

Richmond Hill Maths Policy 2023 -2024



At Richmond Hill we believe:

Every child has a right to a broad, balanced, coherent, consistent curriculum driven by high expectations of behaviour and achievement enveloped in a rich spectrum of experiences.

Our Golden Rule:

‘We always live by our values and always strive to do our best’

Our Maths Intent:

The intent is to design a mathematics curriculum which is accessible to all and maximises the development of every child’s ability and academic development. Mathematical vocabulary is an essential part of each lesson and children need to understand this within the area they are studying and be able to make rich connections across other areas within this subject. We believe in promoting a sustained and deepening understanding by employing a variety of mastery strategies. As well as striving for high academic standards, we place great emphasis on inclusion and the nurturing of all our children. Our curriculum is crammed with opportunities to promote pupils’ personal development to ensure we have happy children who are ready to engage and access learning.

Rationale:

At Richmond Hill School, we aim to inspire all children to reach their full academic potential. In mathematics this means ensuring a curriculum that is fully inclusive of all children and which promotes our curriculum drivers:

- To be a part of creative and engaging lessons that will give them a range of opportunities to explore mathematics following a mastery curriculum approach.
- To give each pupil a chance to believe in themselves as mathematicians and develop the power of resilience and perseverance when faced with mathematical challenges.
- To recognise that mathematics underpins much of our daily lives and therefore is of paramount importance in order that children aspire and become successful in the next stages of their learning.
- To engage all children and entitles them to the same quality of teaching and learning opportunities, striving to achieve their potential, as they belong to our school community.
- To make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.
- To provide equal opportunities for children to apply their mathematical knowledge to other subjects (cross-curricular links).

This policy is set within the context of the school's vision, aims and policy on teaching and learning. As a result of their learning in mathematics and problem solving across the curriculum children will:

- Be prepared for applying their skills effectively in everyday life situations, in their future learning and in the workplace.
- Have the building blocks in place and to provide a solid foundation to lead onto secondary, further and higher education.

At KS1 and KS2 teachers ensure that all parts of the National Curriculum Programme of Study are taught.

Through careful planning and preparation we aim to ensure that throughout the school children are given opportunities for:

- * practical activities and mathematical games
- * problem solving
- * individual, paired, group and whole class discussions and activities
- * open and closed tasks
- * a range of methods of calculating eg. mental, pencil and paper and using a calculator where appropriate.
- * working with computers as a mathematical tool.

Planning

Planning begins from a thorough understanding of children's needs through effective and rigorous assessment and tracking, combined with high expectations and ambition for all children to achieve. Each class teacher is responsible for the mathematics in his or her class in consultation with and with guidance from the mathematics coordinator.

EYFS follow the Lancashire County Council planning to help teachers ensure they plan for coverage and progression. Our school subscribes to 'White Rose Maths' and this is the programme for Year 1 to Year 6 follow. Teachers are encouraged to take learning objectives from White Rose Maths to ensure continuity, progression and ensure all key learning areas are covered. Teachers then use the plans provided as a starting point and adapt them appropriately and supplement them with other resources and plans if necessary. Before starting a new unit of work a block assessment is carried out to gain an understanding of where the children are at for this unit and look at the key areas we need to focus on.

We also use the analysis from half termly assessments in Year 6 to ensure progression is made and gaps are addressed. All other year groups carry out ongoing assessment through end of unit tests and then termly assessments from WRM. We are confident that the scheme of work more than meets the national vision for Maths.

The approach to teaching maths at RHS is based on the following principles:-

- A daily maths lesson
- A clear focus on direct, instructional teaching and interactive oral work with the whole class, small groups and individuals
- Focus on times tables daily practice and testing
- Weekly Mental Arithmetic tests with a lesson to accompany this

Teachers of the Reception class base their teaching on objectives in the Early Years Framework; this ensures that they are working towards the 'Early Learning Goal for Mathematics'. Towards the end of Reception teachers aim to draw the elements of a daily mathematics lesson together so that by the time children move into Year 1 they are familiar with the hour-long lesson.

Inclusion

Children with SEN are taught within the daily mathematics lesson and are provided with a fully differentiated lesson when necessary. Intervention groups are set up where necessary and other programmes are delivered often in place of the daily maths lesson.

When additional support staff are available to support groups or individual children they work collaboratively with the class teacher. Feedback is given to the teacher by support staff at the end of each session.

Within the daily mathematics lesson teachers not only provide activities to support children who find mathematics difficult but also activities that provide appropriate challenges for children who are high achievers in mathematics.

