OXHEY FIRST SCHOOL

MATHEMATICS POLICY

2025 - 2026

Part of the Children First Learning Partnership

The CFLP Maths Policy in respect of the Children First Learning Partnership has been discussed and adopted by the Local Advisory Board in Autumn 2025.

(To be read in conjunction with the school calculation policies)

Chair of Local Advisory Board:	*Mrs. W Parrott*
Responsible Officer:	*Head of School: Mrs. K. Proffitt*

Agreed and ratified by the Local Advisory Board on: 13/10/25

To be reviewed:	*September 2026*

INTENT

At Oxhey First School, we provide rich and varied learning opportunities that allow all children to build knowledge and develop their skills and abilities to their full potential. Underpinning this are our eight core values:

The overall intent of our school curriculum is to:

Recognise Uniqueness: in our pupils, staff, resources and whole school community.

Be Inclusive: recognising learning styles, learning needs at all levels and providing solutions to any barriers to learning we encounter.

Engage and Inspire: through knowledge rich, highly enriched, progressive and purposeful contexts.

Promote Aspiration: offering challenge, accountability and responsibility for their learning.

Create Citizens of the Future: who thrive on responsibility, see difference as a strength of our community and use democracy to embed their own values and beliefs.

Our mathematics curriculum strives to drive these intentions and links very closely to the achievement and development of each one.

Intent

- To ensure the children have a sound understanding of all mathematical concepts, we use the CPAR approach (Concrete, Pictorial, Abstract and Reasoning). Children need to make links between practical equipment, pictures and abstract numbers because they learn in different ways. The CPAR approach helps children learn new ideas and build on their existing knowledge by introducing abstract concepts in a more familiar and tangible way.
- We build on this with rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.
- This ensures that across the Children First Learning Partnership we provide a high-quality mathematics curriculum that is both challenging and enjoyable for all, whilst expanding inquisitive and resilient minds.
- All children are exposed to their age-related expectations in a keep up approach through the mastery format. Those children who are significantly working behind their year group expectations will be exposed to learning at the appropriate level for them.

Implementation

A Unit of Work (Pathway)

Across the Children First Learning Partnership, a unit pathway enables all staff to have a clear understanding of how individual, sequenced components enable all children to have a clear composite understanding of each unit. Each unit will consist of:

- National Curriculum Programmes of Study are used for long-term and medium-term planning.
- White Rose Maths (WRM) small steps programme is used for long-term, medium-term, weekly and daily lessons.
- A mastery format is delivered where all children working at their age-related expectations start at the same point and then progress through the fluency and reasoning problems at their own pace.
- Prior learning - this is achieved through targeted questioning and ongoing assessment in daily lessons.
- Working walls reflect the unit of work that is being taught and demonstrate the build-up of skills throughout the unit incorporating the CPAR model and key vocabulary. Working walls are referred to regularly throughout lessons to encourage and promote independence.
- Vocabulary - a wide range of mathematical vocabulary is modelled and displayed on the working wall and used in context to demonstrate understanding.
- Teach - The C-P-A-R concrete, pictorial, abstract and reasoning approach is used to encourage children to make links between practical equipment, pictures and abstract numbers whilst learning new ideas and building on their existing knowledge to explore abstract concepts in a more familiar and tangible way.
- Application - varied fluency, reasoning and problem solving are used to develop a deep and secure knowledge and understanding of mathematical concepts.
- Assessment - through live marking, formative and summative assessment (end of unit assessments) as well as through questioning, feedback and plenaries.

Calculation Policy

The calculation policy shows the methods we teach to solve addition, subtraction, multiplication and division problems and the progression throughout our school. Across the Children First Learning Partnership, children are taught a range of mental and pencil-and-paper methods and are encouraged to consider when different methods are appropriate and efficient.

A Lesson

Within each and every lesson, there are various sequential components which enable all children to progress no matter their ability. Below shows the sequenced order of a typical mathematics lesson across the Children First Learning Partnership:

- Daily counting / times tables - to promote automaticity with number facts.
- Daily mental starter through a flash back - used to revisit and retrieve previously taught concepts.
- Shared learning objective, success criteria and unit specific vocabulary - helps to set the context for a lesson.

