



Progression of Mathematics in St Pius X 2021-2022

Updated: July 2021

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number and Place Value	<p>Numbers to 10 Count to five forwards and backwards, saying one number for each item in order. Numbers have an order that they follow. Each number is one more than the previous number.</p> <p>Link numerals and amounts, showing the right number of fingers or objects to match numerals up to five. The last number reached when counting tells you how many there are in total.</p> <p>Recite numbers in order to 10.</p> <p>Explore odd and even numbers to 10.</p> <p>Numbers to 20</p> <p>Explore real-world addition and subtraction within their play, such as if they have two cars and a friend gives them one more, they will have three. Adding objects makes the group bigger. Taking away objects makes the group smaller.</p> <p>Explore the composition of numbers to five and compare numbers. Numbers to five can be made in different ways, but the total is the same each time. AOL: Maths Explore the different ways that groups of three and four objects can be separated. A number of objects can be separated in different</p>	<p>Count objects, actions and sounds, up to 10 forwards and backwards, beginning at zero, one or any given number and link numerals with its cardinal number value. Numbers follow a sequence. Each number is one more than the previous number. The last number reached when counting tells you how many there are in total.</p> <p>Explore odd and even numbers to 10.</p> <p>Numbers to 20</p> <p>Recite numbers, in order, to 20 and beyond. Numbers have an order and a pattern that they follow.</p> <p>Identify and represent up to five objects, without counting, using concrete objects and pictorial representation. However a group of objects is displayed, the total is still the same.</p> <p>Use and understand language related to adding and subtracting, including 'more than, less than' and 'the same as'. The same as means that both quantities match. More than is a bigger amount. Less than is a smaller amount.</p>	<p>I can count to and across 100, forwards and backwards, from any given number</p> <p>I can count, read and write to 100 in numerals</p> <p>I can count, read and write to 20 in words</p> <p>Count in multiples of twos, fives and tens from 0 to solve problems</p> <p>I can identify one more and one less of a given number</p> <p>I can identify and represent numbers using objects and pictorial representation</p> <p>Partition and combine a two digit number into tens and one to show understanding of place value (using apparatus to support)</p>	<p>I can count on in steps of 2, 3, 5 and 10 from any number</p> <p>I can recognise the place value of each digit in a two-digit number (tens and ones)</p> <p>I can partition any two digit number into different combinations of tens and ones using pictures or apparatus</p> <p>I can identify and represent numbers using objects and pictorial representation – including the number line</p> <p>I can use < , > and = signs to compare and order numbers to 100</p> <p>I can order, read and write numbers in increasing and decreasing value</p> <p>I can give 10 more or less than any number to 100</p> <p>I can read and write numbers to 100 in numerals</p> <p>I can read and write numbers to 100 words</p> <p>Use place value and number to solve problems</p> <p>Use reasoning about numbers and relationships to solve more complex problems and explain his/her thinking E.g. $29 + 17 = 15 + 4 + ?$;</p>	<p>I can count in multiples of 4, 8, 50 and 100 from 0</p> <p>I can recognise place value of each digit in a 3-digit number (hundreds, tens, ones)</p> <p>I can compare and order numbers up to 1000</p> <p>I can find 10 or 100 more or less than a given number</p> <p>I can identify, show and estimate numbers using objects and pictures –</p> <p>I can read and write numbers up to 1000 in numerals and words</p> <p>I can solve number and practical problems involving these ideas.</p>	<p>I can count in multiples of 6, 7, 8, 9, 10, 25, 50, 100 and 1000 from any given number.</p> <p>I can find a 1000 more or less than a given number</p> <p>I can count backwards through zero to include negative numbers</p> <p>I can recognise the place value of each digit in a 4-digit number (thousands, hundreds, tens and ones)</p> <p>I can order and compare numbers beyond 1000</p> <p>I can identify, represent and estimate numbers using different representations</p> <p>I can round any number to the nearest 10, 100 or 1000</p> <p>I can solve word problems involving all of the above with increasingly large positive numbers</p> <p>I can read Roman numerals to 100 (1 to C) and know that, over time, the numeral system changed to include the concept of zero and place value</p>	<p>I can read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit</p> <p>I can count forwards and backwards in steps of powers of 10 (100, 1000, 10,000) from any given number up to 1,000,000</p> <p>I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</p> <p>I can round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000</p> <p>I can solve number problems and practical problems that involve all of the above, including addition, subtraction, multiplication and division</p> <p>I can read Roman numerals to 1000 (M) and recognise years written in Roman numerals</p>	<p>I can read, write, order and compare numbers to 10,000,000 and determine the value of each digit</p> <p>I can round any whole number to a required degree of accuracy</p> <p>I can use negative numbers in context , and calculate intervals across zero</p>

