Year 1   Spring Term 2022

Weeks	Key knowledge	Previous experience (NCETM Guidance) Support gaps in learning	National Curriculum statement	Links to PD Materials from NCETM to support subject knowledge and small steps
Week 1-2 Addition and subtraction	**Place value and Calculation** Number bonds 0-10 Combing sets- addition (aggregation) Making the amount bigger (argumentation) Subtraction within 20 – removing from the set as takeaway. Subtraction within 20– finding the difference as counting up. Concept of equality Concept of the effect of zero when adding and subtracting. Developing mental strategies for addition and subtraction Partitioning, recombining and writing the numbers accurately	Begin to experience partitioning and combining numbers within 10 Understand the cardinal value of number words for example, 'four' relates to 4 digits. Subitise up to 5 items. Automatically show a given number using fingers. Devise and recall number stories using pictures, numbers and symbols (such as arrows) Secure with Composition of numbers 6-10 (NCETM 1.4 5 TPS)	To read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs. To represent and use number bonds and related subtraction facts *within 20.* To solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9 To identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. To count, read and write numbers to 100 in numerals To add and subtract one-digit *and two-digit numbers to 20,* including zero	1.7 Addition and subtraction strategies within 10 **1NF–1** Develop fluency in addition and subtraction facts within 10 **1AS–1** Compose and partition numbers to 10 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers.

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Weeks 3 & 4	Number sense and arithmetic Numbers to 40 (counting, reading and writing) Continuing to work on number structures Promoting the number sense arithmetic e.g 8 + 4 = 8 +2+2 Doubles and near doubles 7 + 8 e.g double the smaller number and add 1. Missing number problems using bar model to expose the structure Understanding number patterns	Begin to develop a sense of the number system by verbally counting forward to and beyond 20, pausing at each multiple of 10. Understand that larger numbers are further along the track. Knows how to compare sets of objects up to 10 in different contexts, considering size and difference **1NF–1** Develop fluency in addition and subtraction facts within 10 **1AS–1** Compose and partition numbers to 10 **1NPV–1** Count within 100, forwards and backwards, starting with any number.	To count, read and write numbers to 100 in numerals Count in multiples of 2's, 5's and 10's To represent and use number bonds and related subtraction facts within 20. To add and subtract one-digit and two-digit numbers to 20, including zero. To solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems. .	1.8 Composition of numbers: multiples of 10 up to 100 Teaching point 1: One ten is equivalent to ten ones. Teaching point 2: Multiples of ten can be represented using their names or using numerals. We can count in multiples of ten. Teaching point 3: Knowledge of the 0–10 number line can be used to estimate the position of multiples of ten on a 0–100 number line. Teaching point 4: Adding ten to a multiple of ten gives the next multiple of ten; subtracting ten from a multiple of ten gives the previous multiple of ten.
Weeks 5-6	Solving word problems (addition and subtraction) Develop use visual models and own representations to solve problems Use bar modelling as a strategy for solving word problems. Using number bonds and simple bars to represent word problems	Begin to experience partitioning and combining numbers within 10. Devise and record number stories, using pictures, numbers and symbols (such as arrows).	Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs. Add and subtract 1-digit and 2-digit numbers to 20, including zero. Represent and use number bonds	1.8 Composition of numbers: multiples of 10 up to 100 Teaching point 5: Known facts for the numbers within ten can be used to add and subtract in multiples of ten by

	Number comparison, specifically looking at how many more or how many fewer/less. Develop understanding on when to add or when to subtract and decide whether to add or subtract based on the question Be able to add/ subtract numbers to 20. Use number bond diagrams (part, whole model) to add and subtract. Use concrete materials to add and subtract. Use pictures to add and subtract. Use a number bond diagram to break apart numbers according to the context of the problem. Draw pictures to solve word problems. Use the guess-and-check method to solve word problems. Use abstract notation to solve word problems. Create a number sentence from a word problem. Use a 100-square to compare numbers. Use a number line to compare numbers	Develop fluency in addition and subtraction facts within 10. Knows how to automatically recall number bonds for numbers 0-5 and for 10, including corresponding partitioning facts. Secure: 1.5 Addition and subtraction strategies within 10 1.6 Augmentation and reduction 1.7 Addition and subtraction strategies within 10 1.1 Comparison of quantities and measures TP2 & 3	and related subtraction facts within 20. Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs. Given a number, identify one more and one less. Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems	unitising.
Weeks 7-8	Multiplication & Division Grouping and sharing Understanding grouping and sharing as equal and non-equal groups Constructing arrays practically using peg boards and counters. Using the sharing model as one for	Distribute items fairly, for example, put 3 marbles in each bag. Recognise when items are distributed unfairly. Can subitise to 5. Skip count in 10s, 5s and	To solve one-step problems involving multiplication and division, calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	2.1 Counting, unitising and coins Teaching point 1: We can count efficiently by counting in groups of two. Teaching point 2: We can

	you, one for you and one for you. Then moving onto grouping using twos, fives and tens. Make connections between arrays, number patterns and counting in 2's, 5's and 10's	twos **1NF–2** Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers.		count efficiently by counting in groups of ten. Teaching point 3: We can count efficiently by counting in groups of five.
Week 9&10	**Money** Recognising coins and notes. Identify coins and notes through shape, markings, size and colour. Understand the value of 1p and £1. Understand that silver coins and copper coins are not the same Understand that the size of the coin doesn't denote its value Identify all of the coins using pictures and concrete materials. Describe the features of the coins including colour, shape and size. Tell the value of the coins by looking at the markings on them.	Skip count in 10s, 5s and twos Can subitise to 5. Knows that money is used to buy items **1NF–2** Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers	Recognise and know the value of different denominations of coins and notes.	2.1 Counting, unitising and coins: **Teaching point 4**: A coin has a value which is independent of its size, shape, colour or mass. **Teaching point 5:** The number of coins in a set is different from the value of the coins in a set; knowledge of counting in groups of two, five or ten can be used to work out the value of a set of identical low-denomination coins. **Teaching point 6:** Knowledge of counting in groups of two, five or ten can be used to work out how many identical low-denomination coins are needed to make a given value.
Week 11: Assessment, closing the gap and revision				
Week 12	**Measurement: length and height** Compare and describe using the appropriate mathematically vocabulary Practical application Non-standard unit into standard unit- use non-standard units and centimetre cubes to measure the lengths of items		To compare, describe and solve practical problems for: ● lengths and heights (long/short, longer/shorter, tall/short, double/half) Compare, describe and solve	MNP/ Powermaths/White Rose 1.1 Comparison of quantities and measures

	Understanding the concept of measuring/ weighting etc. and then the need for standardisation. Compare lengths and describe whether something is taller, longer, shorter or higher. Place objects they are comparing at the same starting point. Learn how to fairly measure two items for comparison using items and body parts, before moving on to measuring using a ruler. Understand the difference between length and height	practical problems for length and height, for example long/short, longer/shorter, tall/short, double/half. Measure and begin to record length and height.	
Seasonal theme: spring – growing and planning Opportunities within topic and look for links		