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| Strand | Reception | Year 1 | | Year 2 | | Year 3 | | Year 4 | |
| Number and Place Value |  | | \*I can count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.  \*I can count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.  \*I can identify one more and one less of numbers up to 100.  \*I can 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 and least.  \*I can read and write numbers 1-20 in numerals and words. | | I can count in steps of 2, 3, 5 and 0, and in tens from any number, forward and backward.  \*I can recognise the place value of each digit in a two-digit number (tens, ones).  \*I can identify, represent and estimate numbers using different representations, including the number line.  \*I can compare and order numbers from 0 up to 100; use <,> and = signs.  \*I can read and write numbers to at least 100 in numerals and words.  \*I can use place value and number facts to solve problems. | | \*I can count from 0 in multiples of 4,8,50 and 100; find 10 or 100 more or less than a given number.  \*I can recognise the place value of each digit in a three-digit number (hundreds, tens and ones).  \*I can compare and order numbers up to 1000.  \*I can identify, represent and estimate numbers using different representations.  \*I can read and write numbers up to 1000 in numerals and in words.  \*I can solve number problems and practical problems involving these ideas. | | \*I can count in multiples of 6, 7,9,25 and 1000.  \*I can find 1000 more or less than a given number.  \*I can count backwards through zero to include negative numbers.  \*I can recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones).  \*I can order and compare numbers beyond 1000.  \*I can identify, represent and estimate numbers using different representations.  \*I can round any number to the nearest 10,100 and 1000.  \*I can solve number and practical problems that involve all of the above and with increasingly large positive numbers.  \*I can read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value. |
| Addition and Subtraction |  | | \*I can read, write and interpret mathematical symbols involving addition, subtraction and equal signs.  \*I can represent and use number bonds and related subtraction facts within 20.  \*I can add and subtract one-digit and two-digit numbers to 20, including zero.  \*I can solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems. | | \*I can use concrete objects and pictorial representations, including those involving numbers, quantities and measures.  \*I can apply my increasing knowledge of mental and written methods.  \*I can recall using addition and subtraction facts to 20 fluently, and deriving and using related facts to 100.  \*I can show that addition of two number can be done in any order (commutative) and subtraction of one number from another cannot. | | \*I can add and subtract numbers mentally including: A three-digit number and ones. A three digit number and tens. A three digit number and hundreds.  \*I can add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction.  \*I can estimate the answer to a calculation and use inverse operations to check answers.  \*I can solve problems, including missing number facts, place value, and more complex addition and subtraction. | | \*I can add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.  \*I can estimate and use inverse operations to check answers to a calculation.  \*I can solve addition and subtraction two-step problems in context, deciding which operations and methods to use and why. |
| Multiplication and Division |  | | \*I can solve one-step problems including multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with support of the teacher. | | \*I can recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.  \*I can calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs.  \*I can show that multiplication for two numbers can be done in any order (commutative) and division of one number from another cannot.  \*I can solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. | | \*I can recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.  \*I can write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for 2-digit x 1-digit numbers, using mental methods and progressing to formal written methods.  \*I can solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems. | | \*I can recall multiplication and division facts for multiplication tables up to 12 x 12.  \*I can use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers.  \*I can recognise and use factor pairs and commutativity in mental calculations.  \*I can multiply two-digit and three-digit numbers by one-digit number using formal written layout.  \*I can solve problems involving multiplying and adding, including using  the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems. |
| Fractions |  | | \*I can recognise, find and name a half as one of two equal parts of an object, shape or quantity.  \*I can recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. | | \*I can recognise, find, name and write fractions 1 3 1 4 2 4 3 4 of a length, shape, set of objects or quantity.  \*I can write simple fractions for example 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2. | | \*I can count up and down in tenths, recognise that tenths arise from dividing an object in to 10 equal parts and in dividing one-digit numbers or quantities by 10.  \*I can recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.  \*I can recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.  \*I can recognise and show, using diagrams, equivalent fractions with small denominators.  \*I can add and subtract fractions with the same denominator within one whole (5/7 + 1/7 = 6/7 ).  \*I can compare and order unit fractions, and fractions with the same denominators.  \*I can solve problems that involve all of the above. | | I can recognise and show, using diagrams, families of common equivalent fractions.  I can round up and down in hundredths/recognise that hundredths  arise when dividing an object by one hundred and dividing tenths by  10.  I can solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.  I can add and subtract fractions with the same denominator.  I can recognise and write decimal equivalents of any number of tenth or hundredths.  I can recognise and write decimal equivalents to  ¼, ¾, ½.  \*I can 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.  \*I can round decimals with one decimal place to the nearest whole number.  \*I can compare numbers with the same number of decimal places up to two decimal places.  \*I can solve simple measure and money problems involving fractions and decimals to two decimal places. |
