



# Ludham Primary School and Nursery Maths Action Plan 2022 – 2023

**Team Members:** (Maths Leads: RA/LM/Teaching Staff)

**Priority One:** To ensure all children are making at least expected progress from their starting points.

**Priority Two:** To ensure children are able to recall their multiplication facts fluently by the end of Year 4.

**Priority Three:** To increase the use of manipulatives throughout the school to effectively build on children's existing understanding of key maths concepts, turning knowledge in to skills.

Priority 1		To ensure all children are making at least expected progress from their starting points.					
Rationale		- All children can succeed at mathematics. No child should be left behind. At Ludham Primary School, our focus is on on pupils 'keeping up over catching up'.					
Success Criteria		<ul style="list-style-type: none"> <li>- Percentage of children working at expected level by the end of Reception = or above national in 2023 (using in school tracking system)</li> <li>- Percentage of children meeting the expected standard in KS1 SATs assessment = or above national in 2023</li> <li>- Percentage of children meeting the expected standard in KS2 Sats assessment = or above national in 2023</li> </ul>					
Outcome of Success Criteria (July 2023)		-					
Intended Outcomes		Actions	Who	Resource/Time	Timescale	Monitoring	Evaluation
1.1	WRM scheme followed by all classes	<ul style="list-style-type: none"> <li>Ensure all teachers know where to find the planning and resources for WRM</li> </ul>	Maths Leads/Teachers	Online resources  Cost: £180  Share passwords	Autumn 1	RA/LM to monitor through termly observations/ learning walks	Governors report from Deep Dive Day  RA/LM to compare KS 1 / 2 data with National
		<ul style="list-style-type: none"> <li>Closely monitor the teaching of maths across all classes to ensure consistency</li> </ul>	Maths Leads/Teachers	Observation time	Throughout the year		
		<ul style="list-style-type: none"> <li>Provide staff with an agreed rubric for how maths lessons are taught at LPS</li> </ul>	Maths leads/Teachers	SMT release time	Spring Term		
		<ul style="list-style-type: none"> <li>Staff CPD provided alongside circulation of rubric</li> </ul>	Maths leads/Teachers	Staff meeting	Spring term		
1.2	Children will be able to demonstrate age-appropriate skills required for all elements of maths through quality first teaching	<ul style="list-style-type: none"> <li>Teachers to complete KIRF assessments 3 times each term to ensure all children have the necessary instant recall of key facts.</li> </ul>	Maths Leads/Teachers	KIRF assessments circulated to all staff and saved to One Drive	Throughout the year	RA/LM/AG To monitor KIRF assessment data and end of term data to ensure that all pupils are on track.	LM to compare 2022 Reception data with end of 2019 data
		<ul style="list-style-type: none"> <li>Teachers to identify children who have been identified as not having the necessary KIRFs and plan relevant and speedy intervention.</li> </ul>	Teachers	PPA time used to plan interventions where necessary. Class TAs used to deliver intervention where appropriate.	Throughout the year		
		<ul style="list-style-type: none"> <li>Interactive working walls in use in every classroom with key vocabulary clearly displayed.</li> </ul>	Teachers	-	Throughout the year		
		<ul style="list-style-type: none"> <li>KIRF information sheets detailing each term's Key Facts and how to support children at home to be shared with KS1/2 parents via the class dojo</li> </ul>	KS1/2 Teachers	Resources for reading diaries	Autumn Term		

1.3	Parents know how to support their children with maths at home			printed out		RA/LM to monitor through parent questionnaire
		<ul style="list-style-type: none"> <li>Maths homework to recap work previously covered in class sent home weekly in Key Stage 2</li> </ul>	Teachers	Tapestry Dojo	Throughout the year	
		<ul style="list-style-type: none"> <li>Parents invited in to school for Easter maths event</li> </ul>	Maths Leads/Teachers	PTA provide Easter egg prizes RA to plan Maths themed Easter egg hunt.	Spring	
		<ul style="list-style-type: none"> <li>Maths challenges shared weekly with EYFS parents via their newsletter</li> </ul>	LM	Tapestry	Weekly	
1.4	Structured intervention in place to close the gap between lower attaining pupils and their cohort.	<ul style="list-style-type: none"> <li>Numberstacks intervention purchased and Support Staff trained in how to deliver</li> </ul>	RA	£210	Autumn 1	RA to monitor that pupils are progressing through the program in a timely manner.  Assessment data for pupils receiving intervention to be scrutinised.
		<ul style="list-style-type: none"> <li>All children at risk of not making expected progress assessed to identify their start point on the Numberstacks program</li> </ul>	Support staff	Assessment resources from Numberstacks Circulated by RA	Autumn 1	
		<ul style="list-style-type: none"> <li>Numberstacks intervention timetable produced</li> </ul>	RA	SMT release time	Autumn 1	

