



Jerry Clay Academy Subject Leader Action Plan


Subject: Maths	Leader: C Elliott	Date: November 20
-----------------------	--------------------------	--------------------------

<p>Target 1 Leadership and Management</p> <p>Leadership and Management</p> <ul style="list-style-type: none"> • Continue to develop and refine our use of the maths mastery approach throughout the Academy including use of CPA, sentence stems, conceptual variation, reasoning and problem solving approaches. • Develop and drive teaching strategies for mental maths including rapid recall of number facts and use of mental calculation strategies so that outcomes continue to rise. • Staff are aware of progression in key maths skills and are able to apply a consistent range of representations and strategies across the academy. • Continue to develop an ethos of excellence in maths including establishing and maintaining a @JCA_Maths Twitter feed. 	<p>What will success look like?</p> <p>Half termly updates at staff meetings on our mastery journey. Staff have opportunities to explore and discuss most effective mastery strategies for teaching maths across the whole school including responding to children's knowledge gaps.</p> <p>Features of maths mastery teaching are further embedded into teaching and learning in maths.</p> <p>Having been introduced in Autumn 2, staff have a good knowledge of the JCA Mental Maths Progression and mental strategies appropriate to their year group as well as where this fits within the whole school progression. They can use the JCA Mental maths Progression and DfE Guidance for KS1 and 2 to find good models. Staff are confident to use and adapt a range of mental maths materials and children are facilitated to learn, rehearse and test themselves.</p> <p>Monitoring show a consistent teaching of mental maths facts and strategies as well as consistent use of representations and other features of maths mastery.</p>			
Action	Who?	When?	Resource	
Introduce staff to the JCA Mental Maths Progression, a teaching sequence for mental maths and DfE Guidance for KS1 and 2 in Maths Update	CE	Autumn 1/2		
Ensure maths is monitored using the Monitoring cycle to ensure consistent and deepening use of the mastery maths approach as well as evidence of the mental maths progression and teaching strategies being taught consistently in maths lesson, morning	CE	Autumn 2 onwards		

maths and throughout the school day.				
Half termly updates used to introduce mental maths teaching sequence and key calculation strategies during staff meetings and to ensure a consistent approach.	CE	Half termly		
Coach Year 2 and 3 teacher to provide support, mentoring and challenge.	CE	Spring 1 and 2		
Utilise student voice and particularly the new student leader for Maths to find out the impact of the initiative and what we need to do more of to have maximum impact	CE	Spring 1 onwards		
Introduce a robust summative maths assessment for mental maths.	CE	Spring 2		
Evaluation (impact on learning and progress) (Who? How? Reported to?)				


<p>Section 2 Quality of Education</p> <ul style="list-style-type: none"> • Develop the subject knowledge of subject leader by keeping up to date with the WY Maths Hub, White Rose Maths, NCETM, DfE Guidance and relevant literature including on Twitter. • Subject leader driving the leadership of Maths as a role model through effective critiquing, retrieval and teaching to any gaps in learning. • Develop teaching sequence for mental maths with particular emphasis on developing effective retrieval practices (Knowing more, remembering more and being able to do more)- This will allow the 	<p>What will success look like?</p> <p>Teaching and learning has improved in mental maths and so has staff confidence.</p> <p>Mental maths skills are taught explicitly for 10-15 minutes in each maths lesson so that children develop greater competence with key skills. This lightens the cognitive load for children when tackling more complex calculations and problems. Staff are clear on the progression of age appropriate mental maths skills.</p> <p>Mental maths skills are also practiced in Morning maths sessions and in a rapid recall session later in the day.</p> <p>Staff are confident in their delivery and feel supported.</p> <p>Teaching and learning allows for the development of fluency in recall and calculation of key number facts. Children can choose from different written</p>
---	---

<p>children to calculate and solve problems more flexibly</p> <ul style="list-style-type: none"> • Implement robust summative mental maths assessment. 	<p>and mental methods to calculate. They can choose the most efficient method to solve a problem. They use maths talk to discuss their method.</p> <p>Children are able to practice their key fluency skills in lessons and at home. They can use Diamond Dash, Times Tables Rocks Stars or numbots to practice their key facts and strategies.</p> <p>A range of retrieval practices are in use routinely to rehearse and assess key maths skills and allow them to enter into long term memory. An ethos of repetition is established and staff have a good understanding of how to teach to gaps in learning.</p> <p><i>Children have regular opportunities for all children to attempt complex and open ended problems to allow them to show, explore and develop Greater Depth maths skills. Teachers praise use of learner traits in maths equally to the maths skills.</i></p> <p><i>Teachers use these opportunities to inform formative and summative assessment.</i></p> <p><i>Standards in maths continue to rise including a greater proportion accessing Greater Depth in maths.</i></p>
---	---


Action	Who?	When?	Resource	
Termly updates for teaching staff at staff meeting on mental maths progression and teaching sequence.	CE	Termly		
Continue to model to embed understanding and share good practice	CE	Autumn 2 onwards		
Create model lessons in different year groups	CE	Spring 1 and 2		
Coaching in Y2 and 3	CE	Spring and Summer		
Monitor planning across year groups	CE	Autumn 1 onward	-	Monitor planning across year groups

Evaluation (impact on learning and progress) (Who? How? Reported to?)				

