KS1 LTP MATHS

LTP	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13
Autumn Yr1	<u>Place Value to 10</u> Sort, count and represent objects to 10; count forwards and backwards to 10; read, write and represent numbers to 10 in numerals and words; order and compare numbers to 10.					<u>Addition and Subtraction within 10</u> Use a part-whole model; understand and use the + and – signs; recognise number bonds to 10; adding by counting together/adding more/counting on; subtract by taking away; use subtraction to find the difference.					<u>Shape</u> Recognise and name 2D and 3D shapes; sort 2D and 3D shapes; create patterns using 2D and 3D shapes.		
Autumn Yr2	<u>Place Value to 100</u> Sort, count and represent objects up to 100; count forwards and backwards to 20, 50 and 100; represent numbers to 100 using concrete and pictorial representations and the place value chart; count, read, write, order and compare numbers up to and beyond 100.					<u>Addition and Subtraction</u> Find and compare number bonds to 10 and find related facts to 100; write addition facts to 20; add and subtract ones and tens to a two-digit number; add three one-digit numbers together; add and subtract two two-digit numbers while crossing 10.					<u>Properties of Shape</u> Recognise and name 2D and 3D shapes; count sides and vertices of 2D shapes and faces, edges and vertices of 3D shapes; sort 2D and 3D shapes.		
Spring Yr1	<u>Place Value to 20</u> Sort, count and represent objects to 20; count forwards and backwards to 20; read, write and represent numbers to 20 in numerals and words; order and compare numbers to 20.			<u>Addition and Subtraction within 20</u> Use part-whole model, understand and use the + and – signs; recognise number bonds to 20; add by counting together/adding more/counting on; subtract by taking away; use subtraction to find the difference.			<u>Place Value to 50</u> Sort, count and represent objects to 50; count forwards and backwards to 50; read, write and represent numbers to 50 in numerals and words; order and compare numbers to 50.		<u>Length and Height</u> Use key vocabulary to compare length and height; measure using non-standard and standard units of measure.		<u>Mass and Volume</u> Use key vocabulary to compare mass, capacity and volume; measure using non-standard and standard units of measure.	
Spring Yr2	<u>Money</u> Know the value of each coin and note; combine coins to make amounts; solve problems with money.		<u>Multiplication and Division</u> Count in twos, fives, tens and threes; solve simple multiplication problems; divide by sharing and grouping; understand that multiplication calculations are commutative; understand the link between multiplication and division.				<u>Length and Height</u> Measure lengths to the nearest centimetre; measure longer lengths using metres; compare and order lengths using the correct symbols.				<u>Mass, Capacity and Temperature</u> Measure in grams and kilograms and litres and millilitres; compare and order measurements using the correct symbols.		
Summer Yr1	<u>Multiplication and Division</u> Make equal groups; count in steps of two, five and ten; use knowledge of equal groups to make arrays; begin to divide by grouping and sharing.			<u>Fractions</u> Understand that a whole is one object or quantity; find half of a shape, object or quantity and know that this is two equal parts; find a quarter of a shape, object or quantity and know that this is four equal parts.	<u>Position and Direction</u> Describe turns and directions using left, right, forwards and backwards.	<u>Place Value to 100</u> Sort, count and represent objects to 100; count forwards and backwards to 100; read, write and represent numbers to 100 in numerals and words; order and compare numbers to 100.				<u>Money</u> Recognise the value of each coin and note; understand the links between different coins and notes.	<u>Time</u> Know there are seven days in a week and twelve months in a year; understand how a clock works; draw and tell the time to o'clock and half past; know the difference between seconds, minutes and hours.	<u>Assessment / Consolidation</u>
Summer Yr2	<u>Fractions</u> Make equal parts of an object or quantity; find a half, a quarter and a third of an object, shape or quantity; understand the link between fractions and division.			<u>Time</u> Read and draw the time to o'clock, half an hour, quarter past and quarter to the hour; read and draw the time to five-minute intervals; compare durations of time; know the conversion of minutes in an hour and hours in a day.		<u>Statistics</u> Make tally charts; draw and interpret pictograms; draw and interpret block diagrams.				<u>Position and Direction</u> Describe moments using the correct vocabulary; describe turns using clockwise and anti-clockwise; use understanding of turns to create complex patterns.	<u>Assessment / Consolidation</u>	

