### Year 2 Maths Planning at Emscote

Intent	Implementation	Impact
Planning and Progression of Learning Maths is planned from the starting point of the Y2 assessment criteria that is required for end of year. Progressive planning is made to build on knowledge across the required standards as stated below.  WTS – Working Towards the Standard EXS – Working at the Expected Standard GD -Working at Greater Depth within the Expected Standard.  Reasoning and Problem Solving form an integral part of the Mathematic Curriculum from Early Years onwards. Therefore, we plan a focus based on Gareth Metcalfe's 'I see Reasoning' work. We plan for a Do it: (All children can do) Reasoning: (Reason about it) Problem Solving: (Problem solve)	All planning is created knowing the cohort of children. It is based on planning and progression from the previous year wherever possible & adapting lessons / resources to suit the children, creating 3 to 4 differentiated independent activities.  However, teaching sessions are taking place across 2 long mornings of maths to ensure that the children grasp the concepts more solidly. At the end of Summer 2019, this format was used and it was deemed more effective to embed concepts (rather than 4 separate sessions).  There is a lot of practical maths taking place - Active Maths in both the hall & classroom.  Away from teaching opportunities are made through twice-weekly maths challenges and regular number bond recall sessions and testing.	The maths curriculum provides parity for all groups of pupils, allowing for differentiation as required to ensure progress is made.  Showing that maths is successfully implemented ensuring pupils' progression in knowledge – pupils successfully 'learn the curriculum' and it is adapted based on how the pupils access the lessons.  Variation on how maths is delivered to suit learning styles of all pupils.
Assessment Assessment is reviewed termly using individual assessment grids for each child.  The ITAF (Interim Teacher Assessment Framework) Statements are used to form the basis of teacher assessments and are updated termly with the date a child has independently reached that objective.	Each statement is dated when the children have carried out the work independently. The aim is to gain evidence from 2 or 3 different dates and away from point of teaching opportunities, to confirm that the children have reached the objective or not.  This information then helps update internal data through O-track.	Enables teachers to evaluate the teaching and to understand individual pupil knowledge so changes to teaching can be made.  Have a clear picture that progress of children is being made through internal monitoring and tracking.

	Using old SATs paper (arithmetic & reasoning) to	Ability to make more qualitative assessment of
	form a basis of assessment and review. The end of	children through previous tests.
	year SATs papers also support end of year	
	assessment judgements.	
	Online assessments via <u>www.maths.co.uk</u> are	
	used to review the progress of children	
	throughout the year.	
Moderation	Teachers attend local authority and cluster	Enables teachers to make comparisons to carry
The Year 2 teachers were externally moderated in	moderation to maintain standards and knowledge	out improvements / changes to own judgements
Summer 2019 with accurate evaluations made.	levels.	and planning.
This also supports ongoing teacher assessment	Peer-to-peer moderation reviewing previously	
and teachers use moderated examples to support	moderated books and current work in books in	
judgements.	different Y2 classes.	
Developing Further Challenge	Year 2 teachers are now taking a small group of	Ensure a wide and balanced curriculum so that all
Children believed to be able to work with the	children once a week during singing assembly to	children can progress to their full potential.
Greater Depth require further challenge to	do some problem-solving type questions - some	
develop their learning and skills in maths –	of which is based on the resources from White	Ensure that parents have a say in supporting their
particularly problem solving.	Rose.	children's learning.
	Children who complete work during class time	
Annual IMPACT maths workshops where parents	also have access to their own set of reasoning-	
are invited to a presentation of maths learning in	style questions from White Rose that they	
school. It enables them to understand how maths	complete in their maths books which provides	
is taught and how they can then help their	additional challenge.	
children with the 6-week programme of		
homework.		
Mathletics Online Resource	Weekly activities are set by teachers that are	Allow further maths-based work outside of the
Greater use and focus of maths learning using the	differentiated and are related to the previous	classroom to support a greater learning
online Mathetics resource that children can	week of work that has been done in maths	opportunity for as many children as possible.
access from home with their unique log-ins.	lessons.	
	Bronze certificates are celebrated in class. Silver &	Provide a sense of competition and achievement
	Gold certificates are celebrated in weekly school	for individuals.
	assemblies. Annual school-wide mathletics	
	competitions to encourage greater access to this	
	learning tool.	

