Longsight Community Primary School
Maths Long Term Plan
Reception


## Year One



Year Two


Year Three

|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
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| $\begin{gathered} E \\ \hline \frac{9}{2} \\ \frac{\varepsilon}{8} \\ \frac{1}{3} \end{gathered}$ | Number |  |  | Number |  |  |  |  | Numb |  |  |  |
|  | Place value FREE TRIAL |  |  | Addition and subtraction |  |  |  |  | Muli | ication | d divis | A |
|  | VIEW |  |  | VIEW |  |  |  |  |  |  |  | VIEW |
| $\begin{aligned} & E \\ & \frac{E}{9} \\ & \frac{2}{\circ} \\ & \dot{\circ} \end{aligned}$ | Number |  |  | Measurement |  |  | Number |  |  | Measure |  |  |
|  | Multiplication and division B |  |  | Length and perimeter |  |  | Fractions A |  |  | Mass and capacity |  |  |
|  |  |  | VIEW |  |  | VIEW |  |  | VIEW |  |  | VIEW |
|  | Number |  | Measurement |  | Measurement |  |  | Geom |  | Statistics |  |  |
|  | Fractions B |  | Mor |  | Time |  |  | Sha |  |  |  | $\begin{aligned} & \text { 읗 } \\ & \frac{0}{\overline{0}} \\ & \frac{0}{0} \\ & \stackrel{0}{6} \\ & \hline 0 \end{aligned}$ |
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Year Four

Number
Place value
FREE TRIAL
Number
Addition and subtraction


## Number

Multiplication and division A

VIEW


Year Five


Year Six


|  | Reception | Year One | Year Two | Year Three | Year Four | Year Five | Year Six |
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| Place Value/ number | Match objects and pictures. Identify a set. Sort objects. Cretae sorting rules. <br> Compare amounts. Find, recognise, subitise and know the composition of 1 to 10. <br> Recognise 1 more and 1 less. Build numbers beyond 10. Continue patterns beyond 10. <br> Verbally count beyond 20. | Know that sets of objects can be sorted into groups according to their attributes. Be able to count objects up to and beyond 10. Be able to represent reallife objects using manipulatives. Recognise numerals as words. <br> Be able to count on from any number and know one more. Be able to count backwards within 10 and know one less. <br> Compare groups by matching and compare numbers. Know fewer, less than, greater than, more than, same, equal to. Be able to order numbers and groups. <br> Use a number line to 10. | Know numbers to 20. <br> Be able to count objects to 100 by making 10s. <br> Be able to recognise tens and ones. <br> Be able to use a place value chart. <br> Be able to partition numbers 100. Be able to write numbers to 100 in words. Be able to flexibly partition numbers to 100. Be able to write numbers to 100 in expanded form. <br> Be able to count in 10s on a number line to 100. <br> Be able to count in 10s and ones on a number line. <br> Be able to estimate numbers on a number line. Be able to compare and order objects and numbers. Be abel to counts in 2s 5 s and 10 s . <br> Be able to count in 3 s . | Be able to represent numbers to 100. Be able to partition numbers to 100. Use a number line to 100. Understand hundreds. <br> Be able to represent numbers to 1000. <br> Be able to partition numbers to 1000. <br> Understand flexible partitioning of numbers to 1000. <br> Understand hundreds, tens and ones. Be able to find one, ten, one hundred more or less. <br> Be able to use a number line to 1000. <br> Be able to estimate on a number line to 1000. <br> Be able to compare and numbers to 1000. <br> Be able to count in 50s. | Be able to represent numbers to 1,000. <br> Be able to partition numbers to 1,000. <br> Be able to use a number line to 1,000. <br> Understand thousands. <br> Be able to represent numbers to 10,000. <br> Be able to partition and flexibly partition numbers to 10,000. <br> Find 1, 10, 100, 1000 more or less. <br> Be able use a number line to 10,000. <br> Be able to estimate numbers on a number line up to 10,000 . Be able to compare and numbers to 10,000. <br> Be able to use roman numerals. Be able to round to the nearest 10. | Be able to use roman numerals to 1000 . Be able to recognise use and write numbers up to 1,000,000. Be able to recognise powers of 10. Know 10, 100, 1000,10000, 100000 more or less. <br> Be able to partition numbers to 1,000,000. <br> Be able to use a number line up to 1,000,000. Be able to compare and orer numbers up to 1,000,000. Round to the nearest 10, 100, 1000. <br> Round within 10, 000 and 1,000,000. | Recognise, order and write numbers up to 1,000,000. <br> Be able to recognise powers of 10. Use a number line to 10,000 , 000. <br> Be able to round integers. Be bale to compare and order any integers. Be able to use negative numbers. |


