Mount Pleasant Primary School

Maths Long-Term Plan: Nursery

Autumn	Colours	Colours	Matching	Matching	Sorting	Sorting	Number 1	Number 2 Subitising	Number 2	Pattern	Pattern	Consolidation
Spring	Number 3 Subitising	Number 3	Number 4 Subitising	Number 4	Number 5 Subitising	Number 5	Number 6 Subitising	Number 6	Height & Length	Mass	Capacity	Consolidation
Summer	More / Fewer	One More	One Less	2D Shape	3D Shape	Consolidation	Number Composition	Night & Day	Positional Language	Positional Language	Consolidation	Consolidation

Mount Pleasant Primary School

Maths Long-Term Plan: Reception

Autumn	Getting to Know You (3 weeks)	Just like me! (3 weeks)	It's Me 1, 2, 3! (3 week)	Light and Dark (3 weeks)	Consolidation (2 weeks)
Spring	Alive in 5! (3weeks)	Growing 6, 7, 8 (3 weeks)	Building 9 and 10 (3 weeks)	Consolidation (3 weeks)	Consolidation (2 weeks)
Summer	To 20 and Beyond (3weeks)	First, Then, Now (3 weeks)	Find My Pattern (3 weeks)	On the Move (3 weeks)	Consolidation (2 weeks)

Mount Pleasant Primary School

Maths Medium-Term Plan: Reception

Autumn	**Phase**	**Getting to Know You (3 weeks)**	**Just like me! (3 weeks)**	**It's Me 1, 2, 3! (3 week)**	**Light and Dark (3 weeks)**	**Consolidation (2 weeks)**
	Number	Opportunities for settling in, introducing the areas of the provision and getting to know the children.	Match and Sort Compare Amounts	Representing 1, 2, 3 Comparing 1, 2, 3 Composition of 1, 2, 3	Representing Numbers To 5 One More, One Less	
	SSM	Key times of day, class routines. Exploring the provision area inside and out. Where do things belong? Positional language.	Compare size, mass and capacity Exploring Pattern	Circles and Triangles Positional Language	Shapes With Four Sides Time	
Spring	**Phase**	**Alive in 5! (3weeks)**	**Growing 6, 7, 8 (3 weeks)**	**Building 9 and 10 (3 weeks)**	**Consolidation (2 weeks)**	
	Number	Introducing numbers to zero Comparing numbers to 5 Composition of 4 and 5	Using 6, 7 and 8 Combining 2 amounts Making pairs	Counting to 9 and 10 Comparing numbers to 10 Bonds to 10		
	SSM	Compare mass Compare capacity	Length, height and time	3d shapes Spatial awareness Patterns		
Sum	**Phase**	**To 20 and Beyond (3weeks)**	**First, Then, Now (3 weeks)**	**Find My Pattern (3 weeks)**	**On the Move (3 weeks)**	

Mount Pleasant Primary School

Maths Long-Term Plan: Year 1

Autumn	Place Value Within 10 (5 weeks)	Addition & Subtraction Within 10 (5 weeks)	Problem Solving Skills (2 weeks)	Shape (2 weeks)		
Spring	Place Value Within 20 (3 weeks)	Addition & Subtraction Within 20 (3 weeks)	Place Value Within 50 (2 weeks)	Length & Height (2 weeks)	Weight & Volume (2 weeks)	
Summer	Multiplication & Division (3 weeks)	Fractions (2 weeks)	Position & Direction (1 week)	Place Value Within 100 (2 weeks)	Money (1 week)	Time (3 weeks)

Number	Problem Solving Skills	Measurement	Geometry	Statistics

Mount Pleasant Primary School

Maths Medium-Term Plan / Small Steps: Year 1

		Number	Problem Solving Skills	Measurement	Geometry	Statistics
Autumn	NC	Count to and across 10, forwards and backwards, beginning with 0 or 1, or from any given number Count, read and write numbers to 10 in numerals Read and write numbers from 1 to 10 in words Count in multiples of twos Given a number, identify one more and one less within 10 Use the language of: equal to, more than, less than (fewer), most, least Identify and represent numbers within 10 using objects and pictorial representations including the number line	Represent and use number bonds and related subtraction facts within 10 Add and subtract one-digit numbers within 10, including zero Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs Solve one-step problems that involve addition and subtraction within 10, using concrete objects and pictorial representations, and missing number problems	**Problem Solving Skills** All possibilities Logic Rules	Recognise and name common 2-D and 3-D shapes, including: * 2-D shapes [e.g. rectangles (including squares), circles and triangles] 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres].	
	Small Steps	**Place Value (10)** Sort objects Count objects Count objects from a larger group Represent objects Recognise numbers as words Count on from any number 1 more Count backwards within 10 1 less Compare groups by matching Fewer, more, same Less than, greater than, equal to Compare numbers Order objects and numbers The number line	**Addition & Subtraction (10)** Introduce parts and wholes Part whole model Write number sentences Fact families addition facts Number bonds within 10 Systematic number bonds within 10 Number bonds to 10 Addition add together Addition add more Addition problems Find a part Subtraction find a part Fact families the eight facts Subtraction take away/crossing out (How many left?) Subtraction take away (How many left?) Subtraction on a number line Add or subtract 1 or 2		**Shape** Recognise and name 3 D shapes Sort 3 D shapes Recognise and name 2 D shapes Sort 2 D shapes Patterns with 2 D and 3 D shapes	

