The Harlington and Sundon Academy Trust

Maths Curriculum Overview and Skills Progression (Sundon follow a 2 year rolling programme for mixed year groups)

	AUTUMN	SPRING	SUMMER
Early Years	**Understanding number** Counting and naming numerals, ordering numbers, sequencing; one more/ one less up to 12 **Numbers and sets** Find how many; match 1-1; partitioning to create number bonds; begin to record number bonds. **Comparison and measures** Comparing lengths; comparing heights and numbers; introducing time. **Patterns** Exploring repetitive patterns; counting in 2s; even and odd numbers **Shapes** Exploring and playing with symmetry and 2-D shapes.	**Understanding number** Counting and estimating; order and compare numbers; partition to create number bonds **Addition and subtraction** Say the number 1 more/less; count on to add; count back to subtract **Comparison and measures** Comparing weights; measuring weights; time **Money and coins** Coin recognition; money role play **Shapes** Recognise, create and describe patterns. Exploring and playing 3-D shapes.	**Understanding number** Count reliably numbers one to 20;exploring 100; number games **Addition and subtraction** Add and subtract two single-digit numbers; counting on 1 more/less **Patterns** Recall multiplication facts; counting in 2s, 5s, 10s; recognise odd and even numbers. Doubling and halving. Recognise half as one of two equal parts. **Comparison and measures** Measuring outside; telling the time **Shapes and sorting** Recognise, create and describe patterns; sort shapes and use mathematical language to describe them.
Year 1	**Place Value** - Count to 20 and estimate quantities. Partition teen numbers Count to 100 in 1's/ 10's compare Say 1/10 more or less up to 100 **Addition & Subtraction -** Adding by counting on. Partitioning to create number bonds. Subtraction; count back/ take away. Add by counting on. Number bonds to 10. **Shape & Data** – Explore shapes; symmetry. Understand/identify 2-D shapes. Sort 2-D shapes according to properties. Understand/identify 3-D shapes. **Money** - identify and exchange coins up to 10p. Make an amount /find possibilities. **Time** - O'clock times and sequence events. Days of the week, months of the year.	**Place value** - 1 more/ less than a 2- digit number. Count in 10's; say numbers 10 more/less. Place value in 2-digit numbers. Compare, order 2- digit numbers. **Money** - Use coins to pay amounts and find totals. Find change; differences between amounts. **Addition & subtraction** - Number bonds to 8 & 9 doubles. Use facts and doubles to add 3 numbers. Find 10 more/ less than 2 -digit numbers. Relate + and - to using facts **Fractions** - Understand halves and quarters. Find half & quarter of a number **Measure & Data** - measure using a uniform unit. Compare and measure weights. Measure length in cubes. Find differences between lengths. **Multiplication** - Even and odd numbers and doubles. Counting in 2's; even/odd. Doubling and halving.	**Addition & subtraction** - Add 10s and near 10s to a 2-digit number. Subtract 10s/nr 10s from 2-digit numbers. Add/subtract 11, 12. Number bonds to 10; add to next 10. Add / subtract by bridging 10 using number bonds. Patterns to add/subtract 1 digit numbers. **Measure & Shape** - compare and measure capacities. Explore container capacities. Recognise/ describe 3-D shapes and turns. **Money** - Find totals of coins using number facts. Change/ differences in amounts of money. Totals of amounts; change from 10p, 20p **Time** - Analogue & digital time to hour and half hour. **Multiplication, division, fractions** - counting in 2s, 5s, 10s. Division by finding how many sets. Doubling & halving. **Data** - measure time using different units. Time, data, graphs & pictograms.

Year 2	**Place value** - count to 100, identify number, estimate. PV in 2-digit numbers. Make and write amounts of money. Give change. **Addition & subtraction** - + & - facts; missing numbers. Know how many to next multiple of 10. + & - 10/20 extend to 11/21. Use facts to add several numbers. Add/ subtract bridging 10 and using facts. Add/ subtract multiples/near multiples of 10 Add/subtract 11, 12, 21, 22 Add pairs of 2-digit numbers. **Measures** - Measure lengths in metric units; rulers. Measure weights in g & kg, measure capacity in litres. **Multiplication and division** - Understand multiplication as sets. Doubles and halves to 20 **Shape & data** - left, right, anti/clockwise turns. Draw & describe 2-D shapes and polygons. Sort shapes; Venn & Carroll diagrams. **Time** - Understand hours, minutes, and seconds. Tell the time; introduce 5- minute intervals. **Data** - Tally charts, block graphs and pictograms. 3-D shapes; identify edges, faces, corners	**Place Value** - ordinal numbers. Odd/even **Addition & subtraction** - Use facts, patterns PV to add/ subtract. Use number line/ 100 grid. Find money totals; find change, solve word problems. Add and double by partitioning. Subtract by counting back. **Fractions -** Find fractions of shapes & amounts - ½ ¼, ⅓, **Multiplication and Division** - count in 2s, 5s, and 10s 5x table facts. Division as inverse of multiplication. Solve problems. Multiply by 2, 5, 10 **Time -** Revise units of time and telling the time	**Number, fractions, money** – Count in 2s, 3s, 5s, and 10s. Multiples of 2, 5, 10. How to find amounts of money. **Addition and subtraction** – Adding by partitioning or counting on. Choose strategies to subtract. **Problem solving investigations. Fractions** – Fractions of amounts; count in fractions. **Time –** Tell digital and analogue time confidently. O'clock, half past the hour, quarter past, quarter to.

