

Ashleigh Primary and Nursery School

Maths Improvement and Development Plan

2020/2021

We believe that every child can master an understanding and love of maths with the right kind of teaching and support.

Contents:

Priority One: To develop the practice of maths journaling to promote children's metacognition.

Priority Two: To use cross curricular opportunities to develop pupils' mathematical understanding.

Priority Three: To increase the use of collaborative learning in maths lessons.

Priority one		To develop the practice of maths journaling to promote children's metacognition.					
Rationale		<ul style="list-style-type: none"> - To embed an already existing mastery curriculum throughout the school. - To promote the value of children's metacognition. - Teachers should reinforce an expectation that all pupils are capable of achieving. 					
Success Criteria		<ul style="list-style-type: none"> - Each child from in Years 2-6 will have their own Maths Journal. - Children's metacognition has developed to support them in becoming more confident mathematicians. 					
Intended Outcomes		Actions	Who	Resource/ Time	Timescale	Monitoring	Evaluation
1.1	Children understand why Maths Journals are important.	<p>Reintroduce giant giants throughout the school.</p> <ul style="list-style-type: none"> - Assembly to whole school to introduce how journals will support them in becoming better mathematicians. - Assemblies every half term to celebrate a journal giant from each class in years 2-6. The children will receive a certificate and their picture will go onto the school website. 	<p>JW</p> <p>JW and class teachers Years 2-6</p>	<p>Spring 1 assembly time</p> <p>One assembly each half term</p>	Spring Term	JW to complete learning walks to monitor the use of Maths journals.	Pupil voice about the use of Maths Journal.
1.2	Maths journals are being used regularly in Maths lessons.	<p>All children in Years 2 – 6 will have an identical maths journal (A5 orange squared exercise book).</p> <p>Journal activities will be planned in for at least once a week.</p>	<p>JW</p> <p>Class teachers Years 2-6</p>	Journals to be purchased for all children in years 2-6.	<p>Spring Term</p> <p>2020-2021 academic year</p>	JW to complete learning walks to monitor the use of Maths journals.	Pupil voice about the use of Maths Journal.
1.3	Teachers feel more confident in utilising maths journals in lessons.	<p>Complete a staff meeting to audit use of maths journals. Then discuss new ideas/research about how to use maths journals in the future.</p> <p>Sharing research and articles about maths journals with staff.</p>	<p>JW</p> <p>JW</p>	<p>Staff meeting Spring term 2021</p> <p>MNP blog</p>	<p>Spring Term</p> <p>2020-2021 academic year</p>	Lesson observations in Spring term to monitor use of Maths journals.	Staff questionnaire about the use of maths journals.
1.4	Monitor the use and impact of Maths journals.	<p>Complete regular learning walks to monitor the impact of Maths journals.</p> <p>Complete a Maths journal book look three times throughout the academic year to monitor the use of Maths journals.</p> <p>Pupil questionnaire to gather pupil voice around Maths journals.</p>	<p>JW</p> <p>JW</p> <p>Class teachers Years 2-6</p>	<p>TLR time</p> <p>TLR time</p> <p>A Maths lesson during the relevant terms.</p>	2020-2021 academic year	<p>Regular learning walks.</p> <p>Learning walk with SLT.</p>	Sample of books from each year class. 2 below, at and above standards.

