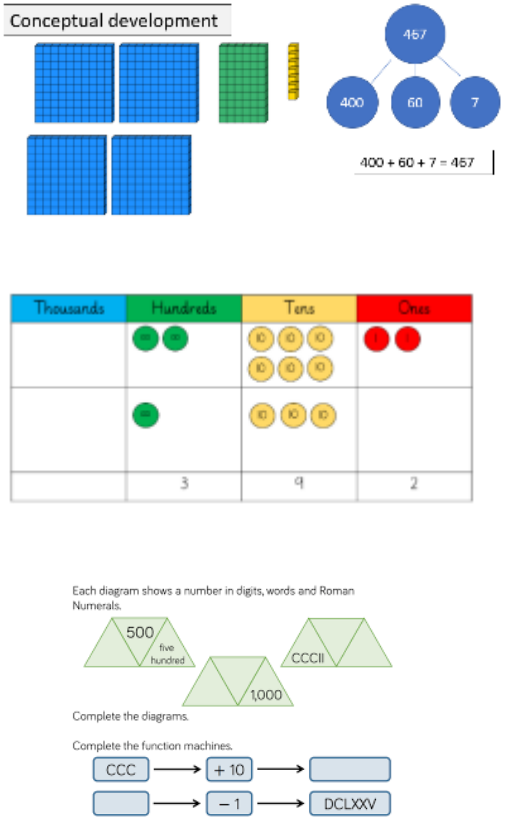
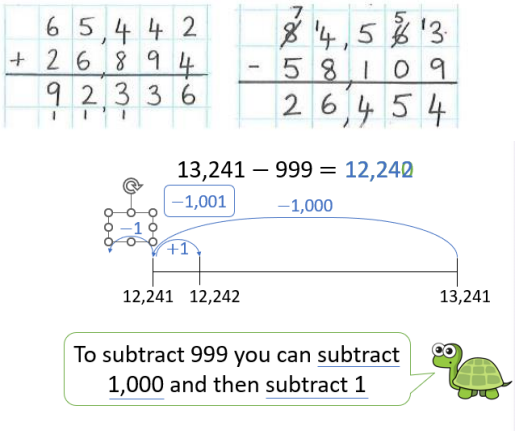
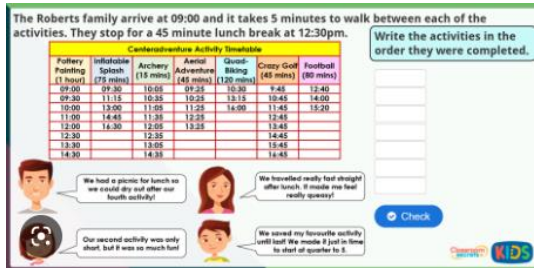
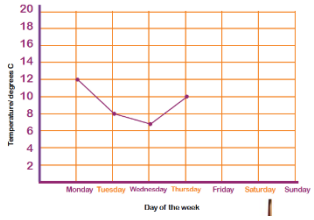
Captain Webb Primary School medium term plan

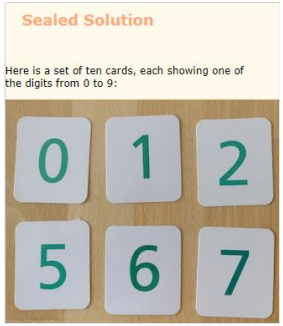
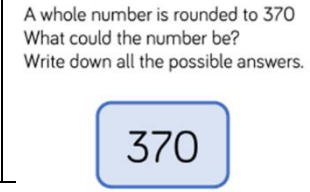
Year 5

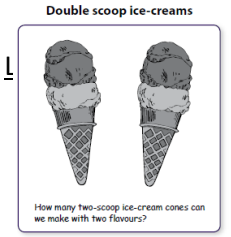
Autumn 1	Strand	Number of weeks	Ready to Progress (Based on National Curriculum objectives)	Key areas of knowledge (small steps in learning)	Resources and methods (Calculation policy)
	Number: Place Value	3	• **Knows how to read and write numbers to at least a million and determine the value of each digit** • **Knows how to round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000** • **Knows the Roman numerals up to M = 1000 and recognise years written in Roman Numerals** • **Knows how to order and compare numbers to at least a million and determine the value of each digit.** • **Knows the place value of each digit to at least a million** • **Count forwards and backwards in steps of powers of 10 to any number up to a million**	• I know numbers can be represented in different ways. • I know the value of a digit is determined by where it is in a number. • I know how to read numbers up to 7 digits. • I know how to write numbers up to 7 digits • I know the symbols for more than and less than • I know how the value of each digit within a number can help me compare numbers • I know the rules for rounding any number. • I know when counting in 10s, 100s and 1000s that the units never change. • I know how to describe linear number sequences using a rule or formula. • I know where roman numerals are used in real life.	

				• I know that roman numerals are a way to represent numbers.	
	Addition & Subtraction	3	• *Knows efficient mental strategies including partitioning and adjusting to add and subtract numbers mentally.* • **Knows how to add and subtract numbers mentally with increasingly large numbers.** • **Knows how to add and subtract whole numbers with more than 4 digits, including using formal written methods.** • **Knows how to solve addition and subtraction multi-step problems in context.** • **Knows that rounding can be used to check answers to calculations and determine in the context of a problem levels of accuracy.** • *Knows how to check the accuracy of addition and subtraction using the inverse.*	• I know how to estimate the answer to addition and subtraction calculations by rounding. • I know how to partition numbers mentally in order to add and subtract. • I know how to adjust numbers in order add and subtract. • I know how to exchange one using the column method. • I know how to use the column method for addition • I know how to exchange more than one number when subtracting. • I know how the inverse can help me check the accuracy of calculations.	Disciplinary knowledge must haves (Critical arithmetic): Number bonds to 10 and 20 and rules of inverse 
	Statistics	2	• *Knows data is represented in different ways and can decide is most appropriate and why.* • *Knows when to use a line graph.* • **Knows how to read a timetable.** • **Knows how to complete, and interpret information in tables, including timetables.** • **Knows how to read a line graph in order to solve comparison, sum and difference problems**	• I know the difference between discreet and continuous data • I know how to represent discreet data appropriately • I know how to find information from a line graph. • I know how to plot data on a line graph.	

				• I know that line graphs can show the relationship between two sets of data • I know how to extract data from a timetable. • I know how to find the difference between two sets of data on a timetable. • I know how to calculate missing values on a timetable.	

Problem Solving and Reasoning

Autumn 1	Strand	Number of Lessons	Ready to Progress (Based on National Curriculum objectives)	Key areas of knowledge (Small steps in learning)	Resources and methods
	Finding all Possibilities	3	I know how to identify the starting and stopping points. I know when some solutions are repeated and when it affects the outcome. I know when the criteria restrict the number of possibilities.	• I know how to start a problem systematically. • I know how to identify repeats when finding all possibilities. • I know what the question is asking of me in order to find all possibilities.	<u>Lesson 1</u>  <u>Lesson 2</u> Rounding Numbers 

					L 
	Word Problems	2	I know what the narrative is about and what words identify the operations and the concepts needed.	• I know the meaning of key vocabulary to understand what the problem is asking me.	Eg. Anne has 34,218 tickets to sell, Mike has 22,218. **Approximately** how many do they have to sell altogether.
	Reasoning	1	I know how to write a single statement to show when something is sometimes true or never true	• I know how to spot mistakes and decide whether something is sometimes true or always true.