

# Withnell Fold School



## Mathematics Policy 2025 - 26

### The Nature of Mathematics

#### Aims

At Withnell Fold Primary School, we believe Mathematics should be:

- Fun
- Hands-on
- Relevant
- Challenging
- Practical

We aim to ensure that children develop a positive attitude and become confident in all areas of mathematics. They will become confident and proficient with number, including fluency with mental strategies and find connections with number. They will become problem solvers, who can reason, think logically, work systematically and become secure in their knowledge that they can apply this to new and challenging contexts when they leave us to go to secondary school and beyond.

#### Breadth of Study

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, group and whole class discussions and activities
- open and closed tasks
- a range of methods of calculating
- working with computers as a mathematical tool

## **Statutory Requirements**

Statutory requirements for the teaching and learning of Mathematics are laid out in the National Curriculum (2014)

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/335158/PRIMARY\\_national\\_curriculum\\_-\\_Mathematics\\_220714.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/335158/PRIMARY_national_curriculum_-_Mathematics_220714.pdf)

The statutory framework for the Early Years Foundation Stage (2025)

[EYFS statutory framework for group and school-based providers](#)

The Development Matters in the Early Years Foundation Stage guidance document (2023)

[Development Matters - Non-statutory curriculum guidance for the early years foundation stage](#)

## **Delivering the Curriculum**

### **Long-term planning**

The National Curriculum for Mathematics 2014, Development Matters and the Early Learning Goals (Number, Shape Space & Measure) provide the long term planning for mathematics taught in the school.

### **Medium –term planning and short-term planning**

At Withnell Fold, we use White Rose Maths as our underpinning scheme to ensure consistency of approach and break down objectives into appropriate small steps. Staff use the White Rose Maths small steps as a starting point in order to develop a coherent and comprehensive conceptual pathway through the mathematics. The White Rose Scheme is adapted to suit the specific needs of our pupils and a variety of resources are used to support this.

- Learning is broken down into small, connected steps, building from what pupils already know.
- Difficult points and potential misconceptions are identified in advance and strategies to address them planned.
- Manipulatives are used throughout the key stages (EYFS-Y6) to support mathematical thinking and understanding, with an expectation they lead to using abstract, more efficient methods as the child progresses through the key stages and develops understanding
- Key questions are planned, to challenge thinking and develop learning for all pupils.
- Contexts and representations are carefully chosen to develop reasoning skills and to help pupils link concrete ideas to abstract mathematical concepts.
- The use of high quality materials and tasks to support learning and provide access to the mathematics, is integrated into lessons. These will include White Rose Math's Schemes of Learning and Assessment Materials,

visual images and concrete resources and possibly Third Space Learning, NCETM Mastery Assessment materials and NRICH materials.

- Flashback Four and Fluency activities offer opportunities to acquire new mathematical knowledge and skills and extra fluency practice to ensure facts are at the forefront of the children's minds (instant recall of key facts, such as number bonds, times tables, division facts, addition and subtraction are provided using arithmetic challenges and platforms such as Times Table Rock Stars).

- Alternative methods of retrieval may also be interwoven to ensure children receive enough practice of relevant and necessary learning.

### **Lesson Structure**

- Lessons are sharply focused; digression is generally avoided.

- Key new learning points are identified explicitly.

- There is regular interchange between concrete/contextual ideas, pictorial representations and their abstract/symbolic representation.

- Mathematical generalisations are emphasised as they emerge from underlying mathematics, which is thoroughly explored within contexts that make sense to pupils.

- Making comparisons is an important feature of developing deep knowledge. The questions "What's the same, what's different?" are often used to draw attention to essential features of concepts.

- Repetition of key ideas (for example, in the form of whole class recitation, repeating to talk partners etc) is used frequently. This helps to verbalise and embed mathematical ideas and provides pupils with a shared language to think about and communicate mathematics.

- Teacher-led discussion is interspersed with short tasks involving pupil to pupil discussion and completion of short activities (modelling in line with the principle of 'I do, we do, you do').