	ways but the total is still the same.							
Addition and subtraction	Experiment with mathematical mark making when solving real-world addition and subtraction problems. Adding objects makes the group bigger. Taking away objects makes the group smaller.	Understand and use language and concepts relating to addition and subtraction. Be aware of the symbols related to addition and subtraction. Adding means making a group larger and can be represented by the + symbol. Subtraction means making a group smaller and can be represented by the – symbol.	<p>Represent and use number bonds and related subtraction facts within 20</p> <p>Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs</p> <p>Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = _ - 9$.</p> <p>Add and subtract one-digit and two-digit numbers to 20, including zero</p>	<p>I can solve problems with addition and subtraction including those involving numbers, quantities and measures by using objects or pictures</p> <p>I can solve addition and subtraction word problems using my knowledge of mental and written methods</p> <p>I can add and subtract mentally:</p> <ul style="list-style-type: none"> • a two-digit number and ones, • a two-digit number and tens, • 2 two-digit numbers; • and 3 one-digit numbers <p>using concrete objects and pictorial representations</p> <p>I can add and subtract up to two-digit numbers (as above) using written methods including column addition (without carrying or borrowing)</p> <p>I can recall and use addition and subtraction facts to 10 fluently and workout similar facts to 20</p> <p>I can recognise that addition can be done in any order but subtraction cannot</p> <p>I can recognise that subtraction is the inverse of addition and use for checking calculations</p> <p>I can solve missing number problems</p> <p>I can use estimation to check that my answers to a calculation are reasonable</p>	<p>I can mentally add and subtract: pairs of one and 2-digit numbers; a 3-digit number and ones; a 3-digit number and tens; a 3-digit number and 100s</p> <p>I can add and subtract numbers with up to 3 digits, using formal written methods of column addition and subtraction</p> <p>I can estimate the answer to a calculation and use inverse operations to check answers</p> <p>I can solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction</p>	<p>I can add numbers with up to 4-digits using the formal written methods of columnar addition</p> <p>I can subtract numbers with up to 4-digits using the formal written methods of columnar subtraction</p> <p>I can estimate and use inverse operations to check answers to a calculation</p> <p>I can solve addition and subtraction two-step problems in contexts, deciding which operations to use and why</p>	<p>I can add and subtract whole numbers with more than 4 digits, including using formal written methods (column addition and subtraction)</p> <p>I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</p> <p>I can add and subtract numbers mentally with increasingly large numbers</p> <p>I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy</p>	<p>I can perform mental calculations, including with mixed operations and large numbers</p> <p>I can use my knowledge of the order of operations to carry out calculations involving the four operations</p> <p>I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</p> <p>I can solve problems involving addition, subtraction, multiplication and division</p> <p>I can use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy</p>

