Year 3 Mathematics Yearly Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Week 1	Place value	Fractions	Calculations	2D shape and Perimeter	Decimals	**Enterprise**
Week 2	Place value	Fractions		Fractions – Adding and subtracting	Calculations week	**Enterprise**
Week 3	Written addition	Angles	Introduction to bar – word problems	Measure – reading scales	Algebra – revision of bar	Calculations week
Week 4	Written subtraction	Time	Statistics – interpret	Measure – converting/ Problem solving	Multiplication – including scaling	Statistics – timetables/bar charts
Week 5	Multiplication	Duration – calculations (context)	Fractions Decimals	Time	3D shape	Money
Week 6	Division	Shape 2D	Money		Conversions - Measure	Position and direction
Week 7	Division/ Multiplication	Measures - conversion			Time	Review Week
	Mental strategies throughout	AUTUMN PUMA		SPRING PUMA		SUMMER PUMA

Autumn 1	Programmes of Study / Objectives / Targets
Week 1	Place value find 10 or 100 more or less than a given number; compare and order numbers up to 1000; read and write numbers up to 1000 in numerals and in words;
Week 2	Place value identify, represent and estimate numbers using different representations; count from 0 in multiples of 4, 8, 50 and 100; solve number problems and practical problems involving these ideas
Week 3	Written addition add and subtract numbers mentally, including: * a three-digit number and ones * a three-digit number and tens * a three-digit number and hundreds add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction estimate the answer to a calculation and use inverse operations to check answers solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction
Week 4	Written subtraction • add and subtract numbers mentally, including: • a three-digit number and ones • a three-digit number and tens • a three-digit number and hundreds • add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction

	• estimate the answer to a calculation and use inverse operations to check answers • solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction
Week 5	Multiplication • recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
Week 6	Division • recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
Week 7	Division/ Multiplication • solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects

Autumn 2	Programmes of Study / Objectives / Targets
Week 1	Fractions • count up and down in tenths; • recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators; • recognise that tenths arise from dividing an object into 10 equal parts and in dividing one – digit numbers or quantities by 10. • recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
Week 2	Fractions • compare and order unit fractions, and fractions with the same denominators • recognise and show, using diagrams, equivalent fractions with small denominators • solve problems that involve all of the above
Week 3	Angles • recognise angles as a property of shape or a description of a turn; • identify right angles, recognise that 2 right angles make a half-turn, 3 make three-quarters of a turn and 4 a complete turn; identify whether angles are greater than or less than a right angle
Week 4	Time • estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight • tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks • compare durations of events, for example to calculate the time taken by particular events or tasks
Week 5	Duration – calculations (context) • know the number of seconds in a minute and the number of days in each month, year and leap year; • compare durations of events [for example, to calculate the time taken by particular events or tasks]
Week 6	Shape 2D • recognise angles as a property of shape or a description of a turn • ▪ identify right angles, recognise that two right angles make a half-turn, three make three quarters

	of a turn and four a complete turn; identify whether angles are greater than or less than a right angle
Week 7	Measures - conversion • measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)

Spring 1	Programmes of Study / Objectives / Targets
Week 1 Week 2	Calculations week – review • Review of operations. Can move onto more efficient methods if appropriate. • Application in other areas eg perimeter and area, problem solving, two step problems. • Can also concentrate heavily on mental strategies
Week 3	Introduction to bar – word problems solve problems, *including* ***missing number*** *problems, using number facts, place value, and more complex addition and subtraction.* (copied from Addition and Subtraction) • Bar can be used to support understanding of equals sign.
Week 4	Statistics – interpret • interpret and present data using bar charts, pictograms and tables • solve one-step and two-step questions [for example 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables
Week 5	Fractions Decimals • count up and down in tenths; • recognise that tenths arise from dividing an object into 10 equal parts and in dividing one – digit numbers or quantities by 10. (revisited)
Week 6	Money Pupils continue to become fluent in recognising the value of coins, by adding and subtracting amounts, including mixed units, and giving change using manageable amounts. They record £ and p separately. The decimal recording of money is introduced formally in year 4.

Spring 2	Programmes of Study / Objectives / Targets
Week 1	2D shape and Perimeter Shape 2D • measure the perimeter of simple 2-D shapes; • draw 2-D shapes identify horizontal and vertical lines and pairs of perpendicular and parallel lines • Apply angles knowledge
Week 2	Fractions – Adding and subtracting • Review of fractions • add and subtract fractions with the same denominator within one whole (e.g. $^{5}/_{7} + {}^{1}/_{7} = {}^{6}/_{7}$)
Week 3	Measure – reading scales • Pupils understand and use simple scales (for example, 2, 5, 10 units per cm) • Application to time (minutes) • Application to length, weight, capacity
Week 4	Measure – converting/Problem solving • The comparison of measures includes simple scaling by integers (for example, a given quantity or measure is twice as long or five times as high) and this connects to multiplication. • comparing and using mixed units (for example, 1 kg and 200g) and simple equivalents of mixed units (for example, 5m = 500cm). • measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) (review)
Week 5	Time • estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight • tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks • Pupils use both analogue and digital 12-hour clocks and record their times. In this way they become fluent in and prepared for using digital 24-hour clocks in year 4.

Summer 1	Programmes of Study / Objectives / Targets
Week 1	Decimals • count up and down in tenths; • recognise that tenths arise from dividing an object into 10 equal parts and in dividing one – digit numbers or quantities by 10. (revisited) • Application of decimals, including adding and subtracting.
Week 2	Calculations week • Review of operations
Week 3	Algebra – revision of bar • Using Singapore Bar to solve algebraic problems, including missing numbers. • Could also be applied to perimeter. • To be used also with worded problems.
Week 4	Multiplication – including scaling • solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. • Checking using division as inverse • Pupils develop efficient mental methods, for example, using commutativity and associativity (for example, 4 × 12 × 5 = 4 × 5 × 12 = 20 × 12 = 240) and multiplication and division facts (for example, using 3 × 2 = 6, 6 ÷ 3 = 2 and 2 = 6 ÷ 3) to derive related facts (for example, 30 × 2 = 60, 60 ÷ 3 = 20 and 20 = 60 ÷ 3).
Week 5	3D shape • draw and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them; • Pupils' knowledge of the properties of shapes is extended at this stage to symmetrical and non-symmetrical polygons and polyhedra. Pupils extend their use of the properties of shapes. They should be able to describe the properties of 2-D and 3-D shapes using accurate language, including lengths of lines and acute and obtuse for angles greater or lesser than a right angle.

Week 6	Measure Conversions • measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) • Converting between different units of measure, including minutes and seconds, km and m, etc
Week 7	Money • add and subtract amounts of money to give change, using both £ and p in practical contexts • Linked to decimals.

Summer 2	Programmes of Study / Objectives / Targets
Week 1	**Enterprise**
Week 2	**Enterprise**
Week 3	Calculations week Operations, with focus on most challenging. Can children be moved onto more efficient method?
Week 4	Statistics – timetables/bar charts • interpret and present data using bar charts, pictograms and tables • They continue to interpret data presented in many contexts.
Week 5	Time (Review) • estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight • tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks • Pupils use both analogue and digital 12-hour clocks and record their times. In this way they become fluent in and prepared for using digital 24-hour clocks in year 4.
Week 6	Position and direction • identify right angles, recognise that 2 right angles make a half-turn, 3 make three-quarters of a turn and 4 a complete turn; identify whether angles are greater than or less than a right angle (previously covered)
Week 7	Review Week Focus on an area that children have found challenging over the course of the year.