

**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><b>NPV.63</b> 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><b>NPV.64</b> Order and compare 6-digit numbers and say a number between</p> <p><b>NPV.62</b> Understand the effect of multiplying or dividing a given number by 10, 100 or 1000; answers &lt; 100000 and with not more than 2 decimal places</p>
		Decimals, percentages and their equivalence to fractions (DPE)	<p><b>DPE.65</b> Multiply and divide numbers by 10 and 100 to give 1- or 2-place decimal answers</p> <p><b>DPE.62</b> Use place value to add and subtract 0.1 and 0.01 to and from decimal numbers</p> <p><b>DPE.64</b> Round 1- and 2-place decimals up and down to the nearest whole number</p> <p><b>DPE.66</b> Round 2-place decimals up or down to the nearest tenth</p>
		Problem solving, reasoning and algebra (PRA)	<p><b>PRA.65</b> 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><b>MAS.56</b> Use mental strategies to add 2-digit, 3-digit and 4-digit numbers</p> <p><b>MAS.62</b> Add any pair of 1-place decimals</p> <p><b>MAS.63</b> Work out what number to add to a 2-place decimal to make the next whole number</p> <p><b>MAS.58</b> Understand addition and subtraction as inverses of each other and use this to find relationships</p> <p><b>MAS.60</b> Use counting up to subtract 4-digit numbers from near multiples of 1000</p> <p><b>MAS.50</b> Subtract 4-digit from 4-digit multiples of 1000 by counting up</p>
		Problem solving, reasoning and algebra (PRA)	<p><b>PRA.66</b> 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)	<b>WAS.58</b> 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)	<b>MMD.62</b> Apply divisibility tests for 2, 3, 4, 5, 6, 9, 10 and 25 <b>MMD.61</b> Identify factors and multiples, and begin to find common factors <b>MMD.55</b> Use mental strategies to solve multiplications including multiplying by 0 and 1, dividing by 1, multiplying together three numbers <b>MMD.57</b> Use mental strategies to solve divisions including dividing by 1 <b>MMD.66</b> Use efficient mental division strategies to divide large numbers
		Number and place value (NPV)	<b>NPV.68</b> Identify all the prime numbers less than 100 using Eratosthenes sieve <b>NPV.67</b> Identify square numbers up to 100, understand concept of a square root, relate square roots to square numbers
		Problem solving, reasoning and algebra (PRA)	<b>PRA.70</b> 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)	<b>PRA.69</b> Devise a rule to work out missing angles
		Geometry: properties of shapes (GPS)	<b>GPS.58</b> Recognise that an equilateral triangle is a regular polygon with angles of 60° <b>GPS.57</b> Compare and classify triangles, according to their properties
		Measurement (MEA)	<b>MEA.37</b> Read relevant scales to the nearest numbered unit <b>MEA.43</b> Measure, compare, add and subtract weights (masses) using kg/g <b>MEA.65</b> Convert between different units of measure, e.g. kilometres to metres, metres to centimetres, etc. <b>MEA.70</b> Recognise and estimate volume and capacity using ccs and ml
		Statistics (STA)	<b>STA.61</b> 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)	<b>WAS.62</b> Use column addition to add pairs of 2-place decimals, including amounts of money <b>WAS.63</b> Use counting up on a number line to subtract 2-place decimals from 2-place decimals
		Problem solving, reasoning and algebra (PRA)	<b>PRA.57</b> Check that all solutions have been found <b>PRA.68</b> Solve problems involving addition, subtraction, multiplication and division and a combination of these
		Measurement (MEA)	<b>MEA.71</b> Solve problems involving addition and subtraction of measures using decimal notation
			<b>ASSESSMENTS – SPRING HALF TERM TEST IN ARITHMETIC AND PROBLEM SOLVING AND REASONING</b>