to ensure knowledge and skills are transferred into long term memory.

Impact

- Within each lesson teachers continually assess and move children's learning on so that they make the best progress. This is indicated within children's books.
- Through the revisiting of knowledge and skills, teachers are able to see whether these have been understood and retained in long term memory in order to apply them to a range of situations. This knowledge directly informs future planning on a day to day basis.
- At the end of each term children undertake summative assessments. These are analysed and planning is adapted according to the results.
- Teachers assess the children's knowledge and skills against end of year expectations which are based on the National Curriculum requirements. Again this knowledge has direct impact on future teaching and plans.
- Children are tested weekly on multiplication tables to help ensure these are embedded in long term memory and children have quick recall.

- The reasoning activities are also further analysed to indicate whether children can apply their knowledge.
- Careful tracking of children's ability and progress is in place to ensure all children make the best progress and attainment across the school.

Additional Information

- All children have a right to access the curriculum. Teachers modify their plans and lessons appropriately for each child's individual needs.
- We have a Governor with responsibility for maths. Regular reports are given to Full Governors.
- Maths resources are all kept in trays with blue labels so that they can easily be identified. Some are in each classroom but the bulk of the trays are in Ruby Classroom and large apparatus is kept in the cream cupboards outside the hall.

This policy was approved by Governors July 2023.