YEARS 3 AND 4 LTP MATHS

LTP	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Autumn Yr3	Place Value Represent and partition numbers to 100, 1,000. Use number lines to 100, 1,000. Place value to 1,000: hundreds, tens and ones. Find 1, 10, 100 more or less. Estimate on a number line to 1,000. Compare and order numbers to 1,000. Count in 50s.			Addition and Subtraction Use and apply number bonds to and within 10. Add and subtract 1s, 10s, 100s to 3 digit numbers without exchanges. Add and subtract 1s, 10s, 100s to 3 digit numbers with exchanges. Add two 2/3 digit numbers with and without exchanges using column addition. Subtract two 2/3 digit numbers with and without exchanges using column subtraction. Complements to 100. Estimate answers. Using inverse operations. Problem solving - making decisions.					Multiplication and Division Making equal groups. Using arrays. Multiples of 2, 5, 10, 3. Sharing and grouping. Recap times tables and division facts/multiply and divide by 2, 5, 10. Times tables and division facts/multiply and divide by 3, 4, 8. Multiples of 10 up to 3 digit numbers. Calculations related to known facts. Reasoning about multiplication. Multiplying a 2 digit number by a 1 digit number with and without exchange, using the expanded method. Linking multiplication and division facts. Dividing a 2 digit number by a 1 digit number with and without exchange. Dividing a 2 digit number by a 1 digit number with remainders. Scaling. Correspondence problems.					Assessment and Consolidation
Autumn Yr4	Place Value Represent and partition numbers to 100, 1,000, 10,000. Use number lines to 10,000. Find 1, 10, 100, 1,000 more or less. Estimate on a number line to 10,000. Compare and order numbers to 10,000. Use Roman numerals. Round to the nearest 10, 100, 1,000.			Addition and Subtraction Add and subtract 1s, 10s, 100s, 1000s using mental methods/number lines. Add up to 4 digit numbers with and without exchanges using column addition. Subtract up to 4 digit numbers with and without exchanges using column subtraction. Using efficient methods. Estimate answers. Checking strategies.				Multiplication and Division Multiples of 3. Times tables and division facts/multiply and divide by 6, 9, 7, 11, 12. Multiply by 1 and 0. Divide a number by 1 and itself. Multiply 3 numbers. Factor pairs. Multiply and divide by 10, 100. Related multiplication and division facts. Informal written methods for multiplication; short multiplication: multiplying a 2/3 digit number by a 1 digit number. Short division: divide a 2/3 digit number by a 1 digit number. Correspondence problems. Using efficient methods.				Assessment and Consolidation
Spring Yr3	Fractions Understand unit fractions. Compare and order unit fractions. Understand non-unit fractions. Understand the whole. Compare and order non-unit fractions. Fractions and scales. Fractions on a number line. Equivalent fractions on a number line. Equivalent fractions as bar models. Add fractions. Subtract fractions. Partition the whole. Unit fractions of a set of objects. Non-unit fractions of a set of objects. Reasoning with fractions of an amount.						Measurement: Length and Perimeter Measure in m, cm and mm and combinations of these. Equivalent lengths. Compare lengths. Add lengths. Subtract lengths. Perimeter. Measure perimeter. Calculate perimeter.		Money Pounds and pence. Convert pounds and pence. Add and subtract money. Find change.		Measurement: Time Roman numerals to 12. Tell the time to 5 minutes/1 minute. Read time on a digital clock. Use am and pm. Years, months and days. Days and hours. Hours and minutes. Durations. Minutes and seconds. Units of time. Solve problems with time. Assessment		
Spring Yr4	Fractions Understand the whole. Count beyond 1. Partition mixed numbers. Number lines with mixed numbers. Compare and order mixed numbers. Understand improper fractions. Convert mixed numbers to improper fractions. Convert improper fractions to mixed numbers. Equivalent fractions on a number line. Equivalent fractions families. Add two or more fractions. Add fractions and mixed numbers. Subtract two fractions. Subtract from whole amounts. Subtract from mixed numbers.			Decimals Tenths as fractions. Tenths as decimals. Tenths on a place value chart. Tenths on a number line. Divide a 1 or 2 digit number by 10. Hundredths as fractions. Hundredths as decimals. Hundredths on a place value chart. Divide a 1 or 2 digit number by 100. Make a whole with tenths. Make a whole with hundredths. Partition decimals. Compare and order decimals. Round to the nearest whole number. Halves and quarters as decimals.			Measurement: Length, Perimeter and Area Measure in km and m. Equivalent lengths. Perimeter on a grid. Perimeter of a rectangle. Perimeter of rectilinear shapes including finding missing lengths. Perimeter of regular polygons. Area. Count squares. Make shapes. Compare areas.		Money Write money using decimals. Convert between pounds and pence. Compare amounts. Estimate amounts. Calculate and solve problems with money.		Measurement: Time Revision of telling the time to 5 minutes/1 minute. Years, months, weeks, days. Hours, minutes, seconds. Convert between analogue and digital times. Convert to and from the 24 hour clock. Assessment		
