## MATHS YEAR 1 CHILD SPEAK TARGETS

## NUMBER

## Number and Place Value

I can count to 100 and above, forwards and backwards, starting at any number.
I can count in 2's, 5's and 10's.
I can count, read and write numbers to 100 in numbers.
I can say what is one more or one less than a number.
I can read and write numbers from 1 to 20 in numbers and words.
I can use number lines, objects and pictures to help with my numbers.
I can use the words - equal to, more than, less than (fewer), most, least.

## Calculations

I can use addition and subtraction bonds up to 20.
I can add and subtract 1-digit and 2-digit numbers to 20.
I can read, write and do number sentences using,+- and $=$.
I can solve one-step problems that use + and -, using objects and pictures to help.
I can solve missing number problems.
I can solve one-step problems using $x$ and $\div$, using objects and pictures to help me.
Fractions
I can find half of an object, shape or quantity.
I can find a quarter of an object, shape or quantity.

## SHAPE SPACE AND MEASURES

## Measurement

I can compare, talk about and solve practical problems for lengths and heights.
I can compare, talk about and solve practical problems for mass/weight.
I can compare, talk about and solve practical problems for capacity and volume.
I can compare, talk about and solve practical problems