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

Autumn Term 1

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

Autumn Term 2

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

Spring Term 1

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

Spring Term 2

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

Summer 1 and Summer 2

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