#### Autumn Term 1

	Autumn 1								
	WTS4 recall at	WTS1 read and	WTS2 partition	WTS3 add two-	WTS3 add two-	WTS7 name	WTS3 subtract	WTS3 subtract	
Mathletics	least four of	write numbers	a two-digit	digit numbers	digit numbers	some common	two-digit	two-digit	
focus tasks	the six number	in numerals up	number into	and ones, and	and ones, and	2-D shapes	numbers and	numbers and	
locus tasks	bonds for 10	to 100	tens and ones	two-digit	two-digit	from a group	ones, and two-	ones, and two-	
	and reason		to	numbers and	numbers and	of shapes or	digit numbers	digit numbers	
Twice-weekly	about	PKS3 – read &	demonstrate	tens, where no	tens, where no	from pictures	and tens,	and tens,	
morning	associated	write numerals	an	regrouping is	regrouping is	of the shapes	where no	where no	
Maths	facts (e.g. 6 + 4	0-9	understanding	required,	required,	and describe	regrouping is	regrouping is	
Challenges	= 10 ,		of place value,	explaining	explaining	some of their	required,	required,	
Challenges	therefore 4 + 6		though they	their method	their method	properties	explaining	explaining	
	= 10 and 10 – 6		may use	verbally, in	verbally, in	(e.g. triangles,	their method	their method	
	= 4)		structured	pictures or	pictures or	rectangles,	verbally, in	verbally, in	
			resources to	using	using	squares,	pictures or	pictures or	
	PKS4 (number		support them	apparatus (e.g.	apparatus (e.g.	circles)	using	using	
	bonds to 1-5)			23 + 5; 46 +	23 + 5; 46 +		apparatus (e.g.	apparatus (e.g.	
			PKS1 – place	20)	20)		16 – 5; 88 –	16 – 5; 88 –	
			value of 10s &				30)	30)	
			1s in a 2-digit	PKS5 –	PKS5 –				
			number	addition with single digits up to 10	addition with single digits up to 10		PKS5 – subtraction with single digits up to 10	PKS5 – subtraction with single digits up to 10	

#### Autumn Term 2

	Autumn 2							
	WTS3 subtract	WTS3 subtract	WTS3 subtract	WTS6 know the	WTS2 partition a	WTS3 add and	WTS7 name	
Mathletics focus	two-digit	two-digit	two-digit	different value of	two-digit	subtract two-	some common 3-	
tasks	numbers and	numbers and	numbers and	coins	number into tens	digit numbers	D shapes from a	
	ones, and two-	ones, and two-	ones, and two-		and ones to	and ones, and	group of shapes	
Twice-weekly	digit numbers	digit numbers	digit numbers	WTS5 count in	demonstrate an	two-digit	or from pictures	
morning Maths	and tens, where	and tens, where	and tens, where	2s, 5s and 10s	understanding of	numbers and	of the shapes	
Challenges	no regrouping is	no regrouping is	no regrouping is	(use money)	place value,	tens, where no	and describe	
	required,	required,	required,	Refer to	though they may	regrouping is	some of their	
	explaining their	explaining their	explaining their	exemplification	use structured	required,	properties (e.g.	
	method verbally,	method verbally,	method verbally,	materials too	resources to	explaining their	cuboids, cubes,	
	in pictures or	in pictures or	in pictures or		support them	method verbally,	pyramids,	
	using apparatus	using apparatus	using apparatus		(linked to EXS7)	in pictures or	spheres).	
	(e.g. 16 – 5; 88 –	(e.g. 16 – 5; 88 –	(e.g. 16 – 5; 88 –			using apparatus		
	30) <b>+ EXS3</b>	30) <b>+ EXS3</b>	30) <b>+ EXS3</b>		EXS7 use	(e.g. 16 – 5; 88 –	EXS9 name and	
					different coins to	30)	describe	
	PKS5 –	PKS5 –	PKS5 –		make the same	+ EXS3	properties of 3D	
	subtraction with	subtraction with	subtraction with		amount	(USING MONEY	shapes including	
	single digits up	single digits up	single digits up			for sums)	number of	
	to 10	to 10	to 10		PKS1 – place		vertices, edges &	
					value of 10s & 1s		faces.	
					in a 2-digit			
					number		GD6 describe	
							similarities &	
							differences of 2D	
							& 3D shapes,	
							using their	
							properties	