- Children are given the opportunity to work independently, be reflective and learn from mistakes (no rubbers to be used in lessons, so that misconceptions can be identified by teachers).

- Formative assessment is carried out throughout the lesson; the teacher regularly checks pupils' knowledge and understanding and adjusts the lesson accordingly.

- Gaps in pupils' knowledge and understanding are identified early by in-class questioning. They are addressed rapidly through individual or small group intervention, either on the same day or the next day, which may be separate from the main mathematics lesson, to ensure all pupils are ready for the next lesson.

- Teachers discuss their mathematics teaching regularly with colleagues, sharing teaching ideas and classroom experiences in detail and working together to improve their practice.

- Lessons are adapted appropriately, when necessary, by the class teacher to ensure the individual needs of the class are being met.

### **Early Years Foundation Stage (EYFS)**

In the EYFS, mathematics is taught as part of the EYFS framework and may be delivered as whole class, small group and individual teaching. Children in EYFS explore mathematical concepts through active exploration and their everyday play-based learning.

Children are taught key concepts and develop number sense using a hands-on, practical approach. The EYFS Teacher provides opportunities for children to manipulate a variety of objects, which supports their understanding of quantity and number.

Pupils explore the 'story' of numbers to twenty and the development of models and images for numbers as a solid foundation for further progress.

The teacher allows children time for exploration and the use of concrete objects helps to support children's mathematical understanding.

Mathematics in the early years provides children with a solid foundation that will enable them to develop skills as they progress through their schooling and ensures children are ready for the National Curriculum.

EYFS teaching will encourage a developing independence and will prepare children appropriately for Year 1 learning.

### **Inclusion and SEN**

Withnell Fold Primary School aims to meet the needs of all, taking into account gender, ethnicity, culture, religion, language, disability, age and social circumstances. The provision for children with special needs is detailed in the SEND Policy.

SEN pupils may be supported by additional adults, different resources, differentiated activities. We have high expectations of all children and strongly believe that all children are able to achieve in mathematics. Some may take longer to grasp concepts and may need careful scaffolding or extra time/support.

Children who are not achieving the mathematical concepts within the lessons will receive additional support and tutoring at another time within the week (as often as is possible). Where applicable, children's IEPs incorporate suitable objectives from the National Curriculum and teachers keep these objectives in mind when planning work. When additional support staff are available to support groups or individual children, they work collaboratively with the class teacher. This will be planned for carefully to allow children to experience a broad and balanced curriculum. Numeracy IDL 'Learning By Strand' may also be used to support children's learning.

To measure progress accurately, some children will be assessed using learning objectives from PIVATs.

### **Equal Opportunities**

We incorporate mathematics into a wide range of cross-curricular subjects and seek to take advantage of multi-cultural aspects of mathematics. In mathematics lessons, we would support children with English as an additional language in a variety of ways. eg. Repeating instructions, speaking clearly, emphasising key words, using picture cues, playing mathematical games, encouraging children to join in counting, chanting, finger games, rhymes etc.

### **Pupil's Records of Their Work**

Children are taught a variety of methods for recording their work and are encouraged and helped to use the most appropriate and convenient. Children are encouraged to use mental strategies and their own jottings before resorting to more formal written methods. Children's own jottings to support their work is encouraged throughout all year groups.

Work will be recorded in within Maths books or workbooks, where appropriate. It may be that for certain lessons work is not recorded in books, this may be due to a practical element of the lesson (Active Maths), working on paper or using technology to support learning.

### **Books**

|                  |                                                                                                                                          |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Foundation Stage | Mathematics book                                                                                                                         |
| Year 1 – 6       | Printed White Rose Maths Workbooks along with a squared exercise book for adaptions, flashback four, challenges and additional jottings. |

### **Marking Guidance**

When marking work, positive affirmations should be made to increase the children's confidence and our marking policy followed. Across both Key Stages 'live marking' should be carried out with verbal feedback given on the spot. Working should then be marked at appropriate prior to the lesson if not already done so in class.