Mount Pleasant Primary School

Maths Medium-Term Plan / Small Steps: Year 1

Spring	NC	Count to and across 20, forwards and backwards, beginning with 0 or 1, or from any given number Count, read and write numbers to 20 in numerals Read and write numbers from 1 to 20 words Count in multiples of twos and tens Given a number, identify one more and one less within 20 Use the language of: equal to, more than, less than (fewer), most, least Identify and represent numbers within 20 using objects and pictorial representations including the number line	Represent and use number bonds and related subtraction facts within 20 Add and subtract one-digit numbers within 20, including zero Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs Solve one-step problems that involve addition and subtraction within 20, using concrete objects and pictorial representations, and missing number problems	Count to and across 50, forwards and backwards, beginning with 0 or 1, or from any given number Count, read and write numbers to 50 in numerals Read and write numbers from 1 to 50 words Count in multiples of twos, fives and tens Given a number, identify one more and one less within 50 Use the language of: equal to, more than, less than (fewer), most, least Identify and represent numbers within 50 using objects and pictorial representations	Compare, describe and solve practical problems for: * lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half] Measure and begin to record lengths and heights	Compare, describe and solve practical problems for: * mass/weight [e.g. heavy/light, heavier than, lighter than] Measure and begin to record mass/weight Compare, describe and solve practical problems for: * capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter] Measure and begin to record capacity and volume
	Small Steps	**Place Value (20)** count to 20 by making 10s numbers to 20 forward/backwards within 20 tens and ones represent numbers to 20 one more/one less compare objects within 20 compare numbers within 20 order numbers within 20 count in 2s count in 5s	**Addition & Subtraction (20)** add by counting on add ones using number bonds find and make number bonds add by making 20 subtraction – not crossing 20 subtraction by counting back not cross 20 subtraction by counting back cross 20 subtraction crossing 20 related facts comparing number sentences	**Place Value (50)** count to 50 by making 20s numbers to 50 forward/backwards within 50 tens and ones represent numbers to 50 one more/one less compare objects within 50 compare numbers within 50 order numbers within 50 count in 2s count in 5s	**Length & Height** compare lengths compare heights measure length measure height adding lengths subtracting lengths	**Weight & Volume** what are weight and mass measure mass compare mass weight and mass problems what are capacity and volume measure capacity compare capacity

Number | **Problem Solving Skills** | **Measurement** | **Geometry** | **Statistics**

Mount Pleasant Primary School

Maths Medium-Term Plan / Small Steps: Year 1

Summer	NC	Count in multiples of twos, fives and tens Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher	Recognise, find and name a half as one of two equal parts of an object, shape or quantity Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity	Describe position, direction and movement, including half, quarter and three-quarter turns.	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Count, read and write numbers to 100 in numerals Read and write numbers from 1 to 100 in words Count in multiples of twos, fives and tens Given a number, identify one more and one less within 100 Use the language of: equal to, more than, less than (fewer), most, least Identify and represent numbers within 100 using objects and pictorial representations including the number line	Recognise and know the value of different denominations of coins and notes	Compare, describe and solve practical problems for: * time [e.g. quicker, slower, earlier, later] Sequence events in chronological order using language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] Measure and begin to record time (hours, minutes, seconds) Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. Recognise and use language relating to dates, including days of the week, weeks, months and years
	Small Steps	**Multiplication & Division** count in 2s, 5s, 20s make equal groups add equal groups make arrays make doubles equal groups – grouping equal groups - sharing	**Fractions** making a half making a whole find half half of an amount find quarter quarter of an amount	**Position & Direction** describe turns describe position	**Place Value (100)** counting to 100 forwards within 100 backwards within 100 100 squares partitioning compare numbers order numbers 1more/1 less	**Money** recognize coins recognize notes	**Time** before and after dates time to the hour time to the half hour writing time comparing time

Number | **Problem Solving Skills** | **Measurement** | **Geometry** | **Statistics**

Mount Pleasant Primary School

Maths Long-Term Plan: Year 2

Autumn	Place Value (4 weeks)	Addition & Subtraction (5 weeks)	Problem Solving Skills (2 weeks)	Shape (3 weeks)	
Spring	Money (2 weeks)	Multiplication & Division (5 weeks)	Length & Height (2 weeks)	Mass, Capacity & Temperature (3 weeks)	
Summer	Statistics (2 weeks)	Fractions (3 weeks)	Position & Direction (2 weeks)	Problem Solving (2 weeks)	Time (3 weeks)