| Measurement | \*I can begin to use language related to weight, length and capacity.  \*I can begin to record using marks that I can explain.  \*I can being to use language relating to time.  \*I can begin to use everyday language relating to money. | | ***\*I can compare, describe and solve practical problems for:*** \*Length and Heights (long, short) (shorter/longer) \*Weight and mass (heavy/light) (heavier than, lighter than)  \*Given a number, identify one more or one less \*Capacity and volume (full, empty) (more than, less than)  \*Time(quicker, earlier, slower, later)  ***\*I can measure and begin to record the following:***  \*Lengths and heights  \*Mass/weight  \*Capacity and volume.  \*Time (hours, minutes, seconds).  \*Recognise and know the value of different denominations of coins and notes.  \*Sequence events in chronological order using language (before, after, next, first, today, yesterday).  \*Recognise and use language relating to dates, including days of the week, weeks, months and year.  \*Tell the time to the hour and to half past the hour and draw the hands on the clock to show these times. | | \*I can choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (ml/litres) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.  \* I can compare and order lengths, mass, volume/capacity and record the results using >, < and =.  \*I can recognise and use symbols for pounds (£) and pence (p) and combine amounts to make a particular value.  \*I can find different combinations of coins that equal the same amounts of money.  \*I can solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.  \*I can compare and sequence intervals of time.  \*I can 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. | | \*I can measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).  \*I can measure the perimeter of simple 2-D shapes.  \*I can add and subtract amounts of money to give change, using both £ and p in practical contexts.  \*I can tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.  \*I can 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, a.m, p.m, morning, afternoon, noon and midnight.  \*I can know the number of seconds in a minute and the number of days in each month, year and leap year.  \*I can compare durations of events (calculate time taken to a certain event). | | \*I can convert between different units of measure (kilometre to metre; hour to minute).  \*I can measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.  \*I can find the area of rectilinear shapes by counting squares.  \*I can estimate, compare and calculate different measures, including money in pounds and pence.  \*I can read, write and convert time between analogue and digital 12- and 24-hour clocks.  \*I can solve problems, involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. |
| Geometry:  Properties of Shapes | \*I can begin to identify common 2D shapes.  \*I can begin to describe the properties of 2D shapes.  \*I can begin to identify common 3D shapes.  \*I can begin to describe the properties of 3D shapes. | | \*I can recognise and name rectangles (including squares), triangles and circles.  \*I can recognise and name cuboids (including cubes), pyramids and spheres. | | \*I can identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line.  \*I can identify and describe the properties of 3D shapes, including the number of edges, vertices and faces.  \*I can identify 2D shapes on the surface of 3D shapes (a circle on a cylinder and a triangle on a pyramid).  \*I can compare and sort common 2D and 3D shapes and everyday objects. | | \*I can draw 2-D shapes and make 3-D shapes using modelling materials ’recognise 3-D shapes in different orientations and describe them.  \*I can recognise angles as a property of shape or a description of a turn.  \*I can identify right angles, recognise that two right angles  make a half-turn, three make three quarters of a turn and four make a complete turn; identify whether angles are greater than or less than a right angle.  \*I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines. | | \*I can compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.  \*I can identify acute and obtuse angles and compare and order angles up to two right angles by size.  \*I can identify lines of symmetry in 2D shapes presented in different orientations.  \*I can complete a simple symmetric figure with respect to a specific line of symmetry. |
| Geometry:  Position and Direction | I can recreate a simple pattern.  \*I can use positional language. | | \*I can describe position direction and movement, including whole, half, quarter and three-quarter turns. | | \*I can order and arrange combinations of mathematical objects in patterns and sequences.  \*I can 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). | |  | | \*I can describe positions on a 2D grid as co-ordinates in the first quadrant.  \*I can describe movements between positions as translations of a given unit to the left/right and up/down.  \*I can plot specified points and draw sides to complete a given polygon. |
| Statistics |  | |  | | \*I can interpret and construct simple pictograms, tally charts, block diagrams and simple tables.  \*I can ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.  \*I can ask and answer questions about totalling and comparing categorical data. | | \*I can interpret and present data using bar charts, pictograms  and tables  \*I can solve one-step and two-step questions (How many more?)  (How many fewer?)using information presented in scaled bar charts and pictograms and tables . | | \*I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.  \*I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. |