<p>Multiplication and division</p>	<p>Explore sharing resources in their play with adult support. Sharing evenly means putting one object at a time into a group, until the groups have the same amount of objects.</p> <p>Explore sharing resources in their play with adult support. Sharing evenly means putting one object at a time into a group until the groups have the same amount of objects.</p>	<p>Double quantities within 10 and explore how to share amounts evenly using concrete resources. Doubling is adding the same number to itself. Sharing something evenly means that each group has the same amount. Only even numbers can be shared equally between two sets.</p> <p>Explore how to share amounts evenly using concrete resources. Sharing something evenly means that each group has the same amount. Only even numbers can be shared equally between two sets.</p>	<p>I can solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays</p>	<p>I can recall doubles and halves to 20</p> <p>I can recall multiplication and division facts for the 2, 5 and 10 times tables and use them to solve simple problems</p> <p>I can recognise odd and even numbers</p> <p>I can answer multiplication and division problems (within the tables I have learned so far using the \times, \div and $=$ signs</p> <p>I recognise that multiplication can be done in any order but division cannot</p> <p>I can solve word problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</p>	<p>I know all table calculations for 2, 3, 4, 5, 8 and 10</p> <p>I can calculate mathematical statements for multiplication and division using the multiplication tables that I know, including for 2-digit times one-digit numbers, using mental and progressing to formal written methods</p> <p>Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems (n objects are connected to m objects)</p>	<p>I can recall multiplication and division facts for tables up to 12×12</p> <p>I can use place value, known and derived facts to multiply and divide mentally, including multiplying by 0 and 1; dividing by 1</p> <p>I can recognise and use factor pairs and commutativity in mental calculations</p> <p>I can multiply a 2-digit and 3-digit numbers by 1-digit number using formal written layout</p> <p>I can solve problems involving multiplying using the distributive law to multiply two digits by one digit, integer scaling and correspondence problems (n objects are connected to m objects)</p>	<p>I can identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers</p> <p>I know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers</p> <p>I can work out if any given number up to 100 is a prime number and can recall prime numbers up to 19</p> <p>I can recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)</p> <p>I can solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes</p> <p>I can multiply numbers up to 4-digits by a 1 or 2-digit number using a formal written method, including long multiplication for 2-digit numbers</p> <p>I can multiply and divide mentally, drawing upon known facts</p> <p>I can divide numbers up to 4-digits by a 1-digit number using the formal written method of short division and interpret remainders appropriately</p> <p>I can multiply and divide whole and decimal numbers by 10, 100 and 1000</p> <p>I can solve number and word problems involving addition and</p>	<p>I can multiply multi-digit numbers up to 4-digits by a 2-digit whole number using the formal written method of long multiplication</p> <p>I can divide numbers up to 4-digits by a 2-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context</p> <p>I can divide numbers up to 4-digits by a 2-digit number using the formal written method of short division rounding where appropriate, and interpreting remainders according to the context</p> <p>I can perform mental calculations, including with mixed operations and large numbers</p> <p>I can identify common factors, common multiples and prime numbers</p> <p>I can use my knowledge of the order of operations to carry out calculations involving the four operations</p>
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<p>Fractions (including decimals and percentages)</p>			<p>I can recognise, find and name a half as one of two equal parts of an object, shape or quantity</p> <p>I can recognise, find and name a quarter as one of four equal parts of an object, shape or quantity</p>	<p>I can recognise, find, name and write fractions $1/2$, $1/3$, $1/4$, $2/4$ and $3/4$ of a length, shape, set of objects or quantity</p> <p>I can write simple fractions and equivalents</p>	<p>I can count up and down in tenths</p> <p>Recognise, find and write fractions of a discrete set of objects: unit fractions ($1/4$) and non-unit fractions ($2/3$) with small denominators</p> <p>I can recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</p> <p>I can recognise and show, using diagrams, equivalent fractions with small denominators</p> <p>I can add and subtract fractions with same denominator within one whole</p> <p>I can compare and order unit fractions, and fractions with the same denominators</p> <p>Solve problems that involve all of the above</p>	<p>I can count up and down in hundredths</p> <p>I can solve problems involving increasingly harder fractions to calculate quantities – with unit and non unit fractions</p> <p>I can add and subtract 2 fractions with the same denominator</p> <p>I can recognise and write decimal equivalents to $1/4$, $1/2$, $3/4$</p> <p>I can find and write decimal equivalents using tenths and hundredths</p> <p>I can find the effect of dividing a 1 or 2-digit number by 10 and 100; identify the value of the digits in the answer as ones, tenths and hundredths</p> <p>Round decimals with one decimal place to the nearest whole number</p> <p>Compare numbers with the same number of decimal places up to two decimal places</p>	<p>I can recognise and show, using diagrams, families of common equivalent fractions with denominators up to and including 12</p> <p>I can count up and down in hundredths</p> <p>I can recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number, E.g. $2/5 + 4/5 = 6/5 = 1\frac{1}{5}$</p> <p>I can add and subtract fractions with the same denominator and denominators that are multiples of the same number</p> <p>I can multiply proper fractions and mixed fractions by whole numbers, supported by material and diagrams</p> <p>I can read and write decimal numbers as fractions (e.g. $0.71 = 71/100$) and vice versa</p> <p>I can recognise and use thousandths and relate them to tenths, hundreds and decimal equivalents</p>	<p>I can compare and order fractions whose denominations are all multiples of the same number</p> <p>I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths</p> <p>I can recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number, E.g. $1/4 \times 1/2 = 1/8$</p> <p>I can add and subtract fractions by whole numbers and denominators that are multiples of the same number</p> <p>I can associate a fraction with division and work out decimal fractions such as knowing that 7 divided by 21 is the same as $7/21$ and that this is equal to $1/3$, and that 0.375 is $3/8$ as a simple fraction</p> <p>I can identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving equivalents</p>

