Mathematics Mastery

Curriculum Map: Year 3 (Amended for Spring and Summer)

Number of unplanned weeks in spring: 2 Number of unplanned weeks in summer: 3

	Unit	Key Points	Considerations
Spring	**Unit 6: Multiplication and Division (2 weeks)**	• Multiplication and division facts for 2, 3, 4, 5, 6, 8 and 10 • Multiplicative structures: equal groups/parts, change and comparison, correspondence problems • Relationships: commutativity and inverse	- *This is an important unit for development of number. It can be taught remotely but there will need to be careful consideration of how the use of representations and models will be demonstrated to pupils.* - *Teachers should consider the use of live modelling (or asynchronous recording) to ensure bar models do not become static models. As a rule, always try to draw/create them yourself as you use them.* - *Online environments can bring resources such as bead strings and Cuisenaire rods to life.* - *This unit provides lots of opportunities to reason and explore. Without this, the numbers in the unit can be surface level. Plan how you can still promote reasoning remotely (screen grabs of speech bubbles, live discussion sessions).*
	Unit 7: Deriving multiplication and division facts (3 weeks)	• Multiply and divide by 10 and 100 • Multiply a 2-digit number by 2, 3, 4, 5 and corresponding division situations • Divide 2-digit by a 1-digit	- *Multiplication and Division in this unit uses Dienes and Place Value counters. This can be done using pictorial representations – see the unit videos for further examples.* - *If needed, this unit could be held back for the summer with the Angles & Shape unit being taught remotely in its place.* - *There are 3 consolidation lessons. This unit could be condensed to a 2 week unit by removing L13 & 14 on word problems – these could form home learning packs.*
	Unit 8: Time (2 weeks)	• Tell, record, write and order the time analogue and digital • 12-hour, a.m., p.m. • Measure, calculate and compare durations	- *This could be re-purposed and fitted into Maths Meetings.* - *Number lines are an essential resource. Pupils can create and draw their own to use at home if needed (and if there isn't access to a printer).* - *There are interactive clocks that could be used so pupils can have a clock to set (e.g. https://www.topmarks.co.uk/time/teaching-clock). There will need to be thoughts as to how this will be assessed.*
	Unit 9: Fractions (3 weeks)	• Part-whole relationships • Fractions as part of a whole or a whole set and as a number • Add, subtract, compare and order fractions of a quantity	- *This unit explores lots of pictorial and abstract representations of fractions. By making connections between them, this unit could be effectively taught remotely.* - *Ensure that any presentation includes a number of representations. You may want to adapt PPT or Smarts to ensure the fractions being shown are as clear as possible during modelling. This may include amending colours, size, font etc.*

The Dimensions of Depth - Conceptual Understanding, Language and Communication and Mathematical Thinking - underpin all aspects of the curriculum; problem solving is at the heart and is embedded in all units.

Mathematics Mastery

Curriculum Map: Year 3 (Amended for Spring and Summer)

Number of unplanned weeks in spring: 2 Number of unplanned weeks in summer: 3

Summer

Unit	Key Points	Considerations
Unit 10: Angles and Shape (3 weeks)	• Identify angles including right angles and recognise as a quarter of a turn • Identify and draw parallel and perpendicular lines • Draw/make, classify and compare 2-D and 3-D shapes • Measure the perimeter	- *There are 3 consolidation lessons so do think about whether pupils need a review of pre-requisite knowledge having not covered these concepts recently.* - *This unit can be made interactive by encouraging pupils to use things they have around them to explore angles and lines.* - *Consider short quizzes using tools such as Google forms to check and review understanding as the unit progresses (Oak National Academy has some that can be used).*
Unit 11: Measures (3 weeks)	• Read scales with different intervals when measuring mass and volume • Weigh and compare masses and capacities with mixed units • Estimate mass and capacity	- *This unit is best when practical. Ideally, this will involve pupils physically reading scales and making connections by getting a feel for objects and their mass.* - *Most pupils will have access to scales but this cannot be relied upon. The focus, therefore, may have to be on the accurate reading of scales.* - *Where there may need to be adaptations, consider how opportunities for pupils to develop their mathematical thinking can be integrated into remote learning (odd one out, what's the same and what's different?).*
Unit 12: Securing Multiplication and Division (1 week)	• Recall and use multiplication and division facts for 6 and 8 times table	- *This unit can easily be fed into Maths Meetings or shorter arithmetic sessions. The principal aim is to build pupil fluency in the use of arrays and representations for multiplication and division.* - *If you are teaching live sessions, consider a live 'counting stick' session that pupils can be involved with. This could be done via a video call and pupils could feed back responses in the chat (or simply talk with mute on).*
Unit 13: Exploring calculation strategies and place value (2 weeks)	• Add and subtract mentally • Find 10, 100 and 1000 more or less • Order and compare beyond 1000 • Round numbers	- *A lot of the content is reviewing content with an eye to preparing pupils to be ready for Year 4. There may be other themes in terms of number and place value that you would like to add in to consolidate before the end of the year.* - *Lots of the manipulatives used can be recreated at home: pupils can be given the challenge to make their own Dienes and PV counters.* - *That said, when teaching new concepts such as representing over 1000, you may wish to use a video link to physically show the Dienes. This ensures pupils get a concrete idea of the magnitude of the numbers they are using.*

The Dimensions of Depth - Conceptual Understanding, Language and Communication and Mathematical Thinking - underpin all aspects of the curriculum; problem solving is at the heart and is embedded in all units.