## Kingswood Parks <br> PRIMARY SCHOOL

## Mathematics Medium Term Plan - Year 1

| Unit | National Curriculum End of Year 1 Statutory Requirements | Learning Objectives | Small Steps |
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| Autumn Term |  |  |  |
| Place Value (Within 10) | - To be able to count to and across 100, forward and backwards, beginning with 0 or 1 , or from any given number. <br> - To be able to count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens. <br> - To be able to identify one more and 1 less than a given number. <br> - To be able to identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more, less than (fewer), most, least. <br> - To be able to read and write numbers from 1 to 20 in numerals and words. | 1. To be able to sort objects based on their attributes <br> 2. To be able to fluently count objects to 10 <br> 3. To be able to count objects from a larger group <br> 4. To be able to represent objects using manipulatives <br> 5. To be able to recognise numerals as words <br> 6. To be able to count on from any number to 10 <br> 7. To be able to find one more than a given number within 10 <br> 8. To be able to count backwards within 10 <br> 9. To be able to find one less than a given number within 10 <br> 10. To be able to compare groups by matching objects <br> 11. To be able to compare numbers of objects <br> 12. To be able to compare number of objects using $>$ < <br> 13. To be able to compare numbers within 10 <br> 14. To be able to order objects and numbers <br> 15. To be able to count and compare numbers using a number line | 1. Sort objects <br> 2. Count objects <br> 3. Count objects from a larger group <br> 4. Representing objects <br> 5. Recognise numbers as words <br> 6. Count on from any number <br> 7. One more <br> 8. Count backwards within 10 <br> 9. One less <br> 10. Compare groups by matching <br> 11. Fewer, more, same <br> 12. Greater than, less than, equal to <br> 13. Compare numbers <br> 14. Order objects and numbers <br> 15. The number line |


| Addition and Subtraction (Within 10) | - To be able to read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. <br> - To be able to represent and use number bonds and related subtraction facts within 20. <br> - To be able to add and subtract one-digit and two-digit numbers to 20 , including zero. <br> - To be able to solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7=[\quad]-9$ | 1. To be able to recognise parts and wholes <br> 2. To be able to add using the part-whole model <br> 3. To be able to represent addition using a number sentence <br> 4. To be able to add numbers in any order using fact families <br> 5. To be able to add using number bonds within 10 <br> 6. To be able to record addition facts systematically <br> 7. To be able to add using number bonds to 10 <br> 8. To be able to add by combining two or more parts <br> 9. To be able to add by increasing one quantity by a given amount <br> 10. To be able to add when solving problems <br> 11. To be able to subtract by finding a part <br> 12. To be able to subtract by finding a part <br> 13. To be able to add and subtract using fact families <br> 14. To be able to subtract by taking away <br> 15. To be able to subtract by taking away <br> 16. To be able to subtract by counting back <br> 17. To be able to add or subtract 1 or 2 | 1. Introduce parts and wholes <br> 2. Part-whole model <br> 3. Write number sentences <br> 4. Fact families - addition facts <br> 5. Number bonds within 10 <br> 6. Systematic number bonds within 10 <br> 7. Number bonds to 10 <br> 8. Addition - add together <br> 9. Addition - add more <br> 10. Addition problems <br> 11. Find a part <br> 12. Subtraction - find a part <br> 13. Fact families - the eight facts <br> 14. Subtraction - take away/cross out (How many left?) <br> 15. Subtraction - take away (How many left?) <br> 16. Subtraction on a number line <br> 17. Add or subtract 1 or 2 |
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| Shape | - To be able to recognise and name common 2-D and 3-D shapes, including: <br> - 2-D shapes - rectangles (including squares), circles and triangles. <br> - 3-D shapes - cuboids (including cubes), pyramids and spheres | 1. To be able to recognise and name 3D shapes <br> 2. To be able to sort 3D shapes <br> 3. To be able to Recognise and name 2D shapes <br> 4. To be able to sort 2D shapes <br> 5. To be able to create patterns with 2 D and 3 D shapes | 1. Recognise and name 3D shapes <br> 2. Sort 3D shapes <br> 3. Recognise and name 2D shapes <br> 4. Sort 2D shapes <br> 5. Patterns with 2 D and 3 D shapes |
| Spring Term |  |  |  |
| Place Value (Within 20) | - To be able to count to and across 100, forward and backwards, beginning with 0 or 1 , or from any given number. <br> - To be able to count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens. <br> - To be able to identify one more and 1 less than a given number. | 1. To be able to count within 20 <br> 2. To be able to represent and understand the number 10 <br> 3. To be able to represent and understand the numbers 11,12 and 13 <br> 4. To be able to represent and understand the numbers 14,15 and 16 | 1. Count within 20 <br> 2. Understand 10 <br> 3. Understand 11,12 and 13 <br> 4. Understand 14,15 and 16 <br> 5. Understand 17,18 and 19 <br> 6. Understand 20 <br> 7. 1 more and 1 less <br> 8. The number line to 20 |