Number	Problem Solving Skills	Measurement	Geometry	Statistics

Mount Pleasant Primary School

Maths Medium-Term Plan / Small Steps: Year 2

Autumn	NC	Count in steps of 2, 3, and 5 from 0, and in tens from any number, forwards and backwards Compare and order numbers from 0 up to 100; use <, > and = signs Identify, represent and estimate numbers using different representations, including the number line Read and write numbers to at least 100 in numerals and in words Recognise the place value of each digit in a two-digit number (tens, ones) Use place value and number facts to solve problems	Recall/use addition/subtraction facts to 20 fluently, and derive and use related facts up to 100 Add and subtract concrete objects, pictorial representations, and mentally, including: * a two-digit number and ones * a two-digit number and tens * two two-digit numbers * adding three one-digit numbers Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot Recognise and use the inverse relationship between addition and subtraction a Solve problems with addition and subtraction: using concrete objects and pictorial representations, Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change	**Problem Solving Skills** All possibilities Logic Rules	Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] Compare and sort common 2-D and 3-D shapes and everyday objects	
	Small Steps	**Place Value** Numbers to 20 Count objects to 100 by making 10s Recognise tens and ones Use a place value chart Partition numbers to 100 Write numbers to 100 in words Flexibly partition numbers to 100 Write numbers to 100 in expanded form 10s on the number line to 100 10s and 1s on the number line to 100 Estimate numbers on a number line Compare objects Compare numbers Order objects and numbers Count in 2s, 5s and 10s Count in 3s	**Addition & Subtraction** Bonds to 10 Fact families addition and subtraction bonds within 20 Related facts Bonds to 100 (tens) Add and subtract 1s Add by making 10 Add three 1digit numbers Add to the next 10 Add across a 10 Subtract across 10 Subtract from a 10 Subtract a 1 digit number from a 2 digit number (across a 10 more, 10 less Add and subtract 10s Add two 2 digit numbers (not across a 10) Add two 2digit numbers (across a 10) Subtract two 2digit numbers (not across a 10) Subtract two 2 digit numbers (across a 10) Mixed addition and subtraction Compare number sentences Missing number problems		**Shape** Recognise 2D and 3 D shapes Count sides on 2D shapes Count vertices on 2D shapes Draw 2D shapes Lines of symmetry on shapes Use lines of symmetry to complete shapes Sort 2D shapes Count faces on 3D shapes Count edges on 3D shapes Count vertices on 3D shapes Sort 3D shapes Make patterns with 2D and 3 D shapes	

Number | **Problem Solving Skills** | **Measurement** | **Geometry** | **Statistics**

Mount Pleasant Primary School

Maths Medium-Term Plan / Small Steps: Year 2

Spring	**NC**	Recognise and use symbols for pounds (£) and pence (p) Combine amounts to make a particular value Find different combinations of coins that equal the same amounts of money Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts	Compare and order lengths and record the results using >, < and = Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit, using rulers	Compare and order mass and record the results using >, < and = Choose and use appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit, using scales Compare and order volume/capacity and record the results using >, < and = Choose and use appropriate standard units to estimate and measure capacity (litres/ml) to the nearest appropriate unit, using measuring vessels Choose and use appropriate standard units to estimate and measure **temperature** (°C) to the nearest appropriate unit, using thermometers
	Small Steps	**Money** recognize coins and notes count money – pence count money - pounds count money – pounds and pence count money – notes and coins select money make the same amount compare money find the total find the difference find change 2-step money problems	**Multiplication & Division** recognize, make and add equal groups multiplication sentences using x multiplication sentences from pictures use arrays x2, x5, 10 table make equal groups – sharing make equal groups – grouping divide by 2 odd and even numbers divide by 5 and 10	**Length & Height** measure length (cm) measure length (m) compare lengths order lengths 4 operations length	**Mass, Capacity & Temperature** compare mass measure mass (g) measure mass (kg) compare volume millilitre litres 4 operations (mass) 4 operations (volume) temperature

Number | **Problem Solving Skills** | **Measurement** | **Geometry** | **Statistics**

Mount Pleasant Primary School

Maths Medium-Term Plan / Small Steps: Year 2

Summer	NC	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity Ask and answer questions about totalling and comparing categorical data	Pupils should count in fractions up to 10, starting from any number and using the ½ and 2/4 equivalence on the number line Recognise, find, name and write fractions 1/3, 1/4, 2/4 and ¾ of a length, shape, set of objects or quantity Write simple fractions e.g. ½ of 6 = 3 and recognise the equivalence of 2/4 and ½	Use mathematical vocabulary to describe position, direction and movement including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise) Order and arrange combinations of mathematical objects in patterns and sequences	**Problem Solving & Consolidation** ITAF Evidence	Compare and sequence intervals of time Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times Know the number of minutes in an hour and the number of hours in a day.
	Small Steps	**Statistics** make tally charts draw pictograms (1-1) interpret pictograms (1-1) draw pictograms (2,5,10) interpret pictograms (2,5,10) block diagrams	**Fractions** make equal parts recognize ½ find ½ recognize ¼ find ¼ recognize 1/3 find 1/3 unit fractions non-unit fractions ½ and 2/4 equivalence find ¾	**Position & Direction** describing movement describing turns making patterns		**Time** o'clock and half-past quarter past/quarter to telling to 5 mins hours and days find time durations compare durations
		Number	**Problem Solving Skills**	**Measurement**	**Geometry**	**Statistics**