- Teaching exposition (I do) - of a variety of strategies / small steps are used to model and explore new concepts.
- Practise (We do) - Opportunities to discuss learning with learning partners. Children are encouraged to speak in full sentences and reinforce vocabulary in context. Use of manipulatives – exploring the concrete, pictorial, abstract approach where necessary.
- Assessment for learning question/task (You do) - used to identify the level of scaffolding the children may need to access during the lesson.
- Scaffolded learning activities linked to the learning objective to ensure all children achieve the learning outcome.
- Problem solving + reasoning – Children are encouraged to explain and justify their thinking (independently and through guided sessions).
- Evaluate - refer to learning objective and success criteria.

Lessons are planned from the year group Programmes of Study from the National Curriculum. Teachers will be aware of the pre-units that need to be secure from previous year groups to ensure new content can be understood. The Programmes of Study are then broken down into smaller steps to ensure lessons are driven by sharp learning objectives that are progressively linked. Individual lessons are carefully designed using the most effective teaching materials so that pupils are given the best opportunities to show their understanding. Variation is consciously built in by teachers so that pupils can apply their learning to different contexts and make links.

Mathematical Language

Across the Children First Learning Partnership, we understand that mathematical language is crucial in developing mathematical thinking. We introduce new vocabulary from the curriculum in a suitable context, with relevant real objects, mathematical apparatus, pictures and/or diagrams, explaining their meanings carefully. Key vocabulary is displayed on working walls.

In most lessons, children work in pairs; discussing, explaining, disagreeing and proving mathematical ideas, which is integral to building understanding. Children work together so that through their dialogue they can develop a much stronger understanding.

All adults model the correct use of mathematical language and insist pupils do the same. Sentence stems are used to support children to speak about their work in full sentences using the correct terminology. Children understand and remember concepts far better when an answer is given within the context of a sentence.

Manipulatives

A manipulative is a physical object that children or teachers can touch and move which is used to support the teaching and learning of mathematics. In our lessons, Numicon, cuisenaire rods and dienes blocks (and many more) are used regularly to support children to engage with mathematical ideas. The most appropriate and effective manipulatives are carefully selected.

Pitch, Pace and Challenge

Within the Children First Learning Partnership, the expectation is that the majority of children will move through the topics at broadly the same pace. However, decisions about when to progress will always be based on the security of children's understanding and their readiness to progress to the next stage. Children who grasp concepts rapidly will be challenged through being offered rich and sophisticated problems. Those who are not sufficiently fluent with earlier material will consolidate their understanding, including additional practice, before moving on (pre-teach/ intervention).

Solving Problems

Across the Children First Learning Partnership, we teach a variety of problem-solving strategies which enable them to make sense of unfamiliar situations and tackle them intelligently.

Class teachers will seek opportunities for teaching problem solving strategies and more open-ended investigations that reinforce the unit of learning and encourage children to use their reasoning/ problem solving skills. Within this, children will be encouraged to predict, work systematically, justify, test their answers, record and identify patterns. All children will regularly access problem solving and reasoning activities linked to the unit of work.

A range of visual strategies are used to help children understand a problem. These are pictorial representations of problems or concepts that can be used for any of the operations: addition, subtraction, multiplication and division. In word problems, these strategies have a huge benefit in helping children decide which operations to use or visualise problems.

While working on a problem, children are encouraged to use their metacognition to ask questions like, What am I trying to work out?, How am I going about it?, Is the approach that I'm taking working? and What other approaches could I try? When the problem is completed, children are encouraged to answer questions like, What worked well when solving this problem?, What didn't work well?, What other problems could be solved by a similar approach? and What similar problems to this one have I solved in the past? Children should communicate their thinking verbally and in writing—using representations, expressions and equations - to both teachers and other children.

Pupils are encouraged to develop a 'have a go' attitude and are comfortable with making mistakes, as they are seen as part of the learning process. Working out and understanding the mathematics is valued more than the answer.