|  | - To be able to identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more, less than (fewer), most, least. <br> - To be able to read and write numbers from 1 to 20 in numerals and words. | 5. To be able to represent and understand the numbers 17, 18 and 19 <br> 6. To be able to represent and understand the number 20 <br> 7. To be able to find 1 more and 1 less by counting <br> 8. To be able to count within 20 using a number line <br> 9. To be able to count within 20 using a number line <br> 10. To be able to estimate using a number line <br> 11. To be able to compare numbers to 20 using <> = <br> 12. To be able to order numbers to 20 | 9. Use a number line to 20 <br> 10. Estimate on a number line to 20 <br> 11. Compare numbers to 20 <br> 12. Order numbers to 20 |
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| Addition and Subtraction (Within 20) | - To be able to read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. <br> - To be able to represent and use number bonds and related subtraction facts within 20. <br> - To be able to add and subtract one-digit and two-digit numbers to 20 , including zero. <br> - To be able to solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7=[$ ]-9 | 1. To be able to add by counting on within 20 <br> 2. To be able to add ones using number bonds <br> 3. To be able to find and make number bonds to 20 <br> 4. To be able to add two equal quantities together to make double <br> 5. To be able to use doubles to find near doubles <br> 6. To be able to subtract ones using number bonds <br> 7. To be able to subtract by counting back <br> 8. To be able to subtract by finding the difference <br> 9. To be able to solve addition and subtraction problems by drawing on related facts <br> 10. To be able to solve addition and subtraction missing number problems | 1. Add by counting on within 20 <br> 2. Add ones using number bonds <br> 3. Find and make number bonds to 20 <br> 4. Doubles <br> 5. Near Doubles <br> 6. Subtract ones using number bonds <br> 7. Subtraction - counting back <br> 8. Subtraction - finding the difference <br> 9. Related facts <br> 10. Missing number problems |
| Place Value (Within 50) | - To be able to count to and across 100, forward and backwards, beginning with 0 or 1 , or from any given number. <br> - To be able to count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens. <br> - To be able to identify one more and 1 less than a given number. <br> - To be able to identify and represent numbers using objects and pictorial representations including the number line, | 1. To be able to count from 20 to 50 <br> 2. To be able to read and represent tens numbers up to 50 <br> 3. To be able to count by making groups of tens <br> 4. To be able to describe a number using groups of tens and ones <br> 5. To be able to partition numbers to 50 into tens and ones <br> 6. To use a number line to count within 50 <br> 7. To be able to estimate using a number line to 50 <br> 8. To be able to find one more or one less than a number to 50 | 1. Count from 20 to 50 <br> 2. $20,30,40$ and 50 <br> 3. Count by making groups of tens <br> 4. Groups of tens and ones <br> 5. Partition into tens and ones <br> 6. The number line to 50 <br> 7. Estimate on a number line to 50 <br> 8. 1 more, 1 less |


|  | and use the language of: equal to, more, less than (fewer), most, least. <br> - To be able to read and write numbers from 1 to 20 in numerals and words. |  |  |
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| Length and Height | - To be able to compare, describe and solve practical problems for lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half) <br> - To be able to measure and begin to record the following lengths and heights | 1. To be able to compare lengths and heights <br> 2. To be able to measure lengths and heights <br> 3. To be able to measure lengths in centimetres | 1. Compare lengths and heights <br> 2. Measure lengths and heights <br> 3. Measure lengths in centimetres |
| Mass and Volume | - To be able to compare, describe and solve practical problems for mass/weight (e.g. heavy/light, heavier than, lighter than) <br> - To be able to compare, describe and solve practical problems for capacity and volume (e.g. full/empty, more, than, less than, half, half full, quarter) <br> - To be able to measure and begin to record the following mass/weight <br> - To be able to measure and begin to record the following capacity and volume | 1. To be able to compare the mass of objects using heavier and lighter <br> 2. To be able to measure mass using non-standard units <br> 3. To be able to compare mass using non-standard units <br> 4. To be able to describe the capacity and volume of containers <br> 5. To be able to compare volumes <br> 6. To be able to measure capacity using nonstandard units <br> 7. To be able to compare capacity using nonstandard units | 1. Heavier and lighter <br> 2. Measure mass <br> 3. Compare mass <br> 4. Full and empty <br> 5. Compare volume <br> 6. Measure capacity <br> 7. Compare capacity |
| Summer Term |  |  |  |
| Multiplication and Division | - To be able to 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 | 1. To be able to count forwards and backwards in 2 s <br> 2. To be able to count forwards and backwards in 10s <br> 3. To be able to count on and back in 5 s <br> 4. To be able to recognise and describe equal groups <br> 5. To be able to add equal groups together to find a total <br> 6. To be able to make arrays to find a total <br> 7. To be able to make doubles by adding two equal groups <br> 8. To be able to make equal groups by grouping <br> 9. To be able to make equal groups by sharing | 1. Count in 2 s <br> 2. Count in 10 s <br> 3. Count in 5 s <br> 4. Recognise equal groups <br> 5. Add equal groups <br> 6. Make arrays <br> 7. Make doubles <br> 8. Make equal groups - grouping <br> 9. Make equal groups - sharing |