Mount Pleasant Primary School

Maths Long-Term Plan: Year 3

Autumn	Place Value (3 weeks)	Addition & Subtraction (5 weeks)	Problem Solving Skills (2 weeks)	Multiplication & Division (4 weeks)	
Spring	Multiplication & Division (3 weeks)	Length & Perimeter (3 weeks)	Fractions A (3 weeks)	Mass & Capacity (3 weeks)	
Summer	Fractions B (2 weeks)	Money (2 weeks)	Time (3 weeks)	Shape (2 weeks)	Statistics (3 weeks)

Number	Problem Solving Skills	Measurement	Geometry	Statistics

Mount Pleasant Primary School

Maths Medium-Term Plan / Small Steps: Year 3

Autumn	NC	Count from 0 in multiples of 4, 8, 50 and 100; Find 10 or 100 more or less than a given number Compare and order numbers up to 1 000 Identify, represent and estimate numbers using different representations Read and write numbers up to 1 000 in numerals and in words Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) Solve number problems and practical problems involving these ideas.	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	**Problem Solving Skills** All possibilities Logic Rules	Count from 0 in multiples of 4, 8, 50 and 100 Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods Estimate the answer to a calculation and use inverse operations to check answers 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	
	Small Steps	**Place Value** Represent numbers to 100 Partition numbers to 100 Number line to 100 Hundreds Represent numbers to 1,000 Partition numbers to 1,000 Flexible partitioning of numbers to 1000 Hundreds, tens and ones Find 1, 10 or 100 more or less Number line to 1,000 Estimating on a number line to 1,000 Compare numbers to 1,000 Order numbers to 1,000 Count in 50s	**Addition & Subtraction** Apply number bonds within 10 Add and subtract 1s Add and subtract 10s Add and subtract 100s Spot the pattern Add 1s across a 10 Add 10s across a 100 Subtract 1s across a 10 Subtract 10s across a 100 Make connections Add two numbers (no exchange) Subtract two numbers (no exchange) Add two numbers (across a 10) Add two numbers (across a 100) Subtract two numbers (across a 10) Subtract two numbers (across a 100) Add 2digit and 3 digit numbers Subtract a 2 digit number from a 3 digit number Complements to 100 Estimate answers Inverse operations Make decisions		**Multiplication & Division** Multiplication equal groups Use arrays Multiples of 2 Multiples of 5 and 10 Sharing and grouping Multiply by 3 Divide by 3 The 3 times table Multiply by 4 Divide by 4 The 4 times table Multiply by 8 Divide by 8 The 8 times table The 2, 4 and 8 times tables	

Number | **Problem Solving Skills** | **Measurement** | **Geometry** | **Statistics**

Mount Pleasant Primary School

Maths Medium-Term Plan / Small Steps: Year 3

Spring	NC	Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods Estimate the answer to a calculation and use inverse operations to check answers 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	Measure, compare, add and subtract: lengths (m/cm/mm) Measure the perimeter of simple 2-D shapes	Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators Compare and order unit fractions, and fractions with the same denominators Recognise and show, using diagrams, equivalent fractions with small denominators	Measure, compare, add and subtract: mass (kg/g) Measure, compare, add and subtract: volume/capacity (l/ml)
	Small Steps	**Multiplication & Division** consolidate x2, x4, x8 comparing statements related calculations written TO x O written TO ÷ O scaling	**Length & Perimeter** measure length equivalent cm m lengths equivalent mm cm lengths compare lengths add lengths subtract lengths measures perimeter calculate perimeter	**Fractions A** equal parts recognize 1.2 find ½ recognize ¼ find ¼ recognize 1/3 find 1/3 unit fractions non-unit fractions equivalence ½ and 2/4	**Mass & Capacity** measure mass compare mass add and subtract mass measure capacity compare capacity add and subtract capacity temperature

Number | **Problem Solving Skills** | **Measurement** | **Geometry** | **Statistics**