| Addition and Subtraction | Add more and recognise how many have been added. <br> Take away and recognise how many have been taken away. | Introduce parts and wholes. Write number sentences. Understand related addition facts. <br> Know number bonds to 10 and 20. <br> Add together and add more. <br> Find a part. Understand related addition and subtraction facts. <br> Subtract on a number lines, finding the the difference, counting back and using number bonds. Find doubles and near doubles. | Bonds to 100. Add and subtract 1s <br> Add by making 10. <br> Add three 1-digit numbers. <br> Add and subtract to the next 10. <br> Add and subtract across 10. <br> 10 more, 10 less. Add and subtract 2 digit numbers across 10. Solve missing number problems. | Apply number bonds. <br> Add and subtract $1 \mathrm{~s}, 10 \mathrm{~s}, 100 \mathrm{~s}$. Add and subtract 1s and 10s across a 10 and 100. <br> Add and subtract two numbers without exchanging. Add and subtract 2-digit and 3-digit numbers. <br> Use inverse operations. | Add and subtract 1s, 10s, 100s and 1000s. <br> Add and subtract up to 4-digit numbers without or with one exchange. Use efficient subtraction methods. Estimate answers. Use checking strategies. | Add and subtract whole numbers wth more than four digits. Use rounding to check answers. Use inverse operations and find missing numbers. | Add and subtract integers. |
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| Multiplication and Division | Explore sharing. Explore grouping. Even and odd sharing. <br> Play with and build doubles. | Count in 2s, 5 s and 10 s . <br> Recognise and add equal groups. Make arrays. Make doubles. Make equal groups from sharing and grouping. | Recognise, make and add equal groups. Introduce the multiplication symbol and be able to write number sentences. Use arrays. Make qual groups through sharing and through grouping. Rrcognise the 2 $x$ table. Divide by 2. | Multiply equal groups and use arrays. <br> Know multiples of 2,5 and 10. Use sharing and grouping . <br> Multiply and divide by 3,4 and 8. <br> Know multiples of 10 . <br> Multiply a 2-digit number by 1 with 1 exchange. Divide a 2=digit number using flexible | Know multiples of 3. <br> Know the multiplication and division facts for 6,9,7, 11, 12. Multiply a number by 1 and 0. <br> Divifde a number by 1 and itself. <br> Multiply 3 numbers. Recognise and use factor pairs. Multiply and divide ny 10 and 100. | Recognise multiples, factors, common multiples and common factors. Recognise prime numbers. <br> Recognise square and cube numbers. <br> Multiply and divide by 10 , 100, 1000. <br> Know multiples of 10, 100, 1000. Multiply a 4-digit number by a 2digit number. | Recognise common factors and multiples. Know rules of divisibility. Recognise primes to 100. Recognise square and cube numbers. Multiply 4 digit by 2 digit numbers. Use written methods for division. Know the order of operations. |


|  |  |  | Double and halve. <br> Know the difference between odd and even numbers. Know the 10 x tabled and divide by 10. Know the 5 times stable and divide by 5 . | partitioning and with remainders. Use scaling. | Understand related multiplication and division facts. <br> Multiply and divide 2 and 3 digit numbers. | Use written method for short division. Divide with remainders. |  |
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| Fractions |  | Recognise half of an object or shape. <br> Find half of an object or shape. Recognise and find half of a quantity. Recognise and find a quarter of an object or shape. <br> Recognise and find a quarter of a quantity. | Recognise parts and wholes. <br> Recognise equal and unequal parts. <br> Recognise and find a half, a quarer and a third. <br> Fifn the whole. Recognise unti and non-unit fractions. Recognise the equivalence of a half and two quarters. <br> Recognise and find threequarters. Count in fractions up to a whole. | Understand the denominators in unit fractions. COmapre and order fractions. Understand the numerators of non-unit fractions. Use fractions and scales. Order and count fractions on a number line. Find equivalent fractions on a number line and as bar models. Add and subtract fractions. <br> Parition the whole. <br> Find unit fractions of a set of objects. Use fractions of an amount. | Understand the whole. <br> Count in <br> fractions beyond <br> 1. <br> Partition mixed numbers. <br> Use numerlines with mixed numbers. <br> Compare and order mixed numbers. <br> Understand improper fractions. Convert mixed numbers to improper fractions and vice versa. Find equivalent numbers on a number line and recognise equivalent fraction families. Add two or more fractions. Add mixed numbers. Subtract two 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 and vice versa. Compare an dorder fractions less than and greater than 1. Add and subtract fractions with the same denominator. Add fractions with a total greater than 1. Add to a mixed number. <br> Add and subtract two mixed numbers. Subtract fractions and from a mixed number. | Simplify equivalent frctions. <br> Find equivalent fractions on a number line. Compare and order fractions using denominators or numerators. <br> Add and subtract any two fractions. <br> Add and subtract mixed numbers. Multiply fractions by integers and fractions. <br> Divide any fraction by an integer. Find fractions of amount. <br> Find the whole from the fractions of an amount. |


