Subject Development Planning 2020-21
MATHS
Blue highlights are for post-lockdown recovery, yellow highlights are amendments

INTENT Our objectives to raise standards in mathematics	IMPLEMENTATION How we will deliver our planned objectives	IMPACT How we will measure the effectiveness of our actions
Objective(s) **Progress and attainment** 1. Bring pupils' arithmetic knowledge, skills and competence up to pre-lockdown standards. 2. Pupils across all year groups are being challenged using the Challenge Rating System and more able pupils are completing Greater Depth (GD) problems. 3. Increase reasoning average percentages for all classes to meet the school's target of 60% 4. A percentage of Year 6 pupils are attaining the GD standard at the end of Key Stage 2. 5. Increase the progress and attainment at Key Stage 1. 6. Ensure all pupils are secure in their year-specific timestables in preparation for subsequent Multiplication Tables Checks (MTC's). 7. Ensure all SEN pupils are reaching their full potential in maths and are being adequately challenged. **Teaching and Learning in Maths** 1. The quality of teaching and learning in maths across all year groups is consistently good. 2. KS1 teachers are confident in the planning, development and delivery of maths lessons, particularly Year 2. 3. KS1 teachers are supported in the implementation of a new addition and subtraction policy	1. 'Catch-up curriculum' of the first four weeks back at school for both Key Stages. Consisting of a baseline arithmetic assessment followed by a focussed set of arithmetic lessons to identify strong areas and gaps in pupil's arithmetic abilities. An 'impact' arithmetic at the start of week 5 will show progress and aid planning for subsequent objectives. 2. Continue to develop the Challenge Rating System to provide depth of questioning for more able pupils. 3. Termly (KS2) and Half-Termly (KS1) book scrutinies focussing on challenge and GD stretch. AU2 on – AU1 focus is effective use of baseline and impact arithmetic data. 4. Analyse outcomes of reasoning summative assessments to find strengths and weaknesses of each class. 5. DM to continue maths conferencing in Year 6, progressing to Year 5 after SATs. 6. DM to support teachers in Key stage 1 7. Continue to give timestables a high profile within the school, TTRS to be used as the primary tool for analysing and progressing timestables with half-termly 'Gigs' to demonstrate progress 8. All maths targets are based on progress in Numbots (KS1) or TTRS (KS2) 9. Termly reviews of the Maths action plan with the Headteacher.	Planned monitoring timetable activities include; • Analysis of outcomes from half termly and termly summative assessments will indicate expected or better progress in arithmetic, timestables, reasoning and problem solving for all children • Lesson observation/Learning walks focusing on teacher's use of the Challenge Rating System and sentence starters will identify effective examples of good practice and areas for development within problem solving and reasoning. Lesson observations/learning walks and scrutiny of work will show more able children challenging and pushing themselves to make more progress and achieving at a higher level. This will also lead to greater proportion of children in line to achieve GDS.

4. Greater depth and pupils with greater depth potential are identified and sufficiently challenged.
5. Quality assure the maths being delivered within the school with trust partners. Maths hub
6. Continue to share good practise of the teaching and learning in maths across the school. Maths hub
7. DM to work with SEN lead (Helen Carlin, HC) to improve the provision of SEN maths across the school

Leadership

1. Continue to develop DM's ability to lead maths effectively.
2. Have the maths lead folder quality assured both within the school and by TPAT maths lead.

10. Maths folder quality assured both internally and externally

Success Criteria:

- The majority of pupils across the school make 3 terms progress or better in maths
- Targeted outcomes by class by end of each year derived from data handover meetings;

Class	Working at EXS+ End of summer 2020	Working at EXS+ End of summer 2021 target
R	68% (21/31 ELG Met+)	52% (15/29)
1	58% (15/26)	77% (20/26)
2	48% (14/29)	66% (19/29)
3	45% (14/31)	60% (18/30)
4	43% (12/28)	61% (17/28)
5	53% (16/30)	66% (20/30)
6	69% KS2 Prediction (20/29)	

Class	Working at GDS End of summer 2020	Working at GDS End of summer 2021 target
R	19% (6/31 ELG EXC)	14%(4/29)
1	8% (2/26)	16% (4/26)
2	7% (2/29)	17% (5/29)
3	6% (2/31)	17% (5/30)
4	11% (3/28)	18% (5/28)
5	10% (3/30)	17% (5/30)
6	21% (6/29)	

- Progress and attainment in reasoning summative assessments matches that of arithmetic summative assessments

Objectives	**Action:**	**Outcome**	**Monitoring (inc dates and by whom)**	**Autumn Term Evaluation** **Spring Term Evaluation** **Summer Term Evaluation**