Mount Pleasant Primary School

Maths Medium-Term Plan / Small Steps: Year 3

Summer	NC	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. Count up and down in tenths Add and subtract fractions with the same denominator within one whole (e.g. 5/7 + 1/7 = 6/7) Solve problems that involve all of the above	Add and subtract amounts of money to give change, using both £ and p in practical contexts	Compare durations of events, for example to calculate the time taken by particular events or tasks Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., 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 Know the number of seconds in a minute and the number of days in each month, year and leap year	Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them 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 Identify horizontal and vertical lines and pairs of perpendicular and parallel lines	Interpret and present data using bar charts, pictograms and tables Solve one-step and two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.
	Small Steps	**Fractions B** make the whole tenths count in tenths tenths as decimals fractions on a numberline fractions of sets of objects equivalent fractions compare fractions order fractions add fractions subtract fractions	**Money** pounds and pence convert pounds and pence add money subtract money give change	**Time** o'clock and half past quarter past, quarter to months and years hours in a day telling time to 5 mins telling time to the min am/pm 24 hr time find duration compare duration start and end times measuring time in seconds problems with time	**Shape** turns and angles right angles in shapes compare angles draw accurately horizontal and vertical parallel and perpendicular recognize and describe 2d recognize and describe 3d make 3d	**Statistics** Pictograms 2, 5 10 Bar charts Tables

Number | **Problem Solving Skills** | **Measurement** | **Geometry** | **Statistics**

Mount Pleasant Primary School

Maths Long-Term Plan: Year 4

Autumn	Place Value (4 weeks)	Addition & Subtraction (3 weeks)	Problem Solving Skills (2 weeks)	Area (1 week)	Multiplication & Division (4 weeks)	
Spring	Multiplication & Division (3 weeks)	Length & Perimeter (2 weeks)	Fractions (4 weeks)	Decimals (4 weeks)		
Summer	Decimals (2 weeks)	Money (2 weeks)	Time (3 weeks)	Properties of Shape (2 weeks)	Statistics (1 week)	Position & Direction (2 weeks)

Number	Problem Solving Skills	Measurement	Geometry	Statistics

Mount Pleasant Primary School

Maths Medium-Term Plan / Small Steps: Year 4

Autumn	NC	Count backwards through zero to include negative numbers Count in multiples of 6, 7, 9, 25 and 1 000 Find 1 000 more or less than a given number Order and compare numbers beyond 1 000 Identify, represent and estimate numbers using different representations Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) Round any number to the nearest 10, 100 or 1 000 Solve number and practical problems that involve all the above and with increasingly large positive numbers	Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate Estimate and use inverse operations to check answers to a calculation Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	**Problem Solving Skills** All possibilities Logic Rules	Find the area of rectilinear shapes by counting squares.	Recall multiplication and division facts for multiplication tables up to 12 × 12 Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers Recognise and use factor pairs and commutativity in mental calculations Recognise and use factor pairs and commutativity in mental calculations
	Small Steps	**Place Value** Represent numbers to 1,000 Partition numbers to 1,000 Number line to 1,000 Thousands Represent numbers to 10,000 Partition numbers to 10,000 Flexible partitioning of numbers to 10,000 Find 1, 10, 100, 1,000 more or less Number line to 10,000 Estimate on a number line to 10,000 Compare numbers to 10,000 Order numbers to 10,000 Roman numerals Round to the nearest 10 Round to the nearest 100 Round to the nearest 1,000 Round to the nearest 10, 100 or 1,000	**Addition & Subtraction** Add and subtract 1s, 10s, 100s and 1,000s Add up to two 4 digit numbers no exchange Add two 4 digit numbers one exchange Add two 4 digit numbers more than one exchange Subtract two 4 digit numbers no exchange Subtract two 4 digit numbers one exchange Subtract two 4 digit numbers more than one exchange Efficient subtraction Estimate answers Checking strategies		**Area** What is area? Counting squares Make shapes Compare area	**Multiplication & Division** Multiples of 3 Multiply and divide by 6 6 times table and division facts Multiply and divide by 9 9 times table and division facts The 3, 6 and 9 times tables Multiply and divide by 7 7 times table and division facts 11 times table and division facts 12 times table and division facts Multiply by 1 and 0 Divide by 1 and itself Multiply three numbers

Number	Problem Solving Skills	Measurement	Geometry	Statistics

Mount Pleasant Primary School

Maths Medium-Term Plan / Small Steps: Year 4

Spring	NC	Recall multiplication and division facts for multiplication tables up to 12 × 12 Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers Multiply two-digit and three-digit numbers by a one-digit number using formal written layout Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects	Estimate, compare and calculate different measures Convert between different units of measure (kilometre to metre) Measure and calculate the **perimeter** of a rectilinear figure (including squares) in centimetres and metres	Recognise and show, using diagrams, families of common equivalent fractions. Count up and down in hundredths Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number. Add and subtract fractions with the same denominator.	Recognise and write decimal equivalents of any number of tenths or hundredths. Find the effect of dividing a one- or two-digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths Recognise and write decimal equivalents to ¼, ½ and ¾
	Small Steps	**Multiplication & Division** x11 and x12 tables multiply 3 numbers factor fairs efficient multiplication written TO x O written HTO x O divide TO by O divide HTO by O correspondence problems	**Length & Perimeter** recap mm, cm, m kilometres perimeter on a grid perimeter of a rectangle perimeter of rectilinear shapes	**Fractions** what is a fraction equivalent fractions fractions >1 count in fractions add 2 or more fractions subtract 2 fractions subtract fraction from whole fractions of an amount	**Decimals** recognize tenths and hundredths tenths as decimals tenths on a pv grid tenths on a numberline divide 1-digit by 10 divide 2-digit by 10 hundredths hundredths as decimals hundredths on a pv grid divide 1 or 2-digit by 10,100

