

The Ryde School SDP 2021-2022

Domain: Mathematics

Domain Leader: Catherine Brumby

Objectives for Mathematics	
Achievement gap issues	To ensure that the gap between ever 6 children and others is diminished.
Objective 1	To implement mastery techniques across the school.
Objective 2	To embed fluency to ensure children are confident with the fundamentals of mathematics (including vocabulary).
Objective 3	To audit, organise and replenish manipulatives.
Objective 4	To increase connectivity between Mathematics and STEM subjects.
Objective 5	To secure firm foundations of good number sense for all children from Reception through to Year 1 and Year 2.
Objective 6	To improve children's recall of times tables.

Objective 1	To implement mastery techniques across the school.					
Action	Timescale	Person responsible	Budget/resource implications	Monitoring (who by and how often)	Success criteria	SEF reference
To lead an INSET/staff meeting(s) around mastery. <ul style="list-style-type: none"> • Intelligent practice • Games • Challenging GDS 	Summer/Autumn 2021	CB with the support of EM	Time in staff meetings and INSET days.	INSET/staff meetings lead by CB and supported by EM. SB from NCETM Maths Mastery Hub to support with intelligent practice training for staff.	Staff will be able to identify and implement mastery features of a mathematics lesson.	
Introduce White Rose scheme of learning for mathematics with a particular focus on the 'ready to progress criteria'.	Summer 2021	CB	Time in staff meetings and INSET	CB	Staff will use the scheme as a resource to support mastery and 'gap filling'.	

Support staff through informal observations/ feedback.	All staff by end of Autumn 2021	CB and teaching staff	Time out of class for CB to observe and feedback to staff.	Subject leader time for CB to observe/feedback to staff. Time to look at books and planning once a term.	Staff will be confident planning and delivering a mathematics curriculum using mastery techniques.	
Monitor books and planning for mastery elements.	Autumn 2021	CB	Time out of class for CB to monitor planning thoroughly.	CB termly.	Teaching staff will be including elements of mastery into their mathematics lessons.	

Objective 2		To embed fluency to ensure children are confident with the fundamentals of mathematics (including vocabulary).				
Action	Timescale	Person responsible	Budget/resource implications	Monitoring (who by and how often)	Success criteria	SEF reference
To deliver a refresher staff training session on fluency sessions, so they are taught consistently across the school.	September 2021	CB/Class teachers	Time for CB to check weekly planning.	CB to check fluency sessions are planned on weekly timetables	Fluency sessions are taught at least 3 times a week. Teachers to use Herts resources as a starting point. Resources to be adapted using White Rose/NCETM resources.	

					RTP criteria to be used to identify priority areas for Summer term 2021.	
To monitor planning for fluency sessions.	September/October 2021	CB/Class teachers.	Time for CB to observe fluency sessions and to look at planning.	As above, as well as checking MTPs for objectives being covered.	Fluency sessions will be carefully planned for using the RTP criteria as a starting point. Sessions will include at least 3 areas of mathematics.	
To assess the impact of the fluency sessions on children's overall progress.	By the end of Autumn 2021	CB	Time for CB to collect and analyse data.	CB termly with the end of term assessments.	A higher number of children will be achieving at least expected progress.	

Objective 3	To audit, organise and replenish manipulatives.					
Action	Timescale	Person responsible	Budget/resource implications	Monitoring (who by and how often)	Success criteria	SEF reference
To ensure there are sufficient resources and manipulatives to teach the White Rose scheme of work effectively.	By the end of the Summer term 2021.	CB Class teachers to inform CB of resources they need if not already available.	Budget to replenish and order new mathematics manipulatives. Time to spend auditing resources and conversations with teaching staff.	CB to audit and staff to inform if anything more needs auditing that they need.	Adequate mathematics resources will be available to all classes to support learning.	
Staff to be aware of resources available in the school.	By the end of Summer 2021	CB	Time in staff meeting(s).	CB annually.	Staff will be knowledgeable of manipulatives and resources available. Children become more confident using a range of resources to show knowledge across concepts.	
Staff to share good practice with manipulatives.	Ongoing	CB	Staff meeting/INSET (Dates to be confirmed).	CB to lead staff meeting to support sharing of knowledge/good practice.	Staff will be more confident using a wider range of manipulatives. Staff will learn from each other to	

					gain new ideas of how to use different manipulatives.	
To develop a progression map of representations across the school.	Ongoing.	CB (with support from EM and SB during the “Maths Mastery” programme).	Time to build progression map.	CB ongoing.	<p>A clear progression map will be available to share with staff so progression of representations and manipulatives are clear across year groups.</p> <p>Staff will be clear about the representations that their class have used previously and where they will be moving onto.</p>	
Objective 4	To increase connectivity between Mathematics and STEM subjects.					
Action	Timescale	Person responsible	Budget/resource implications	Monitoring (who by and how often)	Success criteria	SEF reference
To deliver INSET/staff meeting training around the links	September 2021	CB/EM Class teachers to seek meaningful	Time for planning to be monitored.	Planning to be monitored termly by CB.	Teachers will plan areas of science where clear and purposeful	

between Mathematics and the STEM subjects.		links between STEM subjects and plan for opportunities, with the support of STEM subject leaders.	Staff meeting/INSET time for CB and EM (Science lead) to deliver training.		mathematical links can be made. Teachers will make use of training materials to support connectivity.	
To monitor planning of the teaching and learning of connectivity.	By the end of Autumn 2021.	CB	Time to monitor planning.	CB to monitor science planning to find clear links to mathematics objectives.	Teachers are proactive in seeking opportunities for cross curricular learning. Links are clear in planning.	
To audit connectivity across the school.	End of Autumn term 2021	CB	Time to monitor planning.	CB at the end of each term.	Planning, children's books and pupil voice responses all reflect connectivity.	