|  |  |  |  |  | Subtract from whole amounts and mixed numbers. | Multiply unit and non unit fractions and mixed numbers by an integer. <br> Find the fraction of a quantity or amount. <br> Find the whole. Use fractions as operators. |  |
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| Measures | Compre size. Compare mass. Find a balance. Compare and explore capacity. Explore and compare length and height. Explore, copy, continue and create simple patterns. <br> Know the difference between day and night. <br> Talk about time. Order and sequence time. | Compare lengths and heights. <br> Measure using objects. <br> Measure length <br> in centimetres. <br> Understand <br> heavier and lighter. <br> Measure and compare mass. Understand full and empty. <br> Compare volume. <br> Measure and compare capacity. Understand before and after. Recognise and use days of the week and months of the year. <br> Use hours, minutes and seconds. Tell the time to the hour and half hour. <br> Recognise coins and notes. Count in coins. | Measure in cm and $m$. <br> Compare and order heights and lengths. Compare mass. Measure in g and kg . <br> Compare volume and capacity. Measure in ml and $I$. <br> Use all four operations with height, length, volume and mass. <br> Measure temperature. Tell the time to o' clock, half past, quarter past and quester to. <br> Tell the time past and to the hour. Tell the time to 5 minutes. <br> Use minutes in an hour and hours in a day. Count money in pence. | Use scales. <br> Measure mass in g and kg . <br> Find equivalent masses g and kg. <br> Compare, add and subtract mass. <br> Measure capacity and avolume in litres and mililitres. Find equivalent capacities and volumes in I and ml . <br> Compare capacity and volume. <br> Add and subtract capacity and volume. <br> Measure in mm, cm and m . <br> Find equivalent lengths between mm and $\mathrm{cm}, \mathrm{cm}$ and $m$. <br> Compare lengths. <br> Add and subtract lengths. | Measure in m and km. <br> Find equivalent lengths in $m$ and km. <br> Make shapes of a given area. <br> Compare areas. <br> Find the perimeter of a shape onn a grid. <br> Find the perimeter of a rectangle and rectilinear shapes. <br> Find missing lengths and calculate the perimeter in rectilinear shapes. <br> Find the perimeter of regular and irregular polygons. Know the relationship between days, weeks, months, years. | Use and measure using km and kg . Use and measure using mililitres and milimetres. Convert metric units of length. Convert between imperial and metric units. Convert units of time. <br> Calculate with timetables. <br> Find the perimeter of rectangles and rectilinear shapes. Find the perimeter regular polygons. <br> Find the area of rectangles. Find the are of compound shapes. Estimate area. Use cubic centimetres. | Know when to use metric measures. Convert metric measures. Calculate with metric measures. Convert between miles and kilometres. Use imperial measures and convert to metric measures. <br> Recognise and compare shapes with the same area. <br> Know the difference and relationship between area and perimeter. Find the area of a triangle. <br> Find the area of a parallelogram. Find the volume of a shape by counting cubes. Calculate the area of a cuboid. |