Number	Problem Solving Skills	Measurement	Geometry	Statistics

Mount Pleasant Primary School

Maths Medium-Term Plan / Small Steps: Year 4

Summer	NC	Solve simple measure and money problems involving fractions and decimals to two decimal places. Compare numbers with the same number of decimal places up to two decimal places Round decimals with one decimal place to the nearest whole number	Estimate, compare and calculate different measures, including money in pounds and pence Solve simple measure and money problems involving fractions and decimals to two decimal places	Convert between different units of measure [hour to minute] Read, write and convert time between analogue and digital 12- and 24-hour clocks Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	Identify acute and obtuse angles and compare and order angles up to two right angles by size Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes Identify lines of symmetry in 2-D shapes presented in different orientations Complete a simple symmetric figure with respect to a specific line of symmetry	Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	Describe positions on a 2-D grid as coordinates in the first quadrant Plot specified points and draw sides to complete a given polygon Describe movements between positions as translations of a given unit to the left/ right and up/ down
	Small Steps	**Decimals** making a whole write decimals compare decimals order decimals round decimals halves & quarters	**Money** pounds & pence ordering money estimating money four operations	**Time** telling to 5 mins telling time to the min am/pm 24hr time hours, minutes, seconds years, months, weeks, days analogue to digital	**Properties of Shape** identify angles compare angles order angles triangles quadrilaterals lines of symmetry complete symmetrical fig	**Statistics** interpret charts comparison questions sum questions difference questions introducing line graphs line graphs	**Position & Direction** describe position draw on a grid move on a grid describe movement grid

Number	Problem Solving Skills	Measurement	Geometry	Statistics

Mount Pleasant Primary School

Maths Long-Term Plan: Year 5

Autumn	Place Value (3 weeks)	Addition & Subtraction (2 weeks)	Problem Solving Skills (2 weeks)	Multiplication & Division (3 weeks)	Fractions A (4 weeks)
Spring	Multiplication & Division (3 weeks)	Fractions B (2 weeks)	Decimals & Percentages (3 weeks)	Perimeter & Area (2 weeks)	Statistics (2 weeks)
Summer	Shape (3 weeks)	Position & Direction (2 weeks)	Decimals (3 weeks)	Negative Numbers (3 weeks)	Converting Units (3 weeks)	Volume (1 week)

Number	Problem Solving Skills	Measurement	Geometry	Statistics

Mount Pleasant Primary School

Maths Medium-Term Plan / Small Steps: Year 5

Autumn	NC	Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000 Solve number problems and practical problems that involve all of the above Read Roman numerals up to 1,000 (M) and recognise years written in Roman numerals	Add and subtract numbers mentally with increasingly large numbers Add and subtract whole numbers with more than 4digits, including using formal written methods (columnar addition and subtraction) Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	**Problem Solving Skills** All possibilities Logic Rules	Multiply and divide numbers mentally drawing upon known facts Multiply and divide whole numbers by 10, 100 and 1000 Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers Recognise and use square numbers and cube numbers and the notation for squared (2) and cubed (3) Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers Establish whether a number up to 100 is prime and recall prime numbers up to 19	Recognise and use thousandths and relate them to tenths and hundredths Compare and order fractions whose denominators are multiples of the same number Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number [for example 2/5 + 4/5 = 6/5 = 1+1/5] Add and subtract fractions with the same denominator and denominators that are multiples of the same number Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
	Small Steps	**Place Value** Roman numerals to 1,000 Numbers to 10,000 Numbers to 100,000 Numbers to 1,000,000 Read and write numbers to 1,000,000 Powers of 10 10/100/1,000/10,000/100,000 more or less Partition numbers to 1,000,000 Number line to 1,000,000 Compare and order numbers to 100,000 Compare and order numbers to 1,000,000 Round to the nearest 10, 100 or 1,000 Round within 100,000 Round within 1,000,000	**Addition & Subtraction** Mental strategies Add whole numbers with more than four digits Subtract whole numbers with more than four digits Round to check answers Inverse operations (addition and subtraction) Multi step addition and subtraction problems Compare calculations Find missing numbers		**Multiplication & Division** Multiples Common multiples Factors Common factors Prime numbers Square numbers Cube numbers Multiply by 10, 100 and 1,000 Divide by 10, 100 and 1,000 Multiples of 10, 100 and 1,000	**Fractions A** Find fractions equivalent to a unit fraction Find fractions equivalent to a non unit fraction Recognise equivalent fractions Convert improper fractions to mixed numbers Convert mixed numbers to improper fractions Compare fractions less than 1 Order fractions less than 1 Compare and order fractions greater than 1 Add and subtract fractions with the same denominator Add fractions within 1 Add fractions with total greater than 1 Add to a mixed number Add two mixed numbers Subtract fractions Subtract from a mixed number Subtract from a mixed number breaking the whole Subtract two mixed numbers