# Spring Term 1

	Spring 1								
Mathletics focus	WTS4 recall at	WTS5 count in	WTS5 count in	WTS5 count in	EXS6 identify ¼,	EXS6 identify ¼,			
tasks	least four of the	2s, 5s, 10s from 0	2s, 5s, 10s from 0	2s, 5s, 10s from 0	1/3, ½, 2/4, ¾ of	1/3, ½, 2/4, ¾ of			
	six number	& use this to	& use this to	& use this to	a number or	a number or			
Weekly checks:	bonds for 10 and	solve problems	solve problems	solve problems	shape	shape			
	reason about			EXS5 recall					
EXS4 recall nb to	associated facts		EXS5 recall	division facts for		+ complete an			
and within 10 &	(e.g. 6 + 4 = 10,		multiplication	2, 5 & 10 and use		arithmetic test			
use these to	therefore 4 + 6 =		facts for 2, 5 &	them to solve					
reason with &	10 and 10 – 6 =		10 and use them	problems					
calculate nb to &	4)		to solve	(include inverse)					
within 20			problems						
	PKS4 (number								
Twice-weekly	bonds to 1-5)								
morning Maths									
Challenges	EXS4 recall nb to								
	and within 10 &								
	use these to								
	reason with &								
	calculate nb to &								
	within 20								
Greater Depth			GD2 – recall & use	I e multiplication & div	vision facts for 2, 5				
Focus			& 10 and make deductions outside known multiplication						
			facts						

# Spring Term 2

	Spring 2							
Weekly checks:	Maths IMPACT	EXS8 read the	EXS1 read scales	EXS3 add and	EXS2 partition	EXS2 partition		
	workshops with	time on a clock	in divisions of 1s,	subtract any 2	any 2-digit	any 2-digit		
EXS4 recall nb to	parents	to the nearest 15	2s, 5s and 10s	two-digit	number in to	number in to		
and within 10 &		mins		numbers using	different	different		
use these to			GD1 read scales	an efficient	combinations of	combinations of		
reason with &	+ complete a	GD5 read the	where not all the	strategy,	10s & 1s,	10s & 1s,		
calculate nb to &	reasoning paper	time on a clock	numbers on the	explaining their	explaining their	explaining their		
within 20		to the nearest 5	scale are given &	method verbally,	thinking verbally,	thinking verbally,		
		mins	estimate point in	in pictures of	in pictures or	in pictures or		
Twice-weekly			between	using apparatus	using apparatus	using apparatus		
morning Maths								
Challenges					+ Reasoning			
					Paper			
Arithmetic								
review paper								
Greater Depth	GD3 – use reasoni	ng about numbers	GD4 – solve u	nfamiliar word	ord GD6 describe similarities			
Focus	& relationships to solve more		problems that in	volve more than	differences of 2D & 3D shapes, using			
	complex probler	n & explain their	one step		their properties (symmetry, faces)			
	thin	king						

### Summer 1 and Summer 2

	Summer 1						Summer 2
Weekly checks:	EXS5 recall	EXS9 name and	WTS3 & EXS3	SATs week	SATs – complete		Review of missing learning &
	multiplication &	describe	add and subtract		all remaining tests		ensure all evidence is collated for
EXS4 recall nb to	division facts for	properties of 3D	any 2 two-digit				children
and within 10 &	2, 5 & 10 and use	shapes including	numbers using		Final Assessment		
use these to	them to solve	number of	an efficient		to be submitted		
reason with &	problems	vertices, edges &	strategy,				
calculate nb to &		faces.	explaining their				
within 20			method verbally,				
		GD6 describe	in pictures of				
Twice-weekly		similarities &	using apparatus				
morning Maths		differences of 2D					
Challenges		& 3D shapes,					
		using their					
Arithmetic		properties					
review paper							
Greater Depth	Greater Depth Review of missing learning						
Focus							