



SUBJECT ACTION PLAN

Subject: Mathematics

Subject lead: Melissa Pearce

Year: 2024-25

CONTEXT

We have been on our journey of mastery for many years and are yielding the positive impacts. Not only are our pupils gaining increased proficiency in calculation and reasoning, but also a genuine enjoyment and excitement about mathematics. Purposeful monitoring and the embedding of a rigorous assessment system for all groups demonstrated the dedication to improving standards using approaches that fully engage the children's mathematical minds. We are thinking of new and more efficient ways to teach concepts- creating carefully crafted sequences of lessons in which children are given the time, space and resources to master their mathematics.

A clear intent and implementation plan for the teaching and learning of mathematics has been shared and embraced by staff and other stakeholders.

Additionally, a whole school calculation policy has been written and embedded and parental involvement has been a consistent focus. Calculation evenings and frequent communication have engaged parents in our approach to the teaching and learning of maths at Farnsfield St Michaels.

This year, a whole school, consistent approach to effective mixed age mastery planning, teaching and assessment will be a focus to ensure comprehensive coverage of concepts and quality of delivery for all pupils in their own class.

SUBJECT LONG-TERM PLAN (2 YEAR TIMESCALE):

- To ensure all children are making at least expected progress from their starting points, including in end of year, formative and summative assessments and at least in line with national standards.
- To develop our provision of a mixed age, mastery curriculum with the highest quality opportunities for consolidation of concepts as well as demonstrating deeper understanding of Mathematical concepts and skills.
- To enhance our provision of manipulatives throughout the school to effectively build on children's existing understanding of key concepts, turning knowledge into skills.

SUBJECT PRIORITIES (1 YEAR TIMESCALE):

1. To support staff to develop and deliver a mixed age, mastery curriculum with the highest quality opportunities for consolidation of concepts as well as demonstrating deeper understanding of Mathematical concepts and skills.
2. To ensure that children can recall their multiplication facts fluently by the end of Year 4.
3. To enhance the working, learning environments to effectively build on children's existing understanding of key concepts, consolidating knowledge and skills using effective manipulatives in engaging and interactive learning spaces (focus on the working wall also).

SUBJECT PRIORITY 1: To support staff to develop and deliver a mixed age, mastery curriculum with the highest quality opportunities for consolidation of concepts as well as demonstrating deeper understanding of Mathematical concepts and skills.

Member of staff with overall responsibility: Melissa Pearce

Targets	Actions to be taken	By whom	By when	Resources needed	Success criteria	Monitoring	RAG
Staff are confident in their provision for mixed age mastery in their year groups.	Provide support in the form of resources, conversations, and ideas. PD meeting (Summer 2024) established expectations for delivery of mixed age mastery.	MP	Autumn 2024	Time to support staff and regular correspondence.	Staff feel supported and confident to provide high quality, mixed age mastery maths learning being able to effectively target each year group	MP	
WRM mixed age mastery scheme followed by all classes	Ensure all staff follow the structure of the LTPs for mixed age mastery using the White Rose resources. Supplement using other high-quality resources.	MP	Autumn 2024	WRM subscription Monitoring time	Staff follow the structure of WRM mixed age mastery LTPs and utilise the materials provided. Ensure other high-quality resources are utilized to develop fluency, reasoning and problem solving.	MP Learning walks, pupil conversations and book looks.	
Check coverage of Mathematics according to the mixed age, long-term overview and ensure that all the knowledge	View learning material from each phase to check what is being taught in Mathematics. Carry out a learning walk to observe provision across school.	MP	Autumn 2024	Monitoring time	Specified units for each year group have been covered. Mastery is at the core of the mixed age approach. Staff utilise a range of approaches to ensure its success.	MP Learning walks, pupil conversations and book looks.	

<p>and skills are being covered.</p> <p>Structured intervention in place to close the gap between lower attaining pupils in their cohort.</p>	<p>Communicate with staff to utilise intervention opportunities and support with materials if needed.</p>	<p>MP</p>	<p>Autumn 24</p>	<p>Monitoring time.</p>	<p>Ensure staff identify those pupils needing further support and utilise intervention opportunities.</p>	<p>MP Learning walks, pupil conversations and book looks.</p>	
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SUBJECT PRIORITY 2: To ensure that children can recall their multiplication facts fluently by the end of Year 4.