Objective 5	To secure firm foundations of good number sense for all children from Reception through to Year 1 and Year 2.					
Action	Timescale	Person responsible	Budget/resource implications	Monitoring (who by and how often)	Success criteria	SEF reference
To register for the 'mastering number'	Summer 2021	CB	None	CB	All teachers who are registered will	

program with the NCETM and engage with sessions.					engage regularly with the program.	
To use manipulatives (e.g. Rekenreks) and other techniques from the training sessions in the classroom.	Each term but secure by the end of Summer 2022	CB and KO, AB and MS	Time out of class to attend training sessions	CB	Children will develop fluency in calculation and a confidence and flexibility with number.	
To assess children's ability to subitise numbers.	Summer 2022	Class teachers to assess CB to monitor	Time to assess and analyse data	CB at the end of the first year of the program	By the end of Year 2, most children will leave KS1 with fluency in calculation and a confidence and flexibility with number.	

Objective 6	To improve children's recall of times tables.					
Action	Timescale	Person responsible	Budget/resource implications	Monitoring (who by and how often)	Success criteria	SEF reference
To subscribe to and launch 'Times tables rock stars' (TTRS), providing all children in KS1 and KS2 with access.	September 2021	CB	Subscription payment	CB	All children will have a login for TTRS and will have regular opportunities to play during school time.	

<p>To ensure all children are familiar with the format and have regular opportunities to play in school.</p>	<p>September 2021</p>	<p>CB and class teachers</p>	<p>Assembly time. Weekly sessions in class.</p>	<p>CB</p>	<p>All children will have time dedicated to their class timetable for them to practice their times tables using the program.</p>	
<p>To assess the impact of TTRS on children's ability to recall times tables.</p>	<p>Summer 2021</p>	<p>CB</p>	<p>Time to analyse data.</p>	<p>CB termly and at the end of academic year.</p>	<p>Children will have made significant progress on their progress charts on the program.</p>	

Objectives for Mathematics review

Achievement gap issues	To ensure that the gap between ever 6 children and others is diminished.
Objective 1	To implement mastery techniques across the school.
Monitor	<ul style="list-style-type: none"> • NCETM sustaining year has been continued by CB. • Weekly planning formats now include features of mastery. • Planning monitoring is carried out by CB and CC. • White Rose scheme of work is now being followed as a guide, which includes many of the features of mastery, including intelligent practice, interleaving of mathematical topics, problem solving and reasoning, sentence stems and identification of misconceptions.
Objective 2	To embed fluency to ensure children are confident with the fundamentals of mathematics (including vocabulary).
Monitor	<ul style="list-style-type: none"> • Fluency sessions have been continued in all classes. • During a HIP visit, it was very clear that children were able to verbalise and talk about their learning articulately. The HIP said this was a real strength of mathematics. • Children still have some gaps in their learning across the school so these need to be continued. Some teachers new to the school or new to fluency sessions will need to be briefed on how these work. They will be offered time to visit other classrooms to see them in practice. • These sessions need to be monitored/planned more carefully as they are often missing on MTPs.
Objective 3	To audit, organise and replenish manipulatives.
Continue	<ul style="list-style-type: none"> • This has been started but not finished.

	<ul style="list-style-type: none"> • Some new manipulatives have been ordered e.g. new sets of diennes, but we need to check the more thoroughly what the needs are. • Manipulatives need to all be stored centrally as some resources are still being kept in classes.
Objective 4	To increase connectivity between Mathematics and STEM subjects.
Continue	<ul style="list-style-type: none"> • This has been monitored by CB through the planning of other subjects. There are some good links particularly in science. • This is an area that needs to be continued as a focus as this hasn't been fully implemented this year. • A training/planning session with staff for the new academic year 2022-2023 has been planned for July 2022 to support this. Teachers will be asked to think about their science topics and make notes to support their future planning about where clear maths links can be made.
Objective 5	To secure firm foundations of good number sense for all children from Reception through to Year 1 and Year 2.
Monitor	<ul style="list-style-type: none"> • KO'C, AB and MS have engaged regularly with the program. • Rekenreks have been used regularly in class following on from the input from the program. • Children are developing a better fluency in calculation and a confidence and flexibility with number, due to the adaptation of teaching strategies. • This will be an ongoing area to monitor to assess the impact of the children's flexibility and deep understanding of number by the time they leave KS1.
Objective 6	To improve children's recall of times tables.
Continue	<ul style="list-style-type: none"> • All children have had access to TTRS this year. • Staff have ensured that there is a timetabled slot each week for children to access TTRS so that children who don't access it at home still have access. • Times tables knowledge has improved across the school for some children however this has not been the case for all children. This has been due to a number of factors, including attendance, support from home, access to TTRS at home and SEND needs. • CB has encouraged the engagement in TTRS through weekly competitions which are announced in assembly each week and winners put on display in the corridor. • This needs to continue to be an area of development next year as there is still a need for improvement through high quality teaching and regular practice through TTRS, Purple Mash or any other way of practising.