|  |  |  | Count money in pounds (coins and notes). Choose notes and coins. <br> Make the same amounts. <br> Comapre amount sof money. Calculate with money. Make a pound. Find change. Solve two-step problems involving money. | Measure and calculate perimeter. Know Roman Numerals to 12. Tell the time to 5 minutes and to the minute. Read the time on an digital clock. Use am and pm. Know the relationship between days, months and years. Know the relationship between days and hours. Use start and end times and durations in minutes and hours. <br> Know the relationship between minutes and seconds. Know units of time. <br> Use and convert pounds and pence. <br> Add and subtract money and find change. | Know the relationship between seconds, minutes and hours. Convert between analogue and digital times. Convert to and from the 24 hour clock. <br> Write money using decimals. Convert between pounds and pence. Compare amounts of money. Estimate and calculate with money. Solve problems with money. | Compare and estimate volume and capacity. |  |
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| Shape | Identify and name circles and triangles. <br> Compare circles and triangles. Recognise shapes in the environment. | Recognise and name 3-D shapes. <br> Sort 3-D shapes. <br> Recognise and name 2-D shapes. Sort 2-D shapes. | Recognise 2-D and $3-\mathrm{D}$ shapes. Count sides and vertices of 2-D shapes. <br> Draw 2-D shapes. Recognise lines of symmetry on | Recognise turns and angles. Recognise rightangles. Comapre angles. Draw and measure angles accurately. | Understand angles as turns. Identify angles. Comapre and order angles. Know different types of triangles and quadrilaterals. | Understand and use degrees. Classify and estimate angles. Measure angles up to 180 . <br> Draw lines and angles accurately. | Measure and classify angles. Calculate angles. Understand vertically opposite angles. Calculate angles in a triangle. |


|  | Describe position. Identify and name shapes with 4 sides. <br> Recognise and name 3-D <br> shapes. <br> Recognise and name 2-D shapes within 3D shapes. Copy, compare and continue patterns. Identify more complex patterns. Select shapes for a purpose. Manipulate shapes. Explain shape arrangements. Compose and decompose shapes. Copy 2D shape pictures. | Create and recognise pattersn in 2-D and $3-\mathrm{D}$ shapes. | shapes and use these to complete shapes. <br> Sort 2-D shapes. Count faces, edges and vertices on 3-D shapes. | Understand horizontal and vertical. <br> Understand parallel and perpendicular lines. <br> Recognise and describe 2-D and 3-D shapes. Draw polygons. Make 3-D shapes. | Recognise polygons. Recognise and draw lines of symmetry. Complete a symmetric figure. | Calculate angles around an point and on a straight line. <br> Measure lengths and angles in shapes. Recognise regular and irregular polygons. Name and know the properties of 3-D shapes. | Calculate angles in quadrilaterals. Calcualte angles in polygons. Calculate diameter and radius of a circle. Draw shapes accurately. Recognise nets of 3D shapes/ |
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| Position and direction. | Visualise from different positions. Desccribe positions. <br> Give instructions. Explore mapping. Represent maps with models. Create own maps of familiar faces and story settings. | Describe turns. Describe position using left and right, backwards and forwards, above and below. <br> Use ordinal numbers. | Use language of position. Describe movements and turns. Use shape patterns with turns. |  | Describe position using coordinates. <br> Plot coordinates. <br> Draw 2-D <br> shapes on a grid. Translate shapes and describe translation on a grid. | Read and plot co-ordinates in the first quadrant. <br> Solve problems with coordinates. <br> Translate using co-ordinates. <br> Find and use lines of symmetry. | Plot and read coordinates in all four quadrants. Solve problems with coordinates. Translate and reflect shapes in all four quadrants. |


|  |  |  |  |  |  | Reflect in horizontal and vertical lines. |  |
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| Statistics |  |  | Make tally charts. <br> Create and read tables. <br> Create and read block diagrams. Draw pictograms (1-1). <br> Interpret pictograms (1-1). Draw and interpret pictograms (scales of $2,5,10)$. | Interpret and Draw pictograms. Interpret and draw bar charts. Collect and represent data. Use two-way tables. | Interpret charts. Interpret and draw line graphs. Compare data and find the sum of difference in data. | Draw line graphs. <br> Read and interpret line graphs. Read and interpret tables. Use and create two-way tables. Read and interpret timetables. | Read and draw line graphs. <br> Read and draw dual bar charts. Read and interpret pie charts. <br> Understand pie charts and percentages. Draw pie charts. Find the mean average. |
| Ratio |  |  |  |  |  |  | Use the ratio symbol. Understand the relationship between ratio and fractions. Use and recognise scale factors and use them in drawings. <br> Reognise similar shapes. Understand and use proportion. |
| Algebr |  |  |  |  |  |  | Use function machines. Form expressions. Use algebra for substitution. Use formulae. Form equations. Solve 1 and 2step equations. Find pairs of values. |

