**Maths Overview for the Summer Term**

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| **Reception** | **Year 1** | **Year 2** |
| Children recognise, create and describe 2 patterns.  Using quantities and objects, they add and subtract 2 single-digit numbers and count on or back to find the answer.  Children count reliably with numbers from 1 to 20, place them in order.  They solve problems, including doubling, halving and sharing.  Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. | Count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s.  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.  Through grouping and sharing small quantities, pupils begin to understand: multiplication and division; doubling numbers and quantities; and finding simple fractions of objects, numbers and quantities.  Recognise, find and name a half as one of two equal parts of an object, shape or quantity.  Describe position, direction and movement, including whole, half, quarter and three-quarter turns.  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.  Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.  Given a number, identify one more and one less.  Sequence events in chronological order using language [e.g. before and aer, next, first, today, yesterday, tomorrow, morning]  Recognise and use language relating to dates, including days of the week, weeks, months and years.  Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. | Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and anti-clockwise).  Use place value and number facts to solve problems.  Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.  Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures.  Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.  Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.  Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures.  Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.  Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.  Know the number of minutes in an hour and the number of hours in a day.  Compare and sequence intervals of time.  Compare and order lengths, mass, volume/capacity and record the results using >, < and =.  Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels. |

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| **Year 3** | **Year 4** |
| Recognise and show, using diagrams, equivalent fractions with small denominators.  Compare and order unit fractions, and fractions with the same denominators.  Add and subtract fractions with the same denominator within one whole (for example, 5/7 + 1/7 = 6/7).  Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.  Know the number of seconds in a minute and the number of days in each month, year and leap year.  Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o’clock, am/pm, morning, afternoon, noon and midnight.  Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24- hour clocks.  Compare durations of events (for example to calculate the time taken by particular events or tasks).  Recognise angles as a property of shape or a description of a turn.  Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle.  Draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them.  Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.  Measure, compare, add and subtract: lengths (m/ cm/mm); mass (kg/g); volume/capacity (l/ml). | Recognise and write decimal equivalents of any number of tenths or hundredths.  Add and subtract fractions with the same denominator.  Find the effect of dividing a one- or two digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.  Compare numbers with the same number of decimal places up to two decimal places.  Round decimals with one decimal place to the nearest whole number.  Recognise and write decimal equivalents to 1/4, 1/2, ¾.  Solve simple measure and money problems involving fractions and decimals to two decimal places.  Estimate, compare and calculate different measures, including money in pounds and pence.  Convert between different units of measure [for example, kilometre to metre; hour to minute].  Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.  Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.  Identify acute and obtuse angles and compare and order angles up to two right angles by size.  Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.  Identify lines of symmetry in 2D shapes presented in different orientations.  Complete a simple symmetric figure with respect to a specific line of symmetry.  Describe positions on a 2D grid as coordinates in the first quadrant.  Plot specified points and draw sides to complete a given polygon.  Describe movements between positions as translations of a given unit to the left/right and up/down. |

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| **Year 5** | **Year 6** |
| Solve problems involving number up to three decimal places.  Read, write, order and compare numbers with up to three decimal places.  Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.  Identify: –angles at a point and one whole turn (total 360°) –angles at a point on a straight line and 1 2 a turn (total 180°) –other multiples of 90°  Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.  Draw given angles, and measure them in degrees (°).  Use the properties of rectangles to deduce related facts and find missing lengths and angles.  Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.  Identify 3D shapes, including cubes and other cuboids, from 2D representations.  Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.  Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).  Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.  Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.  Solve problems involving converting between units of time.  Estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water]. | Draw 2-D shapes using given dimensions and angles.  Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.  Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.  Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.  Recognise, describe and build simple 3-D shapes, including making nets.  Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.  Solve number and practical problems that involve all of the above.  Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.  Solve addition and subtraction multistep problems in contexts, deciding which operations and methods to use and why.  Use their knowledge of the order of operations to carry out calculations involving the four operations.  Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.  Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.  Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.  Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places.  Describe positions on the full coordinate grid (all four quadrants).  Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.  Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.  Calculate and interpret the mean as an average.  Interpret and construct pie charts and line graphs and use these to solve problems |