Mathematical Knowledge

Quick and automatic retrieval of number facts is important for success in mathematics. It is likely that children who have problems retrieving addition, subtraction, multiplication, and division facts, including number bonds and multiples, will have difficulty understanding and using mathematical concepts they encounter later on in their lessons. Across the Children First Learning Partnership, we ensure that children are given ample opportunities to develop fluent recall and automaticity of number facts. Mental starters are used at the start of lessons in a variety of ways to ensure prior learning is revisited and reinforced. In the Early Years Foundation Stage and Key Stage 1, children also take part in daily counting. In Key Stage 2, times tables and number facts are taught daily to develop fluency and automaticity.

Impact

What we aim to achieve from our mathematics curriculum across the Children's First Learning Partnership:

- 'Mastery' is something we want all children to achieve and involves utilising a range of strategies to help children develop a deep and secure knowledge and understanding of mathematics.
- All staff model positive attitudes towards mathematics and a belief that all pupils can succeed.
- An enjoyment and curiosity of mathematics and for children to feel confident to become successful.
- Children's abilities to use and apply mathematics to solve problems in both the classroom and in 'real life' contexts.
- A confidence to communicate ideas in written form and orally.
- Independent and collaborative ways of working, encouraging children to share ideas and solve problems together.
- A wide range of mathematical vocabulary to be modelled and used in the classroom.
- The children's ability to recall mental facts accurately and quickly and using effective written calculation methods.
- Children's logical thinking, reasoning and ability to problem solve as transferable life skills.

Assessment

Our impact will be measured by using both formative and summative assessment.

Formative

Assessment is not just used to track children's learning through the use of assessment trackers but also provides teachers with up-to-date and accurate information about the specifics of what children do and do not know. This information allows teachers to adapt their teaching so it builds on children's existing knowledge, addresses their weaknesses, and focuses on the next steps that they need in order to make progress.

Within the Children First Learning Partnership, assessment in mathematics is continuous. From the beginning of every lesson, teachers and teaching assistants will be assessing what their children are, or are not understanding and use this to scaffold each segment of the lesson. Interventions will be both planned for and 'live', meaning that misconceptions are dealt with immediately and high attaining children are challenged appropriately. We pride ourselves in our use of continuous AFL to identify and direct children's next steps in learning. Our staff are highly skilled to provide a personalised and flexible curriculum for individual children that may need reasonable adjustments to the curriculum. These adaptations increase access to the lesson content enabling them to reach their full potential.

Effective marking and feedback are an important element of teachers' responses to children's learning. This is given orally during live marking and is always:

- specific, accurate and clear
- celebrates success
- compares what a pupil is doing right now with what they have needed to improve before
- provides specific guidance on how to improve as their next step

Summative

As part of our assessment and to support teacher's judgements, each class will undertake a termly formal assessment, which assesses termly concepts that have been taught. This is then converted and analysed through scaled scores which are evaluated termly by leaders.

Statutory Assessments

All children in Year 4 access the Year 4 Multiplication Check, which takes place in June every year. This is an online test where children are exposed to 25 multiplication questions from the 2 times table up to the 12 times table. For each question, children have 6 seconds to answer.

Role of Leaders

- Plan an effective and varied schedule of monitoring including moderations, which is triangulated through our school leaders and triad moderation so that we know the Quality of Education in mathematics is implemented and embedded throughout the school.
- Respond quickly and supportively to all barriers preventing outstanding implementation and impact in mathematics.
- Support staff to identify potential barriers and plan effective and quantifiable interventions.
- Use assessment information to provide effective CPD and challenge.
- Provide clear updates to the Local Advisory Board, Headteacher and SLT.