						<p>Solve simple measure and money problems involving fractions and decimals to two decimal places</p>	<p>I can round decimals with 2 decimal places to the nearest whole number and to one decimal place</p> <p>I can read, write, order and compare numbers with up to 3 decimal places</p> <p>I can solve addition and subtraction problems involving numbers up to three decimal places</p> <p>I can recognise the % symbol and understand that per cent relates to 'a part of a hundred'</p> <p>I can write percentages as a fraction with denominator 100, and as a decimal percentages</p> <p>I can solve problems which require knowing those fractions with a denominator of a multiple of 10 or 25</p> <p>I can solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$</p>	<p>answers up to three decimal places</p> <p>I can multiply one-digit numbers with up to two decimal places by whole numbers</p> <p>I can use written division methods in cases where the answer has up to two decimal places</p> <p>I can solve problems which require answers to be rounded to specified degrees of accuracy</p> <p>I can recall and use equivalences between simple fractions, decimals and percentages including in different contexts</p>
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<p>Geometry – properties of shape</p>	<p>Explore shapes in the environment and use informal mathematical vocabulary to talk about the shape of everyday objects, such as round and tall. Shapes have different properties. They can be straight, long, curvy or short. Shapes are all around us in the environment.</p> <p>Select appropriate shapes for building and construction activities and combine shapes to make new ones. 3-D shapes are solid shapes. They have different shaped faces.</p> <p>Extend and create ABAB patterns using a variety of objects, and notice and correct an error in a repeating pattern. Identify patterns in the environment.</p>	<p>Use mathematical names for common 3-D shapes and use 3-D shapes in their play. 3-D shapes are solid shapes. They have a different number of faces and edges. The faces are made up of different 2-D shapes.</p> <p>Use mathematical names for common 2-D shapes and explore shapes in their play. 2-D shapes are flat. They have a different number of sides and angles. 2-D shapes can be folded and cut into different 2-D shapes. They can also be put together to make other 2-D shapes.</p> <p>Continue, copy and create repeating patterns using a variety of objects.</p>	<p>Recognise and name 2-D shapes e.g. rectangle (including squares), circle and triangle</p> <p>Recognise and name 3-D shapes e.g. cuboids (including cubes), pyramid and sphere</p>	<p>I can identify and describe properties of 2D shapes, including the number of sides and line symmetry in a vertical line</p> <p>I can identify and describe properties of 3D shapes, including the number of edges, vertices and faces</p> <p>I can identify 2D shapes on the surface of 3D shapes</p> <p>I can compare and sort common 2D and 3D shapes</p> <p>I can order mathematical objects in patterns and sequences</p>	<p>I can draw 2D shapes and make 3D shapes using modelling materials</p> <p>I can recognise 3D shapes in different orientations and describe them</p> <p>I can recognise angles as a property of shape or a description of a turn</p> <p>I can identify right angles; know that 2 and 4 right angles make half and a full turn respectively</p> <p>I can identify whether angles are greater or less than a right angle</p> <p>I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines</p>	<p>I can compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</p> <p>I can identify acute and obtuse angles and compare and order angles up to two right angles by size</p> <p>I can identify lines of symmetry in 2D shapes presented in different orientations</p> <p>I can complete a simple symmetric figure with respect to a specific line of symmetry</p>	<p>I can identify 3-D shapes, including cubes and other cuboids, from 2-D representations</p> <p>I can estimate and compare acute, obtuse and reflex angles and I know angles are measured in degrees</p> <p>I can draw given angles, and measure them in degrees (°)</p> <p>I can use the properties of rectangles to deduce related facts and find missing lengths and angles</p> <p>I can identify : angles at a point and one whole turn (total 360°) angles at a point on a straight line and half a turn (total 180°) other multiples of 90°</p> <p>I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles</p> <p>I can 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</p>	<p>I can draw 2-D shapes using given dimensions and angles</p> <p>I can recognise, describe and build simple 3D shapes, including making nets</p> <p>I can compare and classify geometrical shapes based on properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons</p> <p>I can recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles</p> <p>I can illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius</p> <p>I can describe positions on the full coordinate grid (all four quadrants)</p> <p>I can draw and translate simple shapes on the coordinate plane and reflect them in the axes</p>