<b>Priority 2</b>		<b>To ensure children are able to recall their multiplication facts fluently by the end of Year 4</b>					
<b>Rationale</b>		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.					
<b>Success Criteria</b>		- Attainment in the Year 4 Multiplications Tables Check is = to or higher than national					
<b>Outcome of Success Criteria (July 2021)</b>		-					
<b>Intended Outcomes</b>		<b>Actions</b>	<b>Who</b>	<b>Resource/ Time</b>	<b>Timescale</b>	<b>Monitoring</b>	<b>Evaluation</b>
2.1	<b>Quality first teaching is in place across the school</b>	- All daily maths lessons to include counting.	Teachers	-Counting sticks	Throughout the year	RA/AG learning walk	SLT end of year review of progress against whole school priorities
		- Teachers to adhere to the progression document to ensure curriculum coverage. Teachers to recap prior learning before progressing on to new knowledge.	AG/RA/LM/JA All teachers	-Progression document from WRM saved to OneDrive	Throughout the year.		
		- Explicitly teach multiplication as repeated addition, ensuring children understand the concept of multiplication and are able to represent products using pictures and concrete apparatus before moving on to using written methods.	All teachers	-DML	Throughout the year		
2.2	<b>High quality intervention is used for identified children</b>	- NK to provide intervention for children identified as at risk of not being fluent in multiplication recall by the end of Y4	NK		Spring Term 2023	RA book scrutiny	SLT end of year review of progress against whole school priorities
		- TTRockstars used to raise attainment in multiplication recall.	Teachers	£120.20	Throughout the year.		
2.3	<b>Expectations are communicated effectively with parents</b>	- Multiplication Check Information For Parents shared via Dojo in Owls class.	AJ/KH		Spring Term 1		

<b>Priority 3</b>		<b>To increase the use of manipulatives throughout the school to effectively build on children's existing understanding of key maths concepts, turning knowledge in to skills.</b>					
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<b>Rationale</b>		<ul style="list-style-type: none"> <li>- Research has shown that teaching with physical manipulatives has significant positive impact on learning in Maths (Carbonneau, K.J., Marley, S.C. &amp; Selig, J.P. 2013)</li> <li>- children need hands on and visual hooks to understand new concepts in Maths</li> <li>- 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.</li> </ul>	-	-			
<b>Success Criteria</b>		<ul style="list-style-type: none"> <li>- All teachers confident in what manipulatives to use and how to use them</li> <li>- Children independently choosing manipulatives to support their understanding in maths</li> </ul>	-	-			
<b>Outcome of Success Criteria (July 2023)</b>		-					
<b>Intended Outcomes</b>		<b>Actions</b>	<b>Who</b>	<b>Resource/ Time</b>	<b>Timescale</b>	<b>Monitoring</b>	<b>Evaluation</b>
3.1	Teachers confident in the use of teaching new mathematical concepts using manipulatives.	<ul style="list-style-type: none"> <li>- Staff meeting time used to provide CPD in use of manipulatives in the DML.</li> </ul>	Math Leads/Teachers	Staff meeting	Spring 2	RA/LM/Ag to monitor through lesson obs	
		<ul style="list-style-type: none"> <li>- 'Guide to hands on manipulative's document shared with teachers via the OneDrive</li> </ul>	RA/Teachers	Third Space Learning Guide to hands on manipulatives.	Spring 1		
3.2	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	<ul style="list-style-type: none"> <li>- Maths manipulatives to be accessible to all children in every maths lesson.</li> </ul>	Teachers	DML	Throughout the year	RA/LM/AG  to monitor what is happening in classrooms throughout the year	Complete Pupil Voice survey
		<ul style="list-style-type: none"> <li>- Children given the opportunity to explore manipulatives in order to understand concepts rather than always simply observing the teacher demonstrating/modelling how they should be used.</li> </ul>	Teachers	DML	Throughout the year		
		<ul style="list-style-type: none"> <li>- Staff to encourage children to use manipulatives as a way of deepening their understanding rather than as a crutch to find an answer.</li> </ul>	Teachers	DML	Throughout the year		
		<ul style="list-style-type: none"> <li>- Staff to ensure children are made aware that deep understanding in maths is our aim rather than simply finding a correct answer.</li> </ul>	Teachers	DML	Throughout the year		
		<ul style="list-style-type: none"> <li>- Chn are given the opportunity to model to peers how they have used manipulatives to demonstrate their understanding of maths concepts.</li> </ul>	Teachers	DML	Throughout the year		
3.3	A range of high quality manipulatives available to every class to support understanding in maths.	-Audit of maths manipulatives completed	RA/LM	SL time	Spring 1		
		<ul style="list-style-type: none"> <li>- An inventory of manipulatives in each class created.</li> </ul>	RA/LM	SL time	Summer 1		
		<ul style="list-style-type: none"> <li>- Additional resources purchased in response to the audit to ensure each class has the necessary tools to support understanding in maths,</li> </ul>	RA/LM		Spring 2		