Progress and attainment	4 week 'Catch-up curriculum' at the start of the Autumn term for KS1 and KS2	Pupils arithmetic methods and recall are restored to pre-lockdown competency.	Baseline arithmetic in the first week back followed by an 'impact' arithmetic on 5th October to demonstrate progress. Follow-up reviews with staff to identify key areas for improvement.	
	Continual monitoring of the Challenge Rating System and stretch provided to more able pupils.	All pupils are being challenged within maths lessons and more able pupils are achieving a Greater Depth standard. More pupils are assessed as working at a Greater Depth standard at the end of each term. A percentage of Year 6 pupils achieve a Greater Depth standard at the end of KS2 2021.	Half termly book scrutinies will be administered by the Maths Lead for KS1 and KS2. Termly updates will be made to class monitoring sheets monitoring pupils that are working at a Greater Depth level.	Autumn Book Scrutinies 12th Oct – Impact scrutiny 19th Oct Y1 and Y2 2nd Nov Y3 and Y4 9th Nov Y5 and Y6
	Analysis of the termly reasoning papers for all classes.	Identify the areas of maths that need consolidation on an individual, class and whole school level and use this information to guide upcoming planning.	DM will continue to do analyse reasoning data during holidays following reasoning tests and recommend focus areas / pupils for each class.	
	Half-termly timestables assessments in the form of TTRS 'Gig' resets	Pupils are continuing to make progress in their rapid recall of multiplication and division facts in preparation for the June 2021 Multiplication Tables Check (MTC)	DM to analyse data half-termly and compare it to 2019/20 times tables progress.	
	Continue timestables homework books for Year 4 and Year 4 and introduce these to Year 3.			

	Half termly maths targets based on TTRS and Numbots progress, (Y1 targets up to bonds to 10, Y2 bonds up to Christmas and the TTRS in Spring 1)	All able pupils in Y2 to Y6 know the timestables for their year group. A higher number of pupils in Year 4 are achieving 100% in the 2020 MTC (2019 pilot resulted in 1x 100%, 77% class average and 15/27 achieving 80%+, 2020 abandoned)	DM to administer 'Gig' games and monitor progress of pupils. Teacher to identify pupils who have not made progress and provision for those timestables to be added to arithmetic starters.	Staff briefed on Autumn 1 INSET and Autumn 1 targets based from the end of Summer Numbots / TTRS levels.
	Action:	**Outcome**	**Monitoring (inc dates and by whom)**	**Autumn Term Evaluation** **Spring Term Evaluation** **Summer Term Evaluation**
Teaching and Learning in Maths	Collaborative long-term planning between DM and Year 1 and Year 2.	KS1 classes maintain their long-term maths plan and Year 2 pupils have experienced the full Year 2 curriculum in time for KS1 SATs	DM and KS1 teachers to discuss and agree upon a long-term timetable after the catch-up curriculum has been completed, with termly reviews to monitor progress through the curriculum.	
	DM to support JC in identifying and supporting more able and greater depth pupils in Year 3.	Pupils at the start of KS2 are being challenged and more pupils are being assessed as greater depth at the end of Year 3.	DM to meet with JC at the start of the Autumn term to discuss challenge and stretch in Year 3. GD scrutiny will be an additional focus of Year 3 book scrutinies.	
	DM to continue maths conferencing for five more able Year 6 pupils, with an option to extend this to Year 5 once SATS are completed.	More able pupils are given additional focus outside of the normal maths lessons to discuss more complex mathematical problems, making them able to complex the harder end-of-paper questions in order to achieve the Greater Depth standard in Maths at the end of KS2.	DM will create a sub-set of those pupils receiving intervention to analyse their performance against other groups and the Year 6 class as a whole for summative assessment.	

	Collaborative work between DM, VT and SS to clearly define the teaching of maths in Foundation Stage.		Observation on 15th October to monitor the implementation of counting principles and the move to 5 days of dedicated maths provision. Review of long-term maths plan termly.	
	DM to work with HC to develop a maths plan for tailored for SEN pupils.	SEN pupils are reaching their full mathematical potential and are adequately challenged within maths lessons.	Initial development of a plan for NPV for SEN pupils followed by a review with TA's before the end of Autumn 1. HC and DM meet to review White Rose books on 28th September. Launch plan to TA's on 30th September. Review on 19th September.	
	DM to meet with JW termly to review the Maths action plan.	The progression and development of maths is monitored and accounted for, the action plan is current and develops with the needs of the school throughout the year	DM and JW to meet termly.	
Leadership of Maths	Scrutiny of the Maths folder	The maths folder is a concise and up-to-date reflection of the school's policies, practises, progress and attainment.	DM to evaluate 19-20 and 20-21 folder with VT, comparing that with VT's 17-18 folder. Suggest a TPAT wide evaluation discussion (maybe with the clays maths hub group?)	
	Identify progression and GD monitoring for maths in a new assessment management tool (Target Tracker)	Pupil's maths progress and attainment can be accurately and reliable monitored across the school and can inform teachers of pupils who are not making the required progress		