Version Control

Version	Review Date	Changes Made
V2	14.01.2022	CPAR approach (Concrete, Pictorial, Abstract and Reasoning).
V2	14.01.2022	Change the the order of 'a lesson' with the addition of daily counting / times tables, the rearranging of the AFL being moved to after the practise, Differentiated changed to scaffolding and with the addition of (independent and through guided sessions) on the problem solving and reasoning
V2	14.01.2022	Through the document 'At Children First Learning Partnership change to Across the Children First Learning Partnership
V2	14.01.2022	Within 'solving problems' - RUCSAC is an acronym displayed in every KS2 classroom and discussed with children within KS1 to help children remember how to tackle mathematical word problems. Read, Understand/ Underline, Choose, Solve, Answer, Check. You can help children to understand this further with these simple explanations:
V2	14.01.2022	Within 'mathematical knowledge' – the addition to automaticity of number facts
V2	14.01.2022	Within 'Assessment' – the wording ladders has been exchanged with trackers

V2	14.01.2022	Within 'Assessment' - Effective marking and feedback are an important element of teachers' responses to children's learning. This may be given either orally during live marking or during a marking conference.
V3	12.1.23	Within 'Intent' – addition of All children are exposed to their age related expectations in a keep up approach through the mastery format. Those children who are significantly working behind their year group expectations will be exposed to learning which at the appropriate level for them
V3	12.1.23	Within ' A lesson' – each bullet point has been expanded to explain what this means.
V3	12.1.23	Within 'A lesson' – The addition of A mastery format is delivered where all children working at their age related expectations all start at the same point and then progress through the fluency and reasoning problems at their own pace.
V3	12.1.23	Within 'A lesson' – The addition of the wording small steps within the Teaching Exposition bullet point.
V3	12.1.23	Within 'Pitch, Pace and Challenge' – the removal of 'before being moved on'
V3	12.1.23	Within 'Assessment' – in 'Formative' the addition of continuous has been added within the ' We pride ourselves in our use of continuous AFL.'
V3	12.1.23	Within 'Mathematical Knowledge' – in 'impact' the addition of Mastery' is something we want all children to achieve and involves utilising a range of strategies to help children develop a deep and secure knowledge and understanding of maths.
V3	12.1.23	Within 'Role of Leaders' – the addition of Support staff to identify potential barriers and plan effective and quantifiable interventions.
V4	9.1.24	Within 'Assessment' marking conferences has been removed.
V4	9.1.24	Added for all in intent
V4	9.1.24	In a unit of work (pathway) Pre Unit A has been added to prior learning and (prior learning A and end of unit assessments B) in assessment

V4	9.1.24	In 'a lesson' (I do), (We do) and (You do) has been added
V4	9.1.24	In 'Solving Problems' bar models has been replaced with a variety of strategies and metacognition has been added into the question paragraph
V4	9.1.24	In 'Role of the Leaders' including moderations, which is triangulated through our school leader and triad moderation has been added.
V5	3.10.25	• Prior Learning- this is achieved through targeted questioning and on going assessment through daily lessons.
V5	3.10.25	• Assess- through live marking, formative and summative assessment (end of unit assessments) as well as through questioning, feedback and plenaries.
V5	3.10.25	• Practise (We do)- Opportunities to discuss learning with learning partners - Children are encouraged to speak in full sentences and reinforce vocabulary in context. Use of manipulatives – exploring the concrete, pictorial, abstract approach where necessary.
V5	3.10.25	• Within the Children First Learning Partnership, the expectation is that the majority of children will move through the topics at broadly the same pace.
V5	3.10.25	• In our lessons Numicon, cuisenaire rods and dienes blocks (and many more) are used regularly to support children to engage with mathematical ideas
V5	3.10.25	• Class teachers will seek opportunities for teaching problem solving strategies and more open-ended investigations that reinforce the unit of learning and encourage children to use their reasoning/ problem solving skills.
V5	3.10.25	• Within the Children First Learning Partnership, assessment in Maths is continuous
V5	3.10.25	• This is given orally during live marking and is always:
V5	3.10.25	<u>Statutory Assessments</u> All children in Year 4 access the Year 4 Multiplication Check, which takes place in June every year. This is an online test where children are exposed to 25 multiplication questions from the 2

		times table up to the 12 times table. For each question, children have 6 seconds to answer.