Fluency in multiplication facts leads to pupils tackling more complex problems with greater confidence and resilience. Because they are no longer having to tackle remembering how to do the calculations needed or the most appropriate strategy to choose each time, they are able to put all their energy into how to solve their mathematical problem.
 Attainment in the Year 4 Multiplications Tables Check is = to or higher than national

Member of staff with overall responsibility: Melissa Pearce

Targets	Actions to be taken	By whom	By when	Resources needed	Success criteria	Monitoring	RAG
Quality first teaching is in place across the school in coverage of multiplication and division.	Share focus in PD meetings, and regular communication with teachers, particularly those in Year 4.	MP	Autumn 2024	Monitoring time. Access to planning and provision.	Explicitly teach multiplication using a range of high-quality representations ensuring children understand the concept. Teachers to adhere to the progression document to ensure curriculum coverage. Year 3 and 4 to include daily focus.	MP	
High quality intervention is used for identified children	Communicate with staff to utilise intervention opportunities and support with materials if needed.	MP	Autumn 24	Monitoring time. Access to planning and provision and pupil interviews.	Ensure staff identify those pupils needing further support and utilise intervention opportunities.	MP	
Expectations are communicated effectively with parents and carers	Regular communications with stakeholders around expectations for multiplication and division knowledge and homework engagement. (In Year 4).	MP	Termly	TT Rockstar subscription Email	Parents and carers are informed of expectations half-termly. Incompletion of homework is communicated with parents.	MP	

High engagement with TT Rockstars platform.	Relaunch TT Rockstars as platform to practice multiplication and division and raise profile throughout school.	MP	Autumn 2024 (2)	TT Rockstars platform	Relaunch TT Rockstars and raise profile throughout school (display, weekly check-ins). Rewards for engagement (additional playtime for the class) Expectation that incompleteness of homework will be done in school.	MP	
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SUBJECT PRIORITY 3: To enhance the working, learning environments to effectively build on children’s existing understanding of key concepts, consolidating knowledge and skills using effective manipulatives in engaging and interactive learning spaces (focus on the working wall also).

Research has shown that teaching with physical manipulatives has significant positive impact on learning in Maths (Carbonneau, K.J., Marley, S.C. & Selig, J.P. 2013) - children need hands on and visual hooks to understand new concepts in Maths - In Key Stage 2 we increase the chances of children realising the concepts for themselves if we continue using maths manipulatives at this point thereby providing the most powerful type of learning.

Member of staff with overall responsibility: Melissa Pearce

Targets	Actions to be taken	By whom	By when	Resources needed	Success criteria	Monitoring	RAG
Teachers confident in the use of teaching mathematical concepts using manipulatives.	PD meeting (October 10 th 2024) used to provide CPD in use of manipulatives.	MP	Autumn 2024	PD meeting time	All staff will understand best practice in the use of teaching mathematical concepts using manipulatives for their year groups.	MP	
A range of high-quality manipulatives available to every class to support understanding in maths.	Audit of maths manipulatives and an inventory of manipulatives for each phase created after consultation with staff members. Additional resources purchased/created in response to ensure each class has the necessary tools to support understanding in maths.	MP	Spring 2025	Mathematical budget to purchase some resources/print/laminated resources.	Learning environments demonstrate access to manipulatives and pupils confident in their use.	MP Learning walks and pupil interviews	

<p>Children to self-select the manipulative they require to support mathematical mastery.</p>	<p>Maths manipulatives to be accessible to all children. Staff encourage children to use manipulatives as a way of deepening their understanding rather than as a crutch to find an answer and that deep understanding in maths is our aim rather than simply finding a correct answer.</p> <p>Chn model to peers how they have used manipulatives to demonstrate their understanding of maths concepts.</p>	<p>MP</p>	<p>Spring 2025</p>	<p>Mathematical budget to purchase some resources/print/laminated resources.</p>	<p>Children to become independent learners, who are given the choice of which manipulative they think would best suit the task and then be able to reflect on and explain what they did.</p>	<p>MP</p> <p>Learning walks and pupil interviews</p>	
<p>Utilise the working wall to support children in their current learning and enable independence.</p>	<p>PD meeting to share expectations for the maths working wall. Staff to include modelled examples, relevant vocabulary and promote deeper thinking by interacting with the working wall.</p>	<p>MP</p>	<p>Spring 2025</p>	<p>PD meeting time.</p>	<p>Children interact with the working wall to support, consolidate and extend their learning.</p>	<p>MP</p> <p>Learning walks and pupil interviews</p>	

Monitor the impact of the implementation of manipulatives across school.	Learning walks, book looks, and planning looks to evidence the impact of access to manipulatives.	MP	Spring 2025	Monitoring time-learning materials and pupil interviews.	Learning walks, book looks, and planning looks to evidence the impact of access to manipulatives.	MP Learning walks and pupil interviews	
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