## MATHEMATICS:

MEDIUM TERM PLANNING - Y1

| Concept | National Curriculum Objectives | Key Skills | Concrete Resources | Vocabulary |
| :---: | :---: | :---: | :---: | :---: |
| Number <br> Place Value (within 10) <br> (Autumn Term) | - count to and across 100, forwards and backwards, beginning with 0 or 1 , or from any given number <br> - count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens <br> - given a number, identify one more and one less <br> - identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least <br> - read and write numbers from 1 to 20 in numerals and words. | - Sort objects <br> - Count objects <br> - Count objects from a larger group <br> - Represent objects <br> - Recognise numbers as words <br> - Count on from any number <br> - 1 more <br> - Count backwards within 10 <br> - 1 less <br> - Compare groups by matching <br> - Fewer, more, same <br> - Less than, greater than, equal to <br> - Compare numbers <br> - Order objects and numbers <br> - The number line | - Numicon <br> - Diennes/Base 10 <br> - Straws <br> - Tens Frames \& 2 sided counters <br> - Bead Strings <br> - Concrete objects for counting/ordering <br> - Number lines | equal to, more than, less than (fewer), most, least, value |
| Number <br> Addition and Subtraction (within 10) <br> (Autumn Term) | - read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs <br> - represent and use number bonds and related subtraction facts within 20 <br> - add and subtract one-digit and two-digit numbers to 20, including zero <br> - solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7=\square-9$. | - Introduce parts and wholes Partwhole model <br> - Write number sentences <br> - Fact families- addition facts <br> - Number bonds within 10 <br> - Systematic number bonds within 10 <br> - Number bonds to 10 <br> - Addition - add together <br> - Addition - add more <br> - Addition problems <br> - Find a part <br> - Subtraction - find a part <br> - Fact families - the eight facts <br> - Subtraction - take away/cross out <br> - Take away <br> - Subtraction on a number line | - Numicon <br> - Diennes/Base 10 <br> - Straws <br> - Tens Frames \& 2 sided counters <br> - Bead Strings <br> - Number lines <br> - Concrete objects to manipulate when adding/subtracting <br> - Interlocking Cubes <br> - Digit cards (moving to abstract) | equal to, more than, less than (fewer), answer, as many as, calculate, count, how many?, make, number bond, number sentence, operation, add, altogether, and, plus, put together, sum, less, take away, subtract, minus, what is the difference? |


|  |  | - Add or subtract 1 or 2 |  |  |
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| Geometry <br> Shape <br> (Autumn Term) | - Recognise and name common 2-D and 3-D shapes, including: <br> > 2-D shapes [for example, rectangles (including squares), circles and triangles] 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]. | - Recognise and name 3-D shapes <br> - Sort 3-D shapes <br> - Recognise and name 2-D <br> - Patterns with 2-D and 3-D shapes | - $\quad$ Selection of 2-D shapes <br> - Selection of 3-D shapes <br> - 2-D and 3-D shape word mats | circle, rectangle, triangle, oval, octagon, square, heptagon, rhombus, pentagon, hexagon, kite, cube, cuboid, cone, cylinder, sphere, prism, pyramid |
| Number <br> Place Value (within 20) <br> (Spring Term) | - count to and across 100, forwards and backwards, beginning with 0 or 1 , or from any given number <br> - count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens <br> - given a number, identify one more and one less <br> - identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least <br> - read and write numbers from 1 to 20 in numerals and words. | - Count forwards and backwards and write numbers to 20 in numerals and words <br> - Numbers from 11-20 <br> - Tens and ones <br> - Count one more and one less <br> - Compare groups of objects <br> - Compare numbers <br> - Order groups of objects <br> - Order numbers | - Numicon <br> - Diennes/Base 10 <br> - Straws <br> - Tens Frames \& 2 sided counters <br> - Bead Strings <br> - Concrete objects for counting/ordering <br> - Number lines | equal to, more than, less than (fewer), most, least, tens, ones, value |
| Number <br> Addition and Subtraction <br> (within 20) <br> (Spring Term) | - read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs <br> - represent and use number bonds and related subtraction facts within 20 <br> - add and subtract one-digit and two-digit numbers to 20, including zero <br> - solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = $\square$ | - Add by counting on <br> - Find and make number bonds <br> - Add by making 10 <br> - Subtraction not crossing 10 <br> - Subtraction crossing 10 <br> - Related facts <br> - Compare number sentences | - Numicon <br> - Diennes/Base 10 <br> - Straws <br> - Tens Frames \& 2 sided counters <br> - Bead Strings <br> - Number lines <br> - Concrete objects to manipulate when adding/subtracting <br> - Interlocking Cubes <br> - Digit cards (moving to abstract) | equal to, more than, less than (fewer), answer, as many as, calculate, count, how many?, make, number bond, number sentence, operation, add, altogether, and, plus, put together, sum, less, take away, subtract, minus, what is the difference? |
| Number <br> Place Value <br> (within 50) <br> (Spring Term) | - count to and across 100, forwards and backwards, beginning with 0 or 1 , or from any given number <br> - count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens <br> - given a number, identify one more and one less <br> - identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least | - Numbers to 50 <br> - Tens and ones <br> - Represent numbers to 50 <br> - Ones more one less <br> - Compare objects within 50 <br> - Compare numbers within 50 <br> - Count in 2 s <br> - Count in 5 s | - Numicon <br> - Diennes/Base 10 <br> - Straws <br> - Tens Frames \& 2 sided counters <br> - Bead Strings <br> - Concrete objects for counting/ordering <br> - Number lines | equal to, more than, less than (fewer), most, least, value, tens, ones, value |


