



Ryhope Infant School Academy

Maths Policy

Updated: September 2021

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Ratified by: Governing Body

Signed: Ms Suzanne Brown
Chair of Governors

Review Date: July 2022

Our Vision

Maths is basic skill that is required in everyday life. A strong mathematical knowledge provides a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real life problems.

We want our children to learn how to be mathematical thinkers and to confidently apply their maths skills in a wide range of contexts. We want them to know how maths is important for living in modern Britain and so that they see the importance of developing these skills.

Our Intent

Using the Programmes of Study from the White Rose Hub Mastery for Maths scheme, as well as the EYFS framework it is our aim to develop the following:

- A positive attitude towards mathematics and a fascination of mathematics
- Competence and confidence with concepts and skills and a mathematical knowledge
- An ability to solve problems, to reason, to think logically and to work systematically and accurately
- Initiative and an ability to work both independently and with others
- An ability to choose and explain own methods
- An ability to use and apply mathematics across the curriculum and in real life

Rationale

A three step approach will be used when teaching to deepen learning and to ensure all learners can successfully develop a strong mathematical understanding.

We use what is known as the CPA approach:

C = 'concrete' – the use of resources to teach concepts and offer children practical methods to support understanding and so they 'can see' a process

P = 'pictorial' – moving on to drawing out pictures or diagrams to represent concepts/methods so they are thinking about the process.

A = 'abstract' – when children have a sound understanding of a concept we will then introduce the written method. They will have the process embedded by the use of the resources and the pictures so will be ready for this step.

Across the whole school, teachers will ensure that by their careful planning and preparation all children are given opportunities to:

- use maths in a cross curricular way
- work on tasks which develop knowledge, skills and understanding
- problem solve, develop reasoning skills and ability to explain methods
- learn how to calculate mentally
- record using a range of methods
- work as an individual but also in small groups and whole class situations
- use equipment and mathematical vocabulary confidently

Implementation

EYFS:

Children will be supported in developing their understanding of Problem Solving, Reasoning and Numeracy in a broad range of contexts in which they can explore, enjoy, learn, practice and talk about their developing understanding.

They will then be provided with opportunities to practise and extend their skills and to gain competence and confidence in their use.

EYFS will use the White Rose Hub scheme as a basis for teaching to ensure effective coverage of skills with a 'Maths mastery' approach.

Maths lessons will be delivered daily by teachers, with differentiation in mind. Follow-up tasks will be offered via adult led tasks as well as being integrated into the continuous provision within the setting.

In addition to daily maths lessons, children will access a 'maths meeting' whereby a range of skills will be continually practised and consolidated.

Key Stage 1:

Pupils will follow the requirements of the National Curriculum and use the White Rose Hub scheme to ensure effective coverage and a strong build-up of skills.

There will be a daily dedicated maths lesson, inclusive of a short mental warm up, followed by a whole class introduction with differentiated activities and ending with a plenary.

In addition to daily maths lessons, children will access a 'maths meeting' whereby a range of skills will be continually practised and consolidated.

Equal Opportunities

All classes are mixed ability and children will be taught with their own class, being stretched or supported through differentiated group activities. Within a mixed ability class, planning will also allow for children of differing abilities to work together as partners, to develop social interaction, mathematical language and their skills to discuss and explain. All children will have access to resources and materials suitable for their individual learning needs.

We incorporate Maths into a wide range of cross-curricular subjects and seek to take advantage of the multi-cultural aspects of mathematics.

Special Educational Needs

We will ensure that children with special needs have access to appropriate resources, support and have a means of recording, which will enable them equal access to the Maths curriculum.

LA agencies and the school SENCO will also be available to advise staff on planning Mathematical activities for pupils with an I.E.P. with specified targets. I.E.P's for individual pupils will be updated on a termly basis and will be shared with the child's parents.

Cross Curricular Links

Maths will be used in other areas of the curriculum wherever possible or appropriate. Using Maths in a purposeful way in everyday contexts will help the children to realise the importance of maths in the real world.

Some examples of this are:

Snack time – *counting out cups, talking about more/less, how many now?*

Register time – *how many children are absent? How many left in school?*

Design and Technology - *measuring, reasoning and discussing shapes/sizes*

Science - *time related vocabulary, measurements and estimations*

Geography - *position, locations and directions*

History - *chronology and time related vocabulary*

ICT

We will use ICT to enhance children's learning in Maths.

Wherever possible and appropriate the use of digital cameras, relevant websites, and Mathematical programmes will be included in the planning of a Maths lessons.

Teachers will often use the interactive whiteboard as a teaching tool or to display Mathematical programmes, such as Education City or as a means of displaying methods of calculating.

Role of the Subject Leader

This role is to ensure that all pupils receive their full Maths curriculum entitlement within EYFS and Key Stage 1.

The Maths lead will:

- Prepare, organise and lead INSET, with support of the Headteacher and SLT
- Maintain an overview of the progress and attainment in Maths across the school
- Attend LA and other training then disseminate new information to staff
- Support the Headteacher in carrying out audits and setting future targets
- Liaise with the Headteacher, SMT and Numeracy Governor
- To maintain Maths resources and to evaluate new equipment to ensure they effectively support the curriculum.

Parents as Partners

Teachers will consult with parents on a termly basis and ensure parents have up to date information on their child's progress and attainment.

Teachers will also offer parents suggestions of how they can support their child at home with their child's next steps in learning.

Monitoring and Evaluating Impact

EYFS will continue to assess children in line with Development Matters, whereby teachers will observe and document progress toward reaching the Mathematics Early learning goals.

KS1 will use teacher judgement and ongoing observations to assess children's progress in Maths. Assessment will be continual throughout the year across all year groups.

In Key Stage 1 there will be a termly low-stake test administered to enable teachers to assess understanding and to pin point any gaps in learning. The test booklet will be directly linked to the White Rose Hub planning for that term so will offer a clear judgment on each child's understanding of what has recently been taught. Where children may need interventions for specific areas this will be carefully planned for.

In all cases, data will be entered into the school tracking system half termly and will be reviewed by the Headteacher.

Covid 19 – Home learning

Due to the unfortunate circumstances, children that have to self-isolate during the Coronavirus pandemic will receive a catered plan of home learning. Each week children will have daily objectives that cover Literacy, Maths and Phonics. Particularly, Maths will include small step objectives that the rest of the cohort will be focussing on that week, in line with the National Curriculum and White Rose Hub.

Children will be able to complete daily Maths activities at home with required resources and send in hard copies via the school or photographs/worksheets of completed work through our learning platform Class Dojo. Once work is submitted, teachers will be able to access this through the children's portfolio's and they will receive feedback on each completed piece of work.

It is important to note that at Ryhope Infant School Academy, a normal classroom lesson would be dialogue-rich with lots of questioning and the teacher receiving feedback all of the time, also resources would be used as a scaffold to meet children's individual needs.

To provide this, we will deploy a variety of learning approaches and activities to support children during their home learning, using platforms such as; Class Dojo, School Website or Facebook to communicate and support learning. In order to gauge how well pupils are progressing through the curriculum, parents will be able to upload their children's work onto Class Dojo when appropriate and this will allow for teachers to gauge how successfully children have grasped that day's learning. This will then inform the teacher's planning for the following Maths lesson and allow them to identify and address any misconceptions children are experiencing. It will also aid the teacher in planning the next steps in the children's learning.

Communication between parents, pupils and teachers through the above method will be as regular as possible and enable teachers to adjust the pace or difficulty of what is being taught in response to questions or assessments to consolidate pupils' understanding.