



Learning Together, Aiming High, Proud to be Ourselves

POLICY NAME: Maths Policy

DATE ADOPTED: 6th December 2022

DATE GOVERNORS AGREED POLICY: 6th December 2022

REVIEW PERIOD: 3 years

REVIEW RECORD: Autumn 2025

Our aim at John Ray Infant School is to make each child an effective mathematician with the skills to tackle and solve mathematical problems and mastering their understanding in the different areas.

Reasons for the policy:

The purpose of this policy is:

- To reflect upon the current practice of Maths in the school.
- To ensure that the National Curriculum for Mathematics is implemented effectively throughout the school.
- To ensure Maths enhances other areas of the curriculum as well as being a subject in its own right.
- To ensure consistency of approach throughout the school recognising the need for continuity, challenge, progression and mastery.

How this policy was developed:

This policy was developed by the Maths Subject Leader during the Summer Term 2008, reviewed in September 2011 and updated in 2019 to bring it in line with current practice and new initiatives.

Factors influencing this policy document:

- The school improvement plan.
- Previous OFSTED report.
- The maths action plan which is evaluated and updated annually.
- The new National Curriculum.
- Target tracker (Sonar) analysis.

Maths in relation to John Ray Infants

We believe the following statements define the essential nature of the Maths curriculum at John Ray Infant School.

- Maths helps children to understand their environment and allows them to solve problems that occur in everyday life.
- Children are given the skills and knowledge to understand the basic number system.
- Children are encouraged to express mathematical ideas fluently by using the language of maths.
- Maths is taught giving all children the opportunity to start at the same level and then to move on as and when they are ready, challenges are planned for all children whatever their level.
- Mental maths through 'Maths Meetings' and 'Mastering Number' helps to improve fluency, rapid response and accuracy by teaching through the mastery approach.
- Learning is supported through using concrete apparatus, pictorial images moving on to abstract work to ensure progression and a deep understanding.

Our aims for the learning and teaching of Maths are as follows:

- We provide opportunities for children to explore and experience Maths in a variety of practical and play activities.
- We encourage each child to develop communication skills by explaining ideas and reasoning to others. Children are encouraged to become experts to share learning collaboratively. They are encouraged to speak in full sentences using precise mathematical language.
- We achieve continuity and progression by allowing children to use Maths in an increasing range of situations.
- Children are encouraged to use a range of resources to help develop their understanding and to know which resources are the best ones to help with different areas of learning.

- All children are given the same opportunities to show their understanding in different areas of maths then moved on at the correct pace assessed by teachers and LSAs. Teachers and LSAs are used effectively to nudge the learning forward throughout lessons by providing next steps, challenge and mastery opportunities.
- We set clear, realistic but aspirational targets for raising standards and a manageable plan for achieving them. In 2022-25 we aim for all children, regardless of their starting point to make at least expected progress.
- We teach mental maths strategies from Foundation Stage onwards and assess these regularly in Year 1 and 2 analysing results to look for gaps in teaching.
- Teachers regularly update ongoing assessments and moderate within year groups.
- Our aim is to provide all children with as wide as possible experience of Maths. We do this within a structured, progressive and balanced programme. In this way our children will all have the skills necessary to become confident Mathematicians.

Strategies for the teaching of Maths:

- Maths is taught mainly as a subject in its own right but also as a tool to support other curriculum areas.
- Teachers plan for Maths by using the White Rose scheme of work and the National Curriculum which is broken down into small steps, weekly, long term and medium-term plans.
- There is lots of opportunity for practical maths across all year groups which is recorded in class Maths Journals to embed a good understanding of concepts for all children.
- Learning objectives are introduced to the children and success criteria are drawn up so that the children understand how the objective is to be achieved.
- Children self-assess their work indicating work that they found challenging and need extra help with.
- Each class has a challenge box, used to promote mastery and independent challenge opportunities for the children.
- Opportunities for children to use Maths in real situations is planned for.
- Children are taught in whole class, mixed-ability groups, pairs and individually.
- All children are challenged within their classes. They are challenged to broaden their experience through problem solving and deepening their learning by mastering an area, rather than continue on into the next year's curriculum.
- The SEND children are identified and one plans/termly learning reports are drawn up with learning targets specified for Maths. They often work in a small group supported by the class teacher or LSA.
- Daily maths lessons boost all achievers with hover support by teacher and LSA. Maths intervention groups run across key stage 1 and support children to fill any gaps they have in their learning.

How do we plan for progression and continuity?

Continuity is ensured by following White Rose and the National Curriculum. Objectives have been put into our planning following discussion with each year group to ensure continuity from one level to the next. In year groups each objective is planned for including challenge and mastery. At the end of each lesson teachers decide next steps for learning based on knowledge and skills that have already been acquired. Children are moved on in their learning as they are ready.

Updated assessments allow for a broader coverage and highlights progression from entering, developing, securing and mastery within levels from Foundation Stage to year 2. With mastery showing a deeper understanding of an area of learning and the ability to apply this learning to different situations and being able to explain how they understand.