| Fractions | - To be able to recognise, find and name a half as one of two equal parts of an object, shape or quantity. <br> - To be able to recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. | 1. To be able to recognise a half of an object or a shape <br> 2. To be able to find a half of an object or a shape <br> 3. To be able to recognise a half of a quantity <br> 4. To be able to find half of a quantity <br> 5. To be able to recognise a quarter of an object or a shape <br> 6. To be able to find a quarter of an object or a shape <br> 7. To be able to recognise a quarter of a quantity <br> 8. To be able to find a quarter of a quantity | 1. Recognise a half of an object or a shape <br> 2. Find a half of an object or a shape <br> 3. Recognise a half of a quantity <br> 4. Find half of a quantity <br> 5. Recognise a quarter of an object or a shape <br> 6. Find a quarter of an object or a shape <br> 7. Recognise a quarter of a quantity <br> 8. Find a quarter of a quantity |
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| Geometry (Position and Direction) | - To be able to describe position, direction and movement, including whole, half, quarter and three-quarter turns. | 1. To be able to describe turns using the terms full, half, quarter and three quarter <br> 2. To be able to use left and right to describe position <br> 3. To be able to use forwards and backwards to describe position <br> 4. To be able to use above and below to describe position <br> 5. To be able to describe position using ordinal numbers | 1. Describe turns <br> 2. Describe position - left and right <br> 3. Describe position - forwards and backwards <br> 4. Describe position - above and below <br> 5. Ordinal numbers |
| Place Value (within 100) | - To be able to count to and across 100, forward and backwards, beginning with 0 or 1 , or from any given number. <br> - To be able to count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens. <br> - To be able to identify one more and 1 less than a given number. <br> - To be able to identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more, less than (fewer), most, least. <br> - To be able to read and write numbers from 1 to 20 in numerals and words. | 1. To be able to count from 50 to 100 <br> 2. To be able to count in tens to 100 <br> 3. To be able to partition numbers within 100 into tens and ones <br> 4. To be able to count within 100 using a number line <br> 5. To be able to find one more or one less than any number within 100 <br> 6. To be able to compare numbers within 100 with the same number of tens <br> 7. To be able to compare any two numbers within 100 | 1. Count from 50 to 100 <br> 2. Tens to 100 <br> 3. Partition into tens and ones <br> 4. The number line to 100 <br> 5. 1 more, 1 less <br> 6. Compare numbers with the same number of tens <br> 7. Compare any two numbers |


| Money | - To be able to recognise and know the value of different denominations of coins and notes. | 1. To be able to unitise <br> 2. To be able to recognise the value of coins <br> 3. To be able to recognise the value of notes <br> 4. To be able to count and compare amounts in coins | 1. Unitising <br> 2. Recognise coins <br> 3. Recognise notes <br> 4. Count in coins |
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| Time | - To be able to compare, describe and solve practical problems for: <br> - Time (e.g. quicker, slower, earlier, later) <br> - To be able to sequence events in chronological order using language (e.g. before and after, next, first, today, yesterday, tomorrow, morning afternoon and evening) <br> - To be able to use language relating to dates including days of the week, weeks, months and years. <br> - To be able to tell the time to the hour and half past the hour and draw the hands on a cock face to show these times. | 1. To be able to put events in time order <br> 2. To be able to sequence and describe the order of the days of the week <br> 3. To be able to name and sequence the months of the year <br> 4. To be able to describe and compare hours, minutes and seconds <br> 5. To be able to tell the time to the hour <br> 6. To be able to tell the time to half an hour | 1. Before and after <br> 2. Days of the week <br> 3. Months of the year <br> 4. Hours, minutes and seconds <br> 5. Tell the time to the hour <br> 6. Tell the time to the half hour |