<p>Section 3 Behaviour and Attitudes</p> <p>Continue to increase the independence of our pupils by further reinforcing AFL / retrieval practices and critiquing.</p> <p>Further develop the use of maths stem sentences, vocabulary and reasoning frames. Use maths talk to discuss how we solved a problem or performed a calculation. Emphasize finding that there are different ways of performing calculating and we can try to find an efficient method.</p> <p>Continue to expose children to different problem solving types and strategies.</p> <p>Develop an ethos of repetition. Ensure that staff have a good understanding of teaching to gaps.</p> <p>Work with the maths Junior leader to ensure that the children are motivated to practice their quick recall of maths facts.</p>	<p>What will success look like?</p> <p>Stem sentences and maths reasoning speaking frames are used routinely in lessons to support the children in articulating their understanding. Children can access reasoning frames on cards on their tables and see them modelled on the working wall. They use them confidently in maths talk with their partner.</p> <p><i>Working Walls and learning lines are further developed to consistently show sentence stems and speaking frames as well as modelling using CPA. Teaching and working walls also focus on misconceptions (juicy mistakes) to challenge children to explain their understanding.</i></p> <p><i>Time is spent in class discussing strategies and methods used to calculate and solve problems. Teachers model finding an efficient method.</i></p> <p>Ensure assessment for learning is effective in taking children from their starting points and moving them forward. Staff use live marking and children mark their own work to encourage them to identify their next steps. They annotate correct their own mistakes where possible or are supported to do so. They explain their misconceptions in a thought bubble.</p> <p>Marking time focuses on identifying children's next steps and responding appropriately. This could be by setting whole class, groups, or individual tasks. Activities would include an appropriate practice activity, scaffolded tasks, follow up task or extension tasks for strive time or might involve a one to one or group intervention. Staff will use their knowledge of the children's next steps to plan the continuation of the learning journey in the next lesson.</p> <p>Staff will use a range of opportunities to assess and to allow them to develop</p>
---	--

	and explore greater depth maths skills. These might include complex and open ended problems, diagnostic problems, error spotters, problem solving opportunities and partner talk.			
	Children are confident and motivated to practice their key maths skills independently and have a 'can do' attitude to tackling their next steps.			
Action	Who?	When?	Resource	
Model and explore use of retrieval practices in maths	CE	Autumn 2 onwards		
To monitor planning of staff on the school's shared area.	CE	Autumn 1 ongoing		
To moderate books	CE	Autumn 1 and 2 and ongoing		
Pupil voice to assess enjoyment in the subject in particular work the maths Junior leader to assess engagement in mental maths.	CE	Spring 1		
Monitor working wall and learning environment	CE	Autumn 1 and ongoing		
Evaluation (impact on learning and progress) (Who? How? Reported to?)				

<p>Section 4 Personal Development</p> <p>Ensure the mental health of our pupils is a high priority for all staff.</p> <p>Ensure all our pupils are given opportunities to discover new talents and interests</p> <p>Ensure all our children are well prepared for their next steps.</p>	<p>What will success look like?</p> <p>Children have a 'Can do' attitude to learning maths and they know that with support and perseverance they will be able to master new areas of maths. They are happy to tackle more complex problems and to work independently and as a team. This growth mindset fosters self confidence and they are able to apply their maths in unfamiliar and real life contexts.</p> <p>Children know the importance of Maths and know careers possible . They understand how it helps them learn about the world.</p>
---	---

<p>Ensure all our pupils know what it means to be a good citizen.</p> <p>Ensure that Maths is linked real life and given a context.</p>	<p>Children will enjoy maths and see its relevance to real life.</p> <p>Develop the curriculum so that it links well into the community</p>			
Action	Who?	When?	Resource	
Heighten growth mindset and learner traits used in maths learning.	CE	Autumn 2 and onwards		
Update staff on aspect of maths mastery – giving maths a context and a link to real life including use of ‘Tell the story, ask a question’ prompt in problem solving	CE	Autumn 2		
Ensure this is happening through book looks, observation, staff meeting and coordinator notices.	CE	Autumn 1 onwards		
Pupil voice	CE	Spring onwards		
Explore visitors that could showcase maths in real life /careers	CE	Summer 1 onwards		
Heighten Maths on Twitter @JCA_Maths	CE/Staff	Autumn 1 onwards		
	CE	Autumn 2 Summer 2		
Evaluation (impact on learning and progress) (Who? How? Reported to?)				