Number | **Problem Solving Skills** | **Measurement** | **Geometry** | **Statistics**

Mount Pleasant Primary School

Maths Medium-Term Plan / Small Steps: Year 5

Spring	NC	Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for 2-digit numbers Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign. Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates	Recognise and use thousandths and relate them to tenths and hundredths Compare and order fractions whose denominators are multiples of the same number Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number [for example 2/5 + 4/5 = 6/5 = 1+1/5] Add and subtract fractions with the same denominator and denominators that are multiples of the same number Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	Read, write, order and compare numbers with up to three decimal places Read and write decimal numbers as fractions (e.g. 0.71 = 71/100) Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents Round decimals with two decimal places to the nearest whole number and to one decimal place Solve problems which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25 Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal Solve problems which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25	Measure and calculate the perimeter of composite rectilinear shapes in cm and m Calculate and compare the area of rectangles (including squares), and including using standard units, cm², m²estimate the area of irregular shapes Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)	Solve comparison, sum and difference problems using information presented in a line graph Complete, read and interpret information in tables including timetables
	Small Steps	**Multiplication & Division** multiply 4 by 1 multiply 2 by 2 multiply 3 by 2 multiply 4 by 2 divide 4 by 1	**Fractions B** equivalent fractions improper to mixed mixed to improper fraction sequences compare and order fractions add fractions subtract fractions fractions of amounts fractions as operators	**Decimals & Percentages** decimals to 2dp decimals as fractions decimals to 3dp rounding decimals compare & order decimals understand percentages FDP	**Perimeter & Area** measure perimeter calculate perimeter area of rectangles area of compound shapes area of irregular shapes	**Statistics** read & interpret line graphs draw line graphs use line graphs read & interpret tables two-way tables timetables

Number | **Problem Solving Skills** | **Measurement** | **Geometry** | **Statistics**

Mount Pleasant Primary School

Maths Medium-Term Plan / Small Steps: Year 5

Summer	NC	Identify 3D shapes, including cubes and other cuboids, from 2D representations Use the properties of rectangles to deduce related facts and find missing lengths and angles Distinguish between regular and irregular polygons based on reasoning about equal sides and angles Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles Draw given angles, and measure them in degrees (o) Identify: angles at a point and one whole turn (total 360o), angles at a point on a straight line and ½ a turn (total 180o) other multiples of 90o	Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed	Multiply and divide numbers involving decimals by 10, 100 and 1000 Solve problems involving number up to three decimal places Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling.	Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero	Convert between different units of metric measure [for example, km and m; cm and m; cm and mm; g and kg; l and ml] Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints Solve problems involving converting between units of time	Estimate volume [for example using 1cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water] Use all four operations to solve problems involving measure using decimal notations including scaling.
	Small Steps	**Shape** measuring angles drawing angles drawing lines calculating angles calculating lengths regular v irregular	**Position & Direction** coordinates in 1st quadrant translation reflection	**Decimals** complements to 1 adding decimals subtracting decimals decimal sequences multiply decimals by 10, 100, 1000 divide decimals by 10, 100, 1000	**Negative Numbers** counting through zero sequences increases decreases differences	**Converting Units** KG and KM MM & ML imperial units converting units of time timetables	**Volume** what is volume compare volume estimate volume estimate capacity

Number	Problem Solving Skills	Measurement	Geometry	Statistics

Mount Pleasant Primary School

Maths Long-Term Plan: Year 6

Autumn	Place Value (2 weeks)	Addition, Subtraction, Multiplication & Division (5 weeks)	Problem Solving Skills (2 weeks)	Fractions (4 weeks)	Converting Units (1 week)	
Spring	Ratio (2 weeks)	Algebra (2 weeks)	Decimals (2 weeks)	FDP (2 week)	Perimeter, Area & Volume (2 weeks)	Statistics (3 weeks)
Summer	Properties of Shape (3 weeks)		Position & Direction (1 weeks)		Projects / Consolidation / Gaps / Secondary Ready (8 weeks)	

