Year 3 MTP-Autumn Term

Avondale Primary School

Power Maths Unit	Wk	National Curriculum Objective	Small Steps
Unit 1 Place Value within 1000	1	• Recognise the place value of each digit in a two-digit number (tens, ones) (Year 2) • Compare and order numbers up to 1,000 • Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number • Identify, represent and estimate numbers using different representations • Recognise the place value of each digit in a three-digit number (100s, 10s, 1s),	Represent and partition numbers to 100 Number line to 100 100s Represent numbers to 1000 Partition numbers to 1000
	2	• Recognise the place value of each digit in a three-digit number (100s, 10s, 1s), • Identify, represent and estimate numbers using different representations • count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number	Partition numbers to 1000 flexibly, 100s,10s,1s Use a number line to 1000, Estimate numbers on a number line to 1000 Find 1,10, and 100 more or less
	3	• compare and order numbers up to 1,000 • Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number	Compare numbers to 1000, Order numbers to 1000 Count in 50s
Unit 2 Addition and Subtraction	4	• Recognise the place value of each digit in a two-digit number (10s, 1s) (Year 2) • 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	Apply number bonds within 20 Add/subtract 1s, Add/subtract 10s, Add/subtract 100s Spot the pattern
	5	• add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction • solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Add 1s across 10, Add 10s across 100, Subtract 1s across 10, Subtract 1s across 100 Make connections
Unit 3 Addition Subtracti	6	• add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	Add 2 numbers, Subtract 2 numbers, Add 2 numbers (across 10), Add 2 numbers (across 100 subtract 2 numbers (across 10)
Unit 3 Continued	1	• 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	Subtract 2 numbers (across 100), Add a 3 digit and a 2-digit number, Subtract a 2-digit number from a 3 digit, Complements to 100 Estimate answers
	2	• 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	Estimate answers Problem Solving (2)

Unit 4 Multiplication And Division	3	• 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 •	Multiplication-equal groups, Use arrays, Multiples of 2, Multiples of 5&10, Share and group
Unit 5 Multiplication and Division (2)	4	• Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	Multiply by 3, Divide by 3, The 3 times tables, Multiply by 4, Divide by 4
	5	• Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables • 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	The 4 times tables, Multiply by 8, Divide by 8, The 8 times table Problem Solving (multiplication and division)
	6	• 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	Problem Solving (multiplication and division), Understand divisibility (2)

Year 3 MTP-Spring Term

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Unit 6 Multiplication and Division (3)	1	• 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 • 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 • 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	Multiples of 10, Related calculations, Reasoning about multiplication, Multiply 2 digit numbers by 1 digit-no exchange, Multiply 2 digit by 1 digit with exchange
	2	• 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 • 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	Expanded written method, Divide 2 digits by 1 digit (no exchange), Divide 2 digit by 1 digit-flexible partitioning, Divide 2 digit by 1 digit with remainders Link multiplication and division
	3	• 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	How many ways? Problem solving (mixed problems) (2)
Unit 7 Length and Perimeter	4	• measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	Measure in m and cm, Measure in cm and mm, Metres, cm and mm, Equivalent lengths (m/cm), Equivalent lengths (mm/cm)
	5	• measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) • measure the perimeter of simple 2D shapes	Compare lengths, Add lengths, Subtract lengths, Measure perimeter, Calculate perimeter
	6	• measure the perimeter of simple 2D shapes	Problem Solving-length
Unit 8 Fractions	1	• 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	Understand the denominators of unit fractions, Compare and order unit fractions, Understand the numerator of non-unit fractions, understand the whole, Compare and order non-unit fractions
	2	• compare and order unit fractions, and fractions with the same denominators	Divisions on a number line, Count in fractions on a number line, Equivalent fractions as a bar model, Equivalent fractions on a number line, Equivalent fractions

Unit 9 Measurement Mass	3	•measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	Use scales, Measure mass, Measure mass in kg/g, Equivalent masses(kg/g), Compare mass
	4	•measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	Add and subtract mass, Problem solving (mass)
Unit 10 Capacity	5	•measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	Measure capacity and volume in ml, Compare capacity and volume (2), Equivalent capacities and volumes (l/ml) Add and subtract capacity and volume
	6	•measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	Problem solving-capacity,

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Unit 11 Fractions	1	• add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7] • solve problems that involve all of the above • recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators	Add fractions, subtract fractions, Partitioning the whole Problem solving (+/- fractions) Unit fractions of a set of objects
	2	• recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators solve problems that involve all of the above	Non unit fractions of a set of objects, Reasoning with fractions of amount Problem Solving (fractions of measures)
Unit 12 Money	3	• add and subtract amounts of money to give change, using both £ and p in practical contexts	Pounds and pence, Convert pounds and pence, Add money, Subtract money, Find change
Unit 13 Time	4	• tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks • 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, a.m./p.m., morning, afternoon, noon and midnight	Roman numerals to 12, Tell the time to 5mins, Tell the time to the minute, Convert past and to the hour, Using am and pm
	5	• know the number of seconds in a minute and the number of days in each month, year and leap year • 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, a.m./p.m., morning, afternoon, noon and midnight	Years, months and days, Days and hours, Hours and minutes-start and end times, Hours and mins-durations, Hours and mins-compare durations
	6	• 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, a.m./p.m., morning, afternoon, noon and midnight	Minutes and seconds, Solving problems with time
Unit 14 Angles of turn and Properties of shapes	1	• 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 • draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them • identify horizontal and vertical lines and pairs of perpendicular and parallel lines	Turns and angles, Right angles in shapes, Compare angles, Measure and draw accurately, Horizontal and vertical

	2	• identify horizontal and vertical lines and pairs of perpendicular and parallel lines • draw 2D shapes and make 3D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them	Parallel and perpendicular, Recognise and describe 2D shapes, Recognise and describe 3D shapes, Make 3D shapes
Unit 15 Statistics	3	• interpret and present data using bar charts, pictograms and tables	Turns and angles, Right angles in shapes, Compare angles,
	4	• interpret and present data using bar charts, pictograms and tables	