Summer Yr3	Properties of Shapes Turns and angles. Right angles. Compare angles. Measure and draw accurately. Horizontal and vertical. Parallel and perpendicular. Recognise and describe 2D shapes. Draw polygons. Recognise and describe 3D shapes. Make 3D shapes.		Statistics Interpret and draw pictograms. Interpret and draw bar charts. Collect and represent data. Two-way tables.		Measurement: Mass and Capacity Use scales. Measure mass in grams. Measure mass in kg and g. Equivalent masses. Compare mass. Add and subtract mass. Measure capacity and volume in ml/l and ml. Equivalent capacities and volumes. Compare capacity and volume. Add and subtract capacity and volume.		Position and Direction Introduction to position and direction. Describe position using coordinates. Plot coordinates. Draw 2D shapes on a grid.		Consolidation			
Summer Yr4	Properties of Shapes Understand angles as turns. Identify angles. Compare and order angles. Revise 2D shapes. Triangles. Quadrilaterals. Polygons. Lines of symmetry. Complete a symmetric figure. Revise 3D shapes.		Statistics Interpret charts. Comparison, sum and difference. Line graphs. Interpret and draw line graphs.		Measurement: Mass and Capacity Measure mass, capacity and volume. Calculate using mass, capacity and volume. Problem solving and reasoning.		Position and Direction Describe position using coordinates. Plot coordinates. Draw 2D shapes on a grid. Translate position on a grid. Describe translations on a grid.		Consolidation			

YEARS 5 AND 6 LTP MATHS

LTP	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Autumn Yr5	Place Value Read, write, order and compare numbers to 10,000, 100,000, 1,000,000. Powers of 10. 10/100/1,000/10,000/100,000 more or less. Partition numbers to 1,000,000. Round to the nearest 10, 100, 1,000. Round within 100,000. Round within 1,000,000. Negative numbers. Roman numerals to 1,000.			Addition and Subtraction Mental strategies. Add whole numbers with more than four digits (column addition). Subtract whole numbers with more than four digits (column subtraction). Round to check answers. Use inverse operations. Multi-step addition and subtraction problems. Compare calculations. Find missing numbers.		Multiplication and Division Multiples. Common multiples. Factors. Common factors. Prime, square and cube numbers. Multiply by 10, 100, 1,000. Divide by 10, 100, 1,000. Multiples of 10, 100, 1,000. Multiply 4 digit numbers by 1 digit numbers (short multiplication). Multiply 2 numbers (grid method). Multiply 2, 3, 4 digit numbers by 2 digit numbers (long multiplication). Solve multiplication problems. Divide 4 digit numbers by 1 digit numbers (short division). Divide with remainders. Efficient division. Solve problems with multiplication and division.				Fractions 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 and order fractions less than 1. Compare and order fractions greater than 1. Add and subtract fractions with the same denominator. Add fractions with different denominators within 1 and with a total of more than 1. Add fractions to a mixed number. Add two mixed numbers. Subtract fractions with different denominators. Subtract from a mixed number. Subtract from a mixed number, breaking the whole. Subtract two mixed numbers.				Assessment and Consolidation
Autumn Yr6	Place Value Read, write, order and compare numbers to 1.000.000, 10,000,000. Powers of 10. Round any integer. Negative numbers. Revise Roman numerals.		Four Operations: Addition, Subtraction, Multiplication, Division Add and subtract integers (column addition and subtraction). Solve problems with addition and subtraction. Common factors. Common multiples. Rules of divisibility. Primes to 100, Square and cube numbers. Multiply 4 or more digit numbers by 2 digit numbers (long multiplication). Solve problems with multiplication. Short division. Division using factors. 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. Compare and order using denominator/numerator. Add and subtract fractions with denominators which are/are not multiples of each other. Add and subtract mixed numbers. Solve multi-step problems. Multiply fractions by integers. Multiply fractions by fractions. Divide fractions by integers. Mixed problem solving. Finding a fraction of an amount. Find the whole.				Assessment and Consolidation