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Geometry – position and direction	Use and understand positional language. Positional language includes in, under, inside, behind, and on top.	Use and understand language that describes where objects are in relation to each other. Positional language includes under, over, next to, behind, in front, above and through.	I can describe position, direction and movement including whole, half, quarter and three-quarter turns	Use mathematical vocabulary to describe position, direction and movement		I can describe positions on a 2-D grid as coordinates in the first quadrant I can plot specified points and draw sides to complete a given polygon I can describe movements between positions as translations of a given unit to the left/right and up/down		
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Measurement	<p>Explore length, height, capacity, weight, time and money in their play. Items can have different heights, lengths and weights. Containers hold different amounts.</p> <p>Explore length, height, weight and capacity in their play and begin to use language associated with this with support, such as long, short, tall, heavy, light, full and empty. Items can have different heights, lengths and weights. Containers hold different amounts.</p> <p>Compare the length and height of everyday objects in their play and begin to use language associated with this with support, such as long, short and tall.</p> <p>Compare the capacity of everyday objects in their play, and begin to use language associated with this, such as full and empty.</p> <p>Be aware of when certain events take place. There is a structure and routine to the day. Events happen in order.</p> <p>Begin to describe a sequence of real or fictional events, using words, such as 'first' and 'then'. Events happen in an order and sometimes they have to wait for things to happen. Certain words, including 'later', show that they need to wait for an event to happen.</p> <p>Be aware that timers and clocks are used to measure time.</p>	<p>Use language in their play, including heavy, light, heavier, lighter, long, short, longer, shorter, tall, taller, full and empty. Items can be measured to show how long, tall or heavy they are.</p> <p>Compare and order the length and height of two to three objects and use and understand the language tall, taller, tallest, long, longer, longest, short, shorter and shortest. Items can be measured using non standard units to show how long or tall they are.</p> <p>Compare and order the capacity of two to three items in sand and water play and use and understand the language full and empty. The capacity of an object is how much it can hold.</p> <p>Order and sequence familiar events, such as everyday routines. Events can be sequenced using everyday words, such as first, then, next, morning and afternoon.</p> <p>Know the order of the days of the week. There are seven days in the week. School days are Monday to Friday. Saturday and Sunday are the weekend.</p> <p>Use simple timers to measure periods of time.</p> <p>Use language in their play, including heavy, light, heavier, lighter, long, short, longer, shorter, tall, taller, full and empty. Items can be measured to show</p>	<p>I can compare, describe and solve practical problems for length and height e.g. long/ short, longer/ shorter, tall/short, double/half – and begin to record</p> <p>I can compare, describe and solve practical problems for mass and weight e.g. heavy/ light, heavier than/ lighter than – and begin to record Including mass and weight</p> <p>I can compare, describe and solve practical problems for capacity and volume e.g. full/ empty, more than, less than, half, half full, quarter – and begin to record</p> <p>I can compare, describe and solve practical problems for time e.g. quicker, slower, earlier, later – and begin to record</p> <p>I can recognise and know the value of different denominations of coins and notes</p> <p>I can sequence events in chronological order using language e.g. before, after, next, first, today, yesterday, tomorrow, morning, afternoon etc.</p> <p>I can recognise and use language of dates: days of the week, weeks, months and years</p> <p>I can tell time: to hour and half past</p>	<p>I can choose and use appropriate standard units to estimate and measure using rulers, scales, thermometers and measuring vessels, Length/height (m, cm) in any direction. Mass (kg, g) Temperature (°C) Capacity (l, ml)</p> <p>I can compare and order length, mass, volume, capacity using these signs: >, < or =</p> <p>I can read scales in divisions of ones, twos, fives and tens</p> <p>I can recognise and use symbols for pounds (£) and pence (p); combine amounts to a particular value</p> <p>I can find different combinations of coins that equal the same amount of money</p> <p>I can solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</p> <p>I can compare and sequence intervals of time</p> <p>I can remember the number of minutes in an hour and hours in a day</p> <p>I can tell and write the time to the nearest 5 minutes (GDS) including quarter to and past (EXP)</p>	<p>I can measure, compare, add and subtract: lengths (m/cm/mm); mass (kg, g); volume and capacity (l/ ml)</p> <p>I can recognise and use abbreviations of metric units of measure</p> <p>I can measure the perimeter of simple 2D shapes</p> <p>I can add and subtract amounts of money to give change, using both £ and p in practical