Mastery Three Unit Overviews: Spring Term 1

Use opportunities as part of the daily routine to tell the time to the nearest 5 minutes. At some point in each day, not necessarily the maths lesson, addition and subtraction facts (number bonds) and multiplication and division facts for the 2, 3, 4, 5 and 10 times tables should be rehearsed following guidance provided.

Spring 1 Unit 10 *(Week 1)*: Place Value, Mental Addition and Subtraction		
Lesson	**Starter**	**Lesson Focus**
1	Count on and back in ones and tens from any two-digit number (crossing the 100 boundary)	Identify the multiples of 100 immediately before and after a given number Round numbers with up to three-digits to the nearest hundred, e.g. 356 rounds to 400
2	Use a mental partitioning strategy for addition or subtraction of 2 two-digit numbers	Add a number up to three-digits and tens where the tens and hundreds digit changes, e.g. ten more than 397 Add a number up to three-digits and ones where the ones, tens and hundreds digit changes, e.g. one more than 499
3	Multiply 19 by a single digit number	Subtract a number up to three-digits and tens where the tens and hundreds digit changes, e.g. ten less than 407 Subtract a number up to three-digits and ones where the ones, tens and hundreds digit changes, e.g. one less than 500
4	Recall/derive multiplication facts for the 2, 3, 4, 5 and 10 multiplication tables	Recognise addition calculations that require mental compensation e.g. 129 + 49 and use this strategy where appropriate
5	Identifying the bond to the next multiple of 100, e.g. 231 + ☐ = 300	Recognise subtraction calculations that require mental compensation e.g. 175 - 39 and use this strategy where appropriate

Spring 1 Unit 11 *(Weeks 2 & 3)*: Counting Sequences, Multiplication and Statistics		
Lesson	**Starter**	**Lesson Focus**
1	Derive doubles of multiples of 50 to 500, e.g. double 150	Use partitioning to derive doubles of all numbers to 100.
2	Recall addition and subtraction facts for 100 (multiples of 5 and 10)	Use arrays to understand the multiplication and division facts for the 8 multiplication table Derive the 8 multiplication table from the 4 multiplication table
3	Count on and back in tens and hundreds	Use Venn and Carroll diagrams to compare and sort numbers
4	Partition a three-digit number using base 10 apparatus into two groups in different ways where one group is a multiple of 10 e.g. 165 = 150 + 15	Use concrete materials to model the effect of multiplying a two-digit number by 10 Describe the effect of multiplying a two-digit number by ten
5	Addition or subtraction of 2 three-digit numbers where no boundaries are	Multiply a multiple of 10 by a one-digit number, e.g. 60 x 4

		crossed, e.g. 265 + 324	
6	Use a multiplication trio to identify related facts, e.g. 6 x 4 = 24 so 6 x 40 = 240	Use partitioning to calculate a two-digit number multiplied by a single digit number using grid method	
7	Multiply 19 by a single digit number	Use partitioning to calculate a two-digit number multiplied by a single digit number using grid method Within known tables, use partitioning to multiply T1 by a one-digit number	
8	Use multiplication trios to identify missing numbers in multiplication and division number sentences, e.g. 7 x ☐ =28	Solve correspondence problems in which n objects are connected to m objects. (finding all possibilities)	
9	Round numbers with up to three digits to the nearest 100	Solve positive integer scaling problems	
10	Tell and write the time on an analogue clock to the nearest minute – past and to	Read different scales to the nearest whole unit	

Spring 1 Unit 12 *(Week 4)*: Fractions		
Lesson	**Starter**	**Lesson Focus**
1	Using known multiplication facts (1, 2, 5 and 10 multiplication tables) to calculate unknown multiplication facts from the 8 multiplication table	Recognise fractions of a shape, set of objects or quantity
2	Compare and order numbers with up to three digits	Recognise and use fractions as numbers (placing fractions onto number lines)
3	Recall pairs of multiples of 100 that make 1000	Use concrete materials to find unit fractions (with denominators of ten or less) of a set of objects, e.g. $\frac{1}{7}$ of 63 Use concrete materials to find non-unit fractions (with denominators of ten or less) of a set of objects, e.g. $\frac{2}{7}$ of 63
4	Derive addition and subtraction facts for 100 using number lines	Use pictorial representations, e.g. bar model, to find unit fractions of a set of objects, e.g. $\frac{1}{3}$ of 51 Use pictorial representations, e.g. bar model, to find non-unit fractions of a set of objects, e.g. $\frac{2}{3}$ of 51
5	Round numbers with up to three digits to the nearest 10 and 100	Show practically or pictorially that a fraction is one whole number divided by another

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Spring 1 Unit 13 *(Week 5)*: Division		
Lesson	**Starter**	**Lesson Focus**
1	Partition a three-digit number (represented using base 10 apparatus) into hundreds, tens and ones in different ways, e.g. 643 is 5 hundreds (500), 14 tens (140) and 3 ones (3)	Use partitioning to derive and use halves of multiples of 10 where the tens digit is odd Use partitioning to derive and use halves of all numbers to 100
2	Recall and use multiplication and division facts for the 8 times table	Use a horizontal number line to show division as repeated subtraction including numbers beyond the multiplication facts that they know
3	Use a mental counting on strategy to calculate a small difference, e.g. 102 – 95 =	Use a vertical number line to show division as repeated subtraction for numbers beyond the multiplication facts that they know using greater multiples of the divisor
4	Add 3 two-digit multiples of 10	Use a vertical number line to show division as repeated subtraction for numbers beyond the multiplication facts that they know using greater multiples of the divisor (including remainders)
5	Multiply 19 by a single digit number	Mentally divide one number by another by partitioning into multiples of the divisor

Spring 1 Unit 14 *(Week 6)*: Volume, Capacity and Mass		
Lesson	**Starter**	**Lesson Focus**
1	Read different scales to the nearest whole unit	Estimate, measure and compare the capacity of different objects Find the difference between the capacities of containers
2	Double a two-digit number where the total is more than 100	Measure and add the volume of different containers
3	Use a mental partitioning strategy for addition or subtraction of 2 two-digit numbers	Estimate, measure and compare the mass of different objects Find the difference between the masses of objects
4	Tell and write the time on an analogue clock to the nearest minute – past and to	Measure and add the mass of different objects
5		Learning Check