Spring Yr5	Fractions Multiply fractions by integers. Multiply non-unit fractions by integers. Multiply mixed numbers by integers. Finding a fraction of an amount. Find the whole. Using fractions as operators. Fraction problems solving.		Fractions, Decimals and Percentages Decimals to 2 decimal places. Equivalent fractions as decimals (tenths and hundredths). Thousandths as fractions. Thousandths as decimals. Thousandths on a place value chart. Ordering and comparing decimals to 3 d.p.. Rounding decimals to the nearest whole number. Round to 1 d.p. Adding and subtracting decimals within 1. Complements to 1. Adding and subtracting decimals greater than 1. Adding and subtracting decimals with the same and different numbers of decimal places. Efficient calculation strategies. Multiplying and dividing decimals by 10, 100, 1,000. Decimals problem solving - missing values. Understanding percentages. Percentages as decimals and fractions. Equivalent fractions, decimals and percentages.		Measurement: Converting Units Kilograms and kilometres. Milligrams and millimetres. Converting units of length. Convert between metric and Imperial units. Converting units of time. Solving problems with timetables.		Measurement: Area, Perimeter, Volume Perimeter of rectangles. Perimeter of rectilinear shapes. Perimeter of polygons. Area of rectangles. Area of compound shapes. Estimate area. Cubic centimetres. Compare volume. Estimate volume. Estimate capacity.		Geometry: Position and Direction Read and plot coordinates in the first quadrant. Solve coordinate problems. Translation. Translation with co-ordinates. Reflection.	Geometry: Properties of Shapes Understand and use degrees. Classify angles. Estimate angles. Measure angles up to 180°. Draw lines and angles accurately. Calculate angles around a point. Calculate angles on a straight line. Calculate lengths and angles in shapes. Revise triangles and quadrilaterals. Regular and irregular polygons. Reasoning about 3D shapes.		Assessment	
Spring Yr6	Ratio Introduction to ratio. Use the language of ratio. The ratio symbol. Ratio and fractions. Scale drawing. Using scale factors. Similar shapes. Ratio problems. Proportion problems. Recipe problems.		Fractions, Decimals and Percentages Place value within 1 to 3 d.p.. Integers and decimals. Round decimals. Add and subtract decimals. Multiply and divide decimals by 10, 100, 1,000. Multiply decimals by integers. Divide decimals by integers. Decimal problem solving. Decimals and fraction equivalents. Fractions as division. Understand percentages. Fractions to percentages. Equivalent fractions, decimals and percentages. Ordering fractions, decimals and percentages. Finding percentages of an amount one step/multi-step problems. Finding missing values with percentages.		Measurement: Converting Units Metric measures. Converting metric measures. Calculating with metric measures. Miles and kilometres. Imperial measures.		Measurement: Area, Perimeter, Volume Shapes - same area. Area and perimeter. Area of a triangle - counting squares. Area of a right-angled triangle. Area of any triangle. Area of a parallelogram. Volume - counting cubes. Volume of a cuboid.		Geometry: Position and Direction Position in the first quadrant. All four quadrants. Solve coordinate problems. Translations. Reflection.	Geometry: Properties of Shapes Measure and classify angles. Calculate angles. Vertically opposite angles. Angles in a triangle. Angles in a triangle: special cases; missing angles. Angles in a quadrilateral. Angles in polygons. Circles. Draw shapes accurately. Nets of 3D shapes.		Assessment	
Summer Yr5	Statistics Revise interpreting charts: comparison, sum and difference. Draw line graphs. Read and interpret line graphs. Solve problems using line graphs. Read and interpret tables. Two-way tables. Read and interpret timetables.			Negative Numbers Understand negative numbers. Count through zero in 1s and multiples. Compare and order negative numbers. Find the difference. Solve problems using negative numbers.		Projects, Consolidation and Problem Solving Focus on revision and consolidation of learning from earlier in the year, particularly the four operations and fractions, in preparation for learning in Year 6.							
Summer Yr6	Statistics Revise interpreting charts: comparison, sum and difference. Line graphs. Dual bar charts. The mean.	SATs Revision	SATs	Statistics Read and interpret pie charts. Pie charts with percentages. Draw pie charts.	Algebra One step function machines. Two step function machines. Form expressions. Substitution. Formulae. Form equations. Solve one-step equations. Solve two-step equations. Find pairs of values. Solve problems with two unknowns.	Projects, Consolidation and Problem Solving Focus on revision and consolidation of learning from earlier in the year, particularly the four operations and fractions, in preparation for learning in Year 7.							