Key Dates

Autumn 1 2020

7th September	Autumn Term starts
7th September – 2nd October	'Catch-up curriculum' timetable for KS1 and KS2
9th September	Baseline arithmetic test for Y1 to Y5
14th – 17th September	Y6 Baseline mocks
23rd September	Y6 maths planning meeting with CP, HP and VT
28th September	DM and HC meet – White Rose maths book discussion
30th September	DM and HC discuss SEN maths planning with Miss Dawe, Mrs Austin and Mrs Harrison
2nd October	DM meet VT – Y4 SEN maths provision
5th October	Y1-Y5 Impact arithmetics
6th October	Current year curriculum starts
12th October (week)	Catchup curriculum book scrutiny
12th October	Year 5 and Year 3 post-arithmetic meeting, discuss FF pupils and timetabling
15th October	VT and DM observe SS – maths provision in EYFS
19th October (week)	TTRS 'Gig' games and arithmetic results reveal
19th October	DM and HC review SEN maths provision with Miss Dawe, Mrs Austin and Mrs Harrison
Half term	Year 1 and Year 2 book scrutiny

Autumn 2 2020

2nd Nov (Week)	Year 3 and 4 book scrutiny, Year 1 and 2 feedback
9th Nov (Week)	Year 5 and 6 book scrutiny, Year 3 and 4 feedback
16th Nov (Week)	Year 5 and 6 feedback
23rd November (Week)	Year 1 and 2 book scrutiny 2
30th November (Week)	Year 3 and 4 book scrutiny 2, Year 1 and 2 feedback
7th December (Week)	Year 5 and 6 book scrutiny 2, Year 3 and 4 feedback
14th December (Week)	Year 5 and 6 feedback

Spring 1 2021

Spring 2 2021

Summer 1 2021

May (Month)	KS1 SATs
10th – 14th May	KS2 SATs

Summer 2 2020

7th June Y4 MTC open

Red – Item rescheduled

Blue – Previously arranged item that has been rescheduled

Green – New item added in

Appendix A

Summative testing arithmetic summary 19-20

	Baseline %	AU1 %	AU2 %	SP1 %	SP2%
Year 1	37.6	54.9	51.2	70.6	63.3
Year 2	40.1	50.4	44.0	41.1	62.8
Year 3	56.9	75.1	75.8	72.6	70.2
Year 4	63.8	79.7	78.0	77.5	84.7
Year 5	71.2	77.9	78.6	68.3	77.4
Year 6	37.8	54.6	53.4	66	

Baseline to AU1 Progress %	AU1 to AU2 Progress %	AU2 to SP1 Progress %	SP1 to SP2 Progress %	Yearly Progress %
17.3	**-3.7**	19.4	**-7.3**	25.7
10.3	**-6.4**	**-2.9**	21.7	22.7
18.2	0.7	**-3.2**	**-2.4**	13.3
15.9	**-1.7**	**-0.5**	7.2	20.9
6.7	0.7	**-10.3**	9.1	6.2
16.8	**-1.2**	12.6		28.2

Splits		Baseline %	AU1 %	AU2 %	SP1 %	SP2%
Y4	VT	**36.6**	52.9	63.3	63.3	75.7
	DM	**82.1**	92.3	93.8	88.1	92.2

Baseline to AU1 Progress %	AU1 to AU2 Progress %	AU2 to SP1 Progress %	SP1 to SP2 Progress %	Yearly Progress %
16.3	10.4	0.0	12.4	39.1
10.2	1.5	**-5.7**	4.1	10.1

	Class average	**63.8**	79.7	78.0	77.5	84.7	15.9	**-1.7**	**-0.5**	7.2	20.9
Y5	CG	**50.3**	48.7	64.4	47.0	63.9	**-1.6**	15.7	**-17.4**	16.9	13.6
	DM	**82.5**	88.2	89.2	83.0	86.1	5.7	1.0	**-6.2**	3.1	3.6
	Class average	**71.2**	77.9	78.6	68.3	77.4	6.7	0.7	**-10.3**	9.1	6.2
Y6	HPCP	**27.1**	38.8	36.4	49.2		11.7	**-2.4**	12.8		22.1
	DM	**47.8**	70.4	69.2	82.0		22.6	**-1.2**	12.8		34.2
	Class average	**37.8**	54.6	53.4	66		16.8	**-1.2**	12.6		28.2