Priority two		To use cross curricular opportunities to develop pupils' mathematical understanding.					
Rationale		Life in primary schools is very busy leaving limited teaching time but with a variety of subjects and curriculum to cover. Cross-curricular learning is a way to combine different school subjects to deliver a curriculum that children find engaging and enjoyable. Cross-curricular learning offers a way for pupils to develop their knowledge, skills and understanding and become motivated to learn through a series of interconnected topics.					
Success Criteria		<ul style="list-style-type: none"> - Each term the whole school completes a project involving maths across the curriculum. - Teachers develop ideas of planning opportunities to develop maths skills and knowledge across the curriculum. 					
Intended Outcomes		Actions	Who	Resource/ Time	Timescale	Monitoring	Evaluation
2.1	All year groups complete a cross curricular lesson each term highlighting the mathematical links.	<p>JW to plan a whole school project each term that involves teaching mathematical skills and knowledge through another curriculum areas.</p> <p>Autumn Term – Art and geometry Spring Term – PE and Time Summer Term – Geography and data handling Summer Term – Maths around Sports Day https://thirdspacelearning.com/blog/sports-day-maths-activities-ks2/</p>	JW Class Teachers	<p>Whole school project to be resourced by JW.</p> <p>Lessons to be delivered at least once a term.</p>	2020-2021 academic year	Learning walk during whole school projects.	Each Class create a Pic Collage of their cross curricular links for whole school portfolio.
2.2	Plan opportunities to develop mathematical knowledge in skills throughout other areas of the curriculum.	<p>JW to highlight the importance of cross curricular learning to staff.</p> <p>JW to share research and CPD ideas to develop cross curricular links throughout the school.</p> <p>Teachers to review medium term plans to look for cross curricular links involving maths.</p>	JW Class Teachers	<p>Research articles</p> <p>CPD resources</p> <p>PPA time</p>	2020-2021 academic year	Monitor medium term planning to ensure cross curricular learning is highlighted.	Staff survey to explore cross curricular links throughout the school.
2.3	Review impact of cross curricular learning with mathematical links.	<p>Complete learning walks to monitor the impact of cross curricular learning.</p> <p>Monitor medium term planning to ensure cross curricular learning is highlighted.</p> <p>Pupil questionnaire to gather pupil voice around when they have used maths knowledge or skills when not in a maths lesson.</p>	JW	TLR time	2020-2021 academic year	Learning walks with other subject leaders.	Pupil survey to highlight when they have used maths skills and knowledge outside of a maths lesson.

Priority three		To increase the use of collaborative learning in maths lessons.					
Rationale		<ul style="list-style-type: none"> - Research has shown that children working collaboratively in maths can reduce peer competition and isolation, and promote academic achievement and positive interrelationships. - Working collaboratively in maths lessons is a way of ensuring that children develop communication skills and an acknowledgment that working together is an effective way of building skills vital for work and thought in the future. Also it helps to build confidence before independent work is undertaken. Working collaboratively also encourages deeper thinking and critical thinking skills as the follow up questions we usually ask are how? and why? 					
Success Criteria		<ul style="list-style-type: none"> - Teachers are implementing collaborative learning strategies into their maths lessons. - Children's communication and critical thinking skills improve through the use of collaborative learning strategies. 					
Intended Outcomes		Actions	Who	Resource/ Time	Timescale	Monitoring	Evaluation
3.1	Teachers understand the potential positive impact of collaborative learning in maths lessons.	<p>Share research with teachers around the positive impact of collaborative learning.</p> <p>Share strategies for implementing collaborative learning in maths lessons for teachers to explore.</p>	<p>JW</p> <p>Class Teachers</p>	Staff meeting in Spring 1 Term	Spring Term 2021	Does anyone already use them in lessons?	Initial response from staff at staff meeting.
3.2	Trial collaborative learning strategies in lessons.	JW will provide teachers with one or two collaborative learning strategies a week throughout the spring term to trial.	<p>JW</p> <p>Class Teachers</p>	<p>Create a collaborative learning folder on SharePoint.</p> <p>Email teachers new collaborative learning resource once a week.</p>	Spring Term 2021	Staff uptake survey.	Pupil voice.
3.3	Ensure collaborative learning strategies are planned into maths lessons.	Teachers will have time to plan in at least one collaborative learning activity a week for the summer term.	<p>JW</p> <p>Class Teachers</p>	Staff meeting in Spring 2 Term	Summer term 2021	Learning walks throughout the summer term 2021	<p>Pupil survey in the summer term 2021.</p> <p>Evaluate the use impact of collaborative learning through staff survey.</p>
3.4	Monitor the use of collaborative learning strategies in maths lessons.	<p>Complete learning walks to monitor the impact of collaborative learning.</p> <p>Monitor maths planning and resources to explore the use of collaborative learning strategies in lesson.</p> <p>Pupil questionnaire to gather pupil voice around collaborative learning.</p>	JW	TLR time	Summer term 2021	Learning walks throughout the summer term 2021 with SLT.	<p>Pupil survey in the summer term 2021.</p> <p>Evaluate the use impact of collaborative learning through staff survey.</p>