Foundation Stage teachers make ongoing assessments using the Development Matters of the Early Years Foundation Stage curriculum (2021) supported by White Rose statements. At the end of Foundation Stage the children are assessed against the statements of Early Learning Goals.

Maths in the Foundation Stage

- Mathematical understanding is developed through stories, songs, games and imaginative play. Practical activities take place within the inside and outside classrooms so that children enjoy experimenting and so become curious about numbers, shape patterns and measures.
- Daily activities/routines are used as opportunities for children to problem solve and develop mathematical vocabulary and thinking, e.g. counting the lunch boxes.
- Responses can take place orally, practically and written according to the activity and individual child's ability.
- Number blocks are used to develop children's understanding alongside Mastering Number.
- Children are encouraged to develop and talk about their own strategies for solving problems.

Parental Involvement

- Coverage of the maths curriculum is explained at the Welcome Meeting each year and half termly curriculum maps are sent home identifying main teaching and learning.
- At the Termly Learning Reviews parents are informed of progress in Maths and next steps are identified. Parents and children are then set own targets to be achieved together.
- The calculation policy is sent home to parents and is accessible on school website.
- Parents are invited in to participate in a Maths activity with their child.
- Parents are invited to a Maths Workshop.
- Parents are invited to stay and look at work books and discuss learning with their child.
- Maths homework tasks are set to involve the parents and keep maths high profile.
- Annual reports describe progress in maths and next steps.

ICT

ICT is a major resource which is used in a variety of ways to support our teaching and motivate the children's learning in Maths. ICT is used in the following ways:

- The Interactive Whiteboard has extensive programs on it designed to support maths (e.g.: exploring number patterns, practising and consolidating number skills, recording data in charts and graphs, experimenting with shape, developing mathematical vocabulary).
- Basic understanding of number, position and movement is explored through use of the floor turtle/Beebot and the application on the iPads.
- Mathletics app/website
- Mastering Number PPT/website resources
- Various websites have games and activities to support the whole Maths curriculum and these are shared with parents to support learners at home.

Equal opportunities in Maths

- All children (girls/boys/other) are given equal opportunities in maths and a positive attitude to all areas of the subject is promoted.
- Maths coverage should reflect the needs of each pupil. Each child is given the opportunity to bring to the subject something of their own cultural background. A cross-curricular approach allows children of any ethnic origin to do this.

Special Educational Needs:

- Children with special needs in maths are identified early through baseline assessments, teacher assessments and teacher observations.
- The class teacher works with the SENCO to plan a one plan which will contain specific learning targets in maths for individual children. Parents are informed of this and are given a copy of the one plan with included Termly Learning Review.
- SEND children will receive extra support from either the class teacher, class LSA or 1:1 LSA.

Assessment of pupils:

All teachers and support staff assess and record progress in line with the school's Teaching and Learning Policy.

We assess children through:

- Daily observations and notes made during lessons.
- Use of weekly tick sheets used by teachers to highlight whether children have achieved the learning objective.
- Pupil self assessments.
- Feedback to pupils about their progress by discussion, effective marking and next steps.
- Questioning.
- Termly Learning Reviews with specific learning targets.
- Analysis of mental maths tests.
- Analysis of SATs in Year 2.
- Tracking a group of pupils throughout the year.
- Achievement meetings, various groups are highlighted.
- Target tracker (Sonar) from Foundation Stage to Year 2 effectively tracks progress and sets targets.
- Regular use of target tracker (Sonar) by the whole year group.
- Moderation across year groups. John Ray Junior School staff in Year 3 help to moderate end of KS1 assessments.
- Up to date assessment records (assessment grids).
- Annual report and Termly Learning Reviews.

Monitoring, evaluation and review of the Maths policy:

The role of the Maths subject leader is:

- To evaluate the effectiveness of this policy through monitoring pupil progress across the school including data analysis.
- To work alongside colleagues to ensure the impact of this policy continues into classroom practise. To keep teachers up to date with new initiatives.
- To carry out work and planning scrutiny sessions to ensure progression, challenge and coverage.
- To drop into lessons and observe within the school. To monitor working walls and classroom environments.
- To carry out pupil perception surveys to understand how children feel about mathematics within our school.

The Maths Subject leader will:

- Attend relevant courses and support groups.
- Keep up to date on current issues.
- Monitor the implementation of the National Curriculum.
- Monitor updates to the White Rose scheme of work.

- Lead in-service or school led activities.
- Organise Maths workshops for parents.
- Liaise with the link governor.
- Develop a yearly action plan reflecting the School Improvement Plan.
- Review, rewrite and update the Maths policy.
- Audit resources annually (budget for resources is managed by each Year group leader).
- Book outside providers (e.g. Happy Puzzle Company) to inspire learners.
- Monitor and support the standard of teaching and learning.

Approved by Governors

Date.....