|  | - read and write numbers from 1 to 20 in numerals and words. |  |  |  |
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| Measurement <br> Length and Height <br> (Spring Term) | compare, describe and solve practical problems for: <br> - lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] measure and begin to record the following: <br> - lengths and heights | - Compare lengths and heights <br> - Measure length (non-standard units) <br> - Measure length (standard units) | - Range of objects to measure and compare <br> - Rulers <br> - Interlocking cubes | length, height, taller, shorter, longer, same, unit, cms, centimetres |
| Measurement <br> Mass and Volume <br> (Spring Term) | compare, describe and solve practical problems for: <br> - mass/weight [for example, heavy/light, heavier than, lighter than] <br> - capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] <br> measure and begin to record the following: <br> - mass/weight <br> - capacity and volume | - Introduce weight and mass <br> - Measure mass <br> - Compare mass <br> - Introduce capacity and volume <br> - Measure capacity <br> - Compare capacity | - Balance scales <br> - Measuring jugs <br> - Different bottles/containers to show capacity <br> - Range of objects to compare mass | heavy, light, heavier than, lighter than, balance scale, equal to, mass, weight, volume, capacity, more, less, full, empty, quarter, half |
| Number <br> Multiplication and Division <br> (Summer Term) | - 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. | - Count in 2 s <br> - Count in 5 s <br> - Count in 10 s <br> - Make equal groups <br> - Add equal groups <br> - Make arrays <br> - Make doubles <br> - Make equal groups - grouping <br> - Make equal groups - sharing | - Numicon <br> - Number lines/grids <br> - Tens frames <br> - Counters <br> - Bead strings | array, count, pattern, equal groups, group, half, halves, share, share equally, double, doubling, unequal |
| Number <br> Fractions <br> (Summer Term) | - recognise, find and name a half as one of two equal parts of an object, shape or quantity <br> - recognise, find and name a quarter as one of four equal parts of an object, shape or quantity | - Find a half (explore) <br> - Find a half <br> - Find a quarter (explore) <br> - Find a quarter | - Concrete manipulatives to halve/quarter e.g. counters <br> - Bead strings <br> - Visual representations of fractions | half, quarter, equal, equal groups, halve |


| Geometry <br> Position and Direction <br> (Summer Term) | - describe position, direction and movement, including whole, half, quarter and three-quarter turns. | - Describe turns <br> - Describe position | - Range of objects to move position and direction. Eg. Shapes, counters, cubes, coins | Full, half, quarter, turn, left, right, forwards, backwards, |
| :---: | :---: | :---: | :---: | :---: |
| Number <br> Place Value (within 100) <br> (Summer Term) | - count to and across 100, forwards and backwards, beginning with 0 or 1 , or from any given number <br> - count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens <br> given a number, identify one more and one less <br> identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least <br> - read and write numbers from 1 to 20 in numerals and words. | - counting forwards and backwards within 100 <br> - partitioning numbers <br> - comparing numbers <br> - ordering numbers <br> - one more, one less | - Numicon <br> - Diennes/Base 10 <br> - Straws <br> - Tens Frames \& 2 sided counters <br> - Bead Strings <br> - Concrete objects for counting/ordering <br> - Number lines | equal to, more than, less than (fewer), most, least, value, tens, ones, value, partition |
| Measurement <br> Money <br> (Summer Term) | - recognise and know the value of different denominations of coins and notes | - Recognising coins <br> - Recognising notes <br> - Counting coins | - Money - coins, notes <br> - Money vocabulary word mats | value, pounds, pence, money, amount, price |
| Measurement <br> Time <br> (Summer Term) | Compare, describe and solve practical problems for <br> - time [for example, quicker, slower, earlier, later] <br> Measure and begin to record the following: <br> - $\quad$ time (hours, minutes, seconds) <br> - sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] <br> - recognise and use language relating to dates, including days of the week, weeks, months and years | - Before and after <br> - Dates <br> - Time to the hour <br> - Time to the half hour <br> - Writing time <br> - Comparing time | - Stopwatches <br> - Timers <br> - Class clocks <br> - Interactive clocks | Day, week, month, year, hour, minute, seconds, seasons, century, quicker, slower, earlier, later, before, after, next, first, today, yesterday, tomorrow, morning, afternoon, evening, half past, o'clock |


|  | tell the time to the hour and half past the hour <br> and draw the hands on a clock face to show these <br> times. |  |  |
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