

Plan: Abacus Year 5 **Term:** Spring 1 **School Name:** Seaton Sluice Middle School

Wk	Weekly Summary	Strands	Objectives
11	Read, write and order numbers with up to 6 digits and understand the place value of each digit; place 6-digit numbers on a number line and find numbers between; solve place-value additions and subtractions with 6-digit numbers; understand place value in decimal numbers as tenths and hundredths; multiply and divide by 10/100/1000 using a place-value grid; understand place value in decimal numbers to 2-decimal places; place decimal numbers on a line; round two-place decimal numbers to nearest tenth and whole number; say the number a tenth or a hundredth more	Number and place value (NPV)	<p>NPV.63 Understand place value in 6-digit numbers by creating 6-digit numbers, placing them on a number line and solving place value additions and subtractions</p> <p>NPV.64 Order and compare 6-digit numbers and say a number between</p> <p>NPV.62 Understand the effect of multiplying or dividing a given number by 10, 100 or 1000; answers < 100000 and with not more than 2 decimal places</p>
		Decimals, percentages and their equivalence to fractions (DPE)	<p>DPE.65 Multiply and divide numbers by 10 and 100 to give 1- or 2-place decimal answers</p> <p>DPE.62 Use place value to add and subtract 0.1 and 0.01 to and from decimal numbers</p> <p>DPE.64 Round 1- and 2-place decimals up and down to the nearest whole number</p> <p>DPE.66 Round 2-place decimals up or down to the nearest tenth</p>
		Problem solving, reasoning and algebra (PRA)	<p>PRA.65 Use mathematical reasoning to explain findings, patterns and relationships</p>
12	Rehearse mental addition strategies for decimals and whole numbers; use counting on as a strategy to perform mental addition of 2-place decimals to the next whole number; solve missing number sentences; use mental	Mental addition and subtraction (MAS)	<p>MAS.56 Use mental strategies to add 2-digit, 3-digit and 4-digit numbers</p> <p>MAS.62 Add any pair of 1-place decimals</p> <p>MAS.63 Work out what number to add to a 2-place decimal to make the next whole number</p> <p>MAS.58 Understand addition and subtraction as inverses of each other and use this to find relationships</p> <p>MAS.60 Use counting up to subtract 4-digit numbers from near multiples of 1000</p> <p>MAS.50 Subtract 4-digit from 4-digit multiples of 1000 by counting up</p>
		Problem solving, reasoning and algebra (PRA)	<p>PRA.66 Solve addition and subtraction multi-step problems, deciding which operations and methods to use and why</p>

	strategies to solve multi-step word problems; use counting up as a strategy to perform written subtraction (Frog)	Written addition and subtraction (WAS)	WAS.58 Use expanded or compact decomposition to subtract numbers with up to 4-digits (harder)
13	Use rules of divisibility to find if numbers are divisible by 2, 3, 4, 5, 9 and 10; identify prime numbers; revise finding factors of numbers; find squares and square roots of square numbers; finding patterns and making and testing rules; use mental multiplication and division strategies; relate mental division strategies to multiples of ten of the divisor	Mental multiplication and division (MMD)	MMD.62 Apply divisibility tests for 2, 3, 4, 5, 6, 9, 10 and 25 MMD.61 Identify factors and multiples, and begin to find common factors MMD.55 Use mental strategies to solve multiplications including multiplying by 0 and 1, dividing by 1, multiplying together three numbers MMD.57 Use mental strategies to solve divisions including dividing by 1 MMD.66 Use efficient mental division strategies to divide large numbers
		Number and place value (NPV)	NPV.68 Identify all the prime numbers less than 100 using Eratosthenes sieve NPV.67 Identify square numbers up to 100, understand concept of a square root, relate square roots to square numbers
		Problem solving, reasoning and algebra (PRA)	PRA.70 Identify patterns, devise and test rules and use them to make predictions
14	Know properties of equilateral, isosceles, scalene and right-angled triangles; find that angles in a triangle have a total of 180°; sort triangles according to their properties; use scales to weigh amounts to the nearest half interval; convert from grams to kilograms and vice versa, from millilitres to litres and vice versa, and from metres to kilometres and vice versa; read scales to the nearest half division; understand that we measure distance in kilometres and miles; use	Problem solving, reasoning and algebra (PRA)	PRA.69 Devise a rule to work out missing angles
		Geometry: properties of shapes (GPS)	GPS.58 Recognise that an equilateral triangle is a regular polygon with angles of 60° GPS.57 Compare and classify triangles, according to their properties
		Measurement (MEA)	MEA.37 Read relevant scales to the nearest numbered unit MEA.43 Measure, compare, add and subtract weights (masses) using kg/g MEA.65 Convert between different units of measure, e.g. kilometres to metres, metres to centimetres, etc. MEA.70 Recognise and estimate volume and capacity using ccs and ml
		Statistics (STA)	STA.61 Interpret and present continuous data using line graphs

	ready reckoning to give approximate values of miles in kilometres and vice versa; draw line conversion graphs		
15	Use a written column method to add amounts of money in pounds and pence; add 2-place decimals using written column addition; subtract decimal numbers using counting up (Frog)	Written addition and subtraction (WAS)	WAS.62 Use column addition to add pairs of 2-place decimals, including amounts of money WAS.63 Use counting up on a number line to subtract 2-place decimals from 2-place decimals
		Problem solving, reasoning and algebra (PRA)	PRA.57 Check that all solutions have been found PRA.68 Solve problems involving addition, subtraction, multiplication and division and a combination of these
		Measurement (MEA)	MEA.71 Solve problems involving addition and subtraction of measures using decimal notation
			ASSESSMENTS – SPRING HALF TERM TEST IN ARITHMETIC AND PROBLEM SOLVING AND REASONING