Year 3	**Place value & money -** Place 2-digit and 3-digit numbers on lines. Understand PV in 3-digit numbers. PV in money; add and subtract. **Addition & subtraction -** Number facts and inverse operations. Use number facts or PV to add/subtract. Use efficient mental strategies. Partition to add. Mental calculation - complements to 100, counting up. **Multiplication and division -** Revision of 2x, 5x, 10x table multiplication and division facts. 3x and 4x table facts. Division using facts and remainders. Doubles numbers less than 51 halve even numbers less than 101. Mental strategies, times table recall. **Measures & Data -** Measure length (m, cm) and convert units. Measure weights (kg/g) use bar charts. Measure capacities (m/l) use bar charts. Measure perimeters.	**Place value and money -** Partition 3- digit numbers; place on line. Understand x100, x10 and divide as inverse. Understand PV in money x10 and divide by 10. Add/ subtract amounts of money. **Addition & subtraction -** mental addition of 2-digit numbers. Use different strategies to subtract. Expanded addition of 3-digit numbers. Counting up subtraction **Fractions -** Concept of fractions halving. Find ½, ¼, ¾, ⅓, ⅔, of amounts. Find unit/ non-unit fractions using division. **Time & Data -** Tell time to 5 minutes; Roman numerals. Time events; units of time; pictograms. Calculate/ compare time intervals. Units of time; calculate intervals.	**Addition & subtraction -** Mentally add/subtract 1-digit numbers. Add/ subtract multiples of 10, near multiples. 3-digit expanded and compact addition. Subtract large numbers using counting up. Efficient strategies for mental addition/ subtraction. **Fractions -** Fractions of amounts. Fractions as operators and numbers, Add/ subtract same denominator fractions. **Shape -** Line symmetry' name/sort 2-D shapes. Identify, describe and sort 3-D shapes. Right angles as turns, angles in 2-D shapes. **Multiplication & Division -** Counting in equal steps; sequences. Multiplication and division facts. Partition to double, halve and multiply. Solve scaling problems. Gain fluency using multiplication and division.Division. **Place Value** in 4-digit numbers
Year 4	**Place value -** Place 3 and 4-digit numbers on a line. PV in 4-digit numbers. PV additions 4-digit numbers. Add/subtract powers of 10, in numbers less than 1,000. **Addition & subtraction -** Partitioning, mental addition and column addition. Mental subtraction including counting up, counting on a number line, formal column subtraction. **Measures & Data -** Tell time to the nearest minute am/pm. Calculate time intervals; 24 hour clock. Units of time, record data and interpret. Rehearse 24 hour clock; time intervals. **Multiplication & Division -** Double & halve 2 and 3-digit numbers. Multiplication & division facts .Grid multiplication using table facts. Division using efficient chunking. Larger divisions with remainders.	**Decimals & fractions -** unit and non-unit fractions of amounts. Equivalent fractions, simplest form. Introduce one place decimals. Decimals times and divide by 10/100 0.1 **Multiplication & division -** times table multiplication and division facts. X and divide by 10 and 100 Grid multiplication vertical layout. Division chunking with remainders. **Addition and subtraction -** Adding money using column addition. Find change and differences. **Shape -** Understand properties of different triangles. Identify and explore 3-D shapes. Lines of symmetry, Identify and construct. Angles in polygons.	**Addition & subtraction** - Column addition including money. Expanded and compact subtraction 3 & 4-digit numbers. Choose methods for addition/subtraction problems. **Decimals and fractions -** Introduce 1 and 2 place decimals. Decimal/fraction equivalents 10/100th. Compare, order 2-place decimal numbers. Add/subtract 0.1s and 0.01s; equivalent fractions. **Multiplication and division -** factors, multiples, mental multiplication. Scaling and correspondence problems. Efficient chunking with remainders. Multiplication problems, formal methods. **Place value -** Place and round 4-digit numbers on lines. Negative numbers in temperature. Count in 25s/1000s Roman numerals. **Measures & Data -** Measure in m, cm, and mm convert units. Use SI units; bar charts. Find the perimeter and area of rectilinear shapes.