contexts</p> <p>I can tell and write the time from an analogue clock, using Roman numerals 1 to X11,</p> <p>I can tell and write the time on 12 hour & 24 hour clocks</p> <p>I can estimate and read time with increasing accuracy to the nearest minute</p> <p>I can use vocabulary such as: o'clock, am, pm, morning, afternoon, noon and midnight</p> <p>I know the number of seconds in a minute; minutes in an hour; and the number of days in each month, year and leap year</p> <p>I can record and compare time in terms of seconds, minutes, hours</p> <p>I can compare durations of events, e.g. calculate time taken by particular events or tasks</p>	<p>I can convert between different units of measure e.g. km to m; m to cm; cm to mm; kg to g; l to ml; hour to min; min to sec</p> <p>I can measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</p> <p>I can find area of rectilinear shapes by counting squares</p> <p>I can estimate, compare and calculate different measures, including money in pounds and pence</p> <p>I can read, write and convert time between analogue and digital 12- and 24- hour clocks</p> <p>I can solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</p> <p>I can solve problems involving converting between units of time</p> <p>I can use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation, including scaling</p>	<p>I can convert between different units of metric measure, e.g. km/m, cm/m, cm/mm, g/kg, l/ml</p> <p>I understand and use approximate equivalences between metric and common imperial units such as inches, pounds and pints</p> <p>I can measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</p> <p>I can calculate and compare the area of rectangles (including squares) and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes</p> <p>I can estimate volume, e.g. Using 1cm³ blocks to build cuboids (including cubes) and capacity, e.g. using water</p> <p>I can solve problems involving converting between units of time</p> <p>I can use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation, including scaling</p>	<p>I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate</p> <p>I can 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</p> <p>I can convert between miles and kilometres</p> <p>I can calculate the area of parallelograms and triangles</p> <p>I can recognise when it is possible to use formulae for area and volume of shapes</p> <p>I can recognise that shapes with the same areas can have different perimeters and vice versa</p> <p>Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units e.g. mm³ and km³</p>
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	<p>Explore length, height, weight and capacity in their play and begin to use language associated with this with support, such as long, short, tall, heavy, light, full and empty.</p> <p>Compare the weight of everyday objects in their play and begin to use language associated with this, with support, such as heavy and light.</p> <p>Explore coins and money in their play. Money is used to buy objects.</p>	<p>how long, tall or heavy they are.</p> <p>Compare and order the weight of two to three items and use and understand the language heavy, heavier, heaviest, light, lighter and lightest. Items can be measured using non standard units to show how long or tall they are.</p> <p>Use money, including coins, in role play situations. There are different types of coins. Each coin is worth a different amount.</p>						
<p>Statistics</p>		<p>Record data in simple tables and pictograms. Data can be recorded in tables and pictograms.</p>		<p>I can interpret and construct simple pictograms, tally charts, block diagrams and simple tables</p> <p>I can ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</p> <p>I can ask and answer questions about totalling and comparing grouped data</p>	<p>I can interpret and present data using bar charts, pictograms, tables and tally charts.</p> <p>I can solve one-step and two-step questions using information presented in scaled bar charts, pictograms and tables</p>	<p>I can interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs (graphs which show changing data over time)</p> <p>I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs</p>	<p>I can solve comparison, sum and difference problems using information presented in a line graph</p> <p>I can complete, read and interpret information in tables, including timetables</p>	<p>I can interpret and construct pie charts and line graphs and use these to solve problems</p> <p>I can calculate and interpret the mean as average</p>

Algebra								<p>I can use simple formulae</p> <p>I can generate and describe linear number sequences</p> <p>I can express missing number problems algebraically</p> <p>I can find pairs of numbers that satisfy an equation with two unknowns</p> <p>I can enumerate (list) possibilities of combinations of two variables</p>
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Ratio and proportion

I can solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts

I can solve problems involving the calculation of percentages. (E.g. of measures and such as 15% of 360) I can also use percentages for comparisons.

I can solve problems involving similar shapes where the scale factor is known or can be found

I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.