Number	Problem Solving Skills	Measurement	Geometry	Statistics

Mount Pleasant Primary School

Maths Medium-Term / Small Steps: Year 6

Autumn	NC	Use negative numbers in context, and calculate intervals across zero Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit Round any whole number to a required degree of accuracy Solve problems which require answers to be rounded to specified degrees of accuracy Solve number and practical problems that involve all of the above	Perform mental calculations Use their knowledge of the order of operations to carry out calculations involving the four operations Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Solve problems involving addition and subtraction, Use estimation to check answers to calculations and determine in the context of a problem, an appropriate degree of accuracy. Perform mental calculations, including with mixed operations and large numbers Use their knowledge of the order of operations to carry out calculations involving the four operations Multiply multi-digit number up to 4 digits by a 2-digit number using the formal written method of long multiplication. Divide numbers up to 4 digits by a 2-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding as appropriate for the context. Divide numbers up to 4 digits by a 2-digit number using the formal written method of short division, interpreting remainders according to the context. Identify common factors, common multiples and prime numbers. Solve problems involving multiplication and division. Use written division methods in cases where the answer has up to two decimal places Use estimation to check answers to calculations and determine in the context of a problem	**Problem Solving Skills** More than one possibility Logic Rules	Compare and order fractions, including fractions >1 Use common factors to simplify fractions; use common multiples to express fractions in the same denomination Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions Multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. $1/4 \times 1/2 = 1/8$) Divide proper fractions by whole numbers (e.g. $1/3 \div 2 = 1/6$) Generate and describe linear number sequences (with fractions) Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example 1/8] Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.	Solve problems involving the calculation and conversion of **units of measure**, using decimal notation up to three decimal places where appropriate Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places Convert between miles and kilometers
	Small Steps	**Place Value** Numbers to 1,000,000 Numbers to 10,000,000 Read and write numbers to 10,000,000 Powers of 10 Number line to 10,000,000 Compare and order any integers Round any integers Negative numbers	**Addition, Subtraction, Multiplication & Division** Add and subtract integers Common factors Common multiples Rules of divisibility Primes to 100 Square and cube numbers Multiply up to a 4 digit number by a 2 digit number Solve problems with multiplication Short division Division using factors Introduction to long division Long division with remainders Solve problems with division Solve multi step problems Order of operations Mental calculations and estimation Reason from known facts		**Fractions** Equivalent fractions and simplifying Equivalent fractions on a number line Compare and order (denominator) Compare and order (numerator) Add and subtract simple fractions Add and subtract any two fractions Add mixed numbers Subtract mixed numbers Multi step problems	**Converting Units** Metric measures Convert metric measures Calculate with metric measures Miles and kilometres Imperial measures

Number | **Problem Solving Skills** | **Measurement** | **Geometry** | **Statistics**

Mount Pleasant Primary School

Maths Medium-Term / Small Steps: Year 6

Spring	NC	Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts Solve problems involving similar shapes where the scale factor is known or can be found Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples Solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison	Use simple formulae Generate and describe linear number sequences Express missing number problems algebraically Find pairs of numbers that satisfy an equation with two unknowns Enumerate possibilities of combinations of two variables	Identify the value of each digit in numbers given to three decimal places Solve problems which require answers to be rounded to specified degrees of accuracy Multiply one-digit numbers with up to two decimal places by whole numbers Multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places Use written division methods in cases where the answer has up to two decimal places. Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.	Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts Solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.	Recognise that shapes with the same areas can have different perimeters and vice versa Calculate the area of parallelograms and triangles Recognise when it is possible to use formulae for area and volume of shapes Calculate, estimate and compare volume of cubes and cuboids using standard units, including cm3, m3 and extending to other units (mm3, km3)	Interpret and construct pie charts and line graphs and use these to solve problems Calculate the mean as an average
	Small Steps	**Ratio** ratio language ratio & fractions ratio symbol calculating ratio ratio & proportion	**Algebra** 1-step rules 2-step rules formulating expressions substitution formulae equations pairs of values	**Decimals** 3 decimal places multiply by 10, 100, 1000 divide by 10, 100, 1000 multiply decimals divide decimals	**FDP** fractions to percentages FDP percentages of amounts	**Perimeter, Area & Volume** area & perimeter triangle area parallelogram area volume	**Statistics** read and interpret line graphs draw line graphs use line graphs circles pie charts the mean

Number	Problem Solving Skills	Measurement	Geometry	Statistics

Mount Pleasant Primary School

Maths Medium-Term / Small Steps: Year 6

Summer	NC	Draw 2-D shapes using given dimensions and angles Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles Recognise, describe and build simple 3-D shapes, including making nets	Describe positions on the full coordinate grid (all four quadrants) Draw and translate simple shapes on the coordinate plane and reflect them in the axes.	**Projects / Consolidation / Gaps / Secondary Ready** as appropriate based on data
	Small Steps	**Properties of Shape** measure with a protractor calculate angles vertically opposite angles angles in a triangle angles in a quadrilateral angles in regular polygons draw shapes/nets	**Position & Direction** coordinates in the 1st quadrant coordinates in all 4 quadrants translations reflections	

Number	Problem Solving Skills	Measurement	Geometry	Statistics