Mistakes **should not** be rubbed out in mathematics books. Instead, children should be made aware where mistakes have been made and asked to correct them alongside **their previous answer (in purple pen if feedback has been given to support the answer)**. This will be more helpful for a teacher to assess how well a child has understood the objective when they review their work. Children will be given time to respond to previous marking, either at the beginning of the next lesson or through other time allocated in the school day. This should be minimal as the majority of marking should be 'live' and during the lesson.

In KS2, some pieces of work in mathematics can be marked by children themselves, exercises involving routine practice with support and guidance from the teacher. In these cases, children should be encouraged to be

reflective learners – do they understand their mistake or do they need to ask for further guidance, this can be modelled and encouraged through appropriate questioning by the teacher.

## **Assessment**

Teachers should make good use of questioning, analyse errors and pick up on misconceptions, facilitate and listen to discussions and make observations to assess children's understanding, with a focus on challenging every child. Each mathematics lesson should be evaluated at the end and plans adapted accordingly. Objectives that need revisiting further should be included on subsequent plans.

Within the White Rose Scheme of Work, end of unit assessments are available at the end of each unit of work, as are end of term assessments.

Teachers should analyse their class data after assessments and plan appropriate support for those children who require it, including appropriate support for children working above ARE – each class teacher will have Pupil Progress meeting with a member of SLT **at least** once a term.

Y6 complete the national tests (SATs) in May and Year 4 complete the times tables screening.

## **Monitoring and Evaluation**

SLT and the Mathematics Subject Leader are responsible for the monitoring of mathematics teaching and the evidence of learning. Mathematics observations will take place annually (as a minimum); scrutiny of work will take place termly, as well as pupil voice interviews. Feedback will then be given orally and recorded on a relevant proforma. New teachers to the school and ECTs should be encouraged to observe good teachers in mathematics.

## **Staffing and Resources**

### **Resources**

There are a variety of mathematics resources available throughout the school including electronic resources such as Times Table Rock Stars, which have been subscribed to as a school. General mathematics resources are kept on the balcony above the Year 3 / 4 classroom. Children have access to resources, within the classroom that will help them to achieve the learning objectives and should be encouraged to independently access them. They should also be encouraged to ask for resources that they think will help them if not readily available. KS1 and KS2 children should be able to access resources independently within the mathematics session, as appropriate to the objective.

### **Teaching Assistants/ Support Staff**

Teaching Assistants and support staff should be used effectively to support children's mathematical learning. Teachers are responsible for providing weekly plans, or over views, and should discuss the progress of the pupil's that they were working with at the end of the lesson, in order to plan appropriate, follow up activities.

## **Parental Involvement**

Parents are invited into school twice a year to look at their children's work.

Curriculum meetings for parents will be held as appropriate.

It is our school policy to provide parents and carers with opportunities to work with their children at home. These activities may only be brief but are valuable in promoting children's learning in mathematics.

Activities are sent home on a regular basis and take the form of number games and tasks with some formal exercises, including electronic activities.

### **The Maths Subject Leader**

- Ensures teachers understand the requirements of the National Curriculum and supports them to plan lessons.
- Leads by example by setting high standards in their own teaching.
- Leads continuing professional development; facilitates joint professional development – especially Lesson Study; provides coaching and feedback for teachers to improve pupil learning.
- Leads the whole-school monitoring and evaluation of teaching and learning in mathematics by observing teaching and learning in mathematics regularly; analysing assessment data in order to plan whole school improvement in mathematics; conducting work scrutiny to inform evaluation of progress; conducting pupil interviews.
- Takes responsibility for managing own professional development by participating in external training, independent private study, engaging in educational research and scholarly reading and keeping up-to-date with Teaching Maths developments.
- Keeps parents informed about mathematics issues.
- Ensures that the school's senior leaders and governors are kept informed about the quality of teaching and learning in mathematics.
- Works in close partnership with the school's senior leaders to ensure the learning needs of all pupils in mathematics are met effectively.
- Keeps the school's policy for mathematics under regular review.

Reviewed – January 2023

Reviewed – September 2024

Reviewed– September 2025

Next Review – September 2026