EYFS

We teach maths in the Early Years as an integral part of the teaching and learning covered during the year. Using both the National Curriculum and Birth to 5 Matters each provide us with the comprehensive guidance to help children and ensure we meet their needs.

Mathematics for our young children involves developing their understanding of number, quantity, shape and space. Children's curiosity and enjoyment is a key focus to our teaching and learning. We believe every child is entitled to make strong mathematical foundations which will start them off on their journey.

Marking and Assessment

Work in mathematics is marked in accordance with the school's marking policy, including feedback and next steps where appropriate. Children will be given a next step activity to further deepen and challenge knowledge. Children are always given the opportunity to react on feedback given by using a green pen. This formative assessment is used on a daily basis to plan sequential lessons.

Assessment for learning should occur throughout the entire maths lesson, enabling teachers/teaching assistants to adapt their teaching/input to meet the children's needs. This feedback should be incisive and regular. On a daily basis children should be given feedback on the learning objective giving them a sense of success.

Lesson objectives are highlighted as a way of daily assessment, orange if children needed support or aren't confident with the concept and highlighted green if children are confident.

Summative assessments for Year 6 at least once per half term in order to provide further understanding of the level a child is working at and to inform a more rounded judgement of their abilities. RHS currently use previous SATs paper. The remaining year group complete White Rose Maths end of block assessments at the end of each unit as well as termly assessments.

Tracking alongside the analysis of White Rose Maths is used in order that children who are not making good progress over time can be targeted for support in one form or another. What that support will be and how intensive, depends upon the child's needs and it may be a simple strategy within whole class teaching that is needed. Where further support is deemed necessary, children access intervention. It is the responsibility of each class teacher to ensure these interventions are sought and these children are identified. They then work in partnership with the Numeracy coordinator, SEN coordinator and Assessment coordinator to ensure the best interventions and strategies are put into place.

Displays and Resources

Each classroom has a dedicated maths display board and area. The display board should display strategies and resources that the children will find helpful during the daily maths lesson. We aim to show progression throughout the school by matching our displays to the objectives for each year group. Each classroom should also have a mathematical challenge which can be accessed by the children. All junior classrooms should have a TTRS display to show the children's status and achievements.

Mental Arithmetic

From Year 1 to Year 6 each year group is required to complete weekly mental arithmetic lessons along with a test. The aim is to ensure that these skills are constantly recapped and are not forgotten and the format becomes more familiar for children in preparation for SATs.

Weekly times table practice

Throughout the week each child practices times tables based on their current level and understanding. In all year groups 1-6 a 10-minute daily times table practice is to be completed at the start of each maths lesson. This can be verbally or a paper activity. This is a comprehensive approach to the systematic acquisition of Times Tables as well as including extra weekly activities, including TT Rockstars for KS2 children. All children should be accessing TT Rockstars daily during class IPAD time. Children in KS1 should be accessing the WRM app at least once a week.

TTRS and times tables

- 5/10 minutes at the start of each lesson to be dedicated to times tables.
- Year 4,5 and 6 must complete 10 soundchecks a week at home. This is to be checked on a Monday by class teacher and children to be kept in for 10 minutes if they have not done this.
- Heat map to be sent home to show baseline by the **end of September** and then at the **end of each term** to parents on dojo. This will show which times tables children are struggling with. This is based on times tables which are set on garage mode.
- During dedicated TTRS time on iPads children should be using each of the different modes. Decide in your class 1 day for Jamming, 1 day for Garage, 1 day for studio, 1 day for soundcheck and on a Friday children can have free choice.
- Children must do a gig once a month.
- Ownership on teacher to check stats regularly and set children tables. This should be done fortnightly.
- TTRS display in Y3, 4 and 5 to show the status of the children.
- 5 tokens given to the winning house in assembly each week who have collected the most coins.
- Certificate for the player who has earned the most coins in each class handed out in praise assemble.
- Classes to use the recorded raps to help children learn their times tables.
- Each week children must do the minimum of one written times table activity.

Expectations at home

Reception and Key Stage 1

Children to access the White Rose Maths 1 minute maths app for a minimum of 5 minutes per day.

Key Stage 2

Year 3 children are expected to spend 30 minutes per week on TTRS to begin with as they are new to TTRS. This will increase over the year.

Years 4-6 must complete 10 soundchecks at home per week.

Respect. Confidence. Support. Friendship. Kindness. Being Safe. Honesty. Happiness

Legal Framework

This policy has due regard to statutory guidance including, but not limited to, the following: • DfE (updated 2021) 'National curriculum in England: Mathematics programmes of study – Key stages 1 and 2.

Signed: Miss Airey

Date: 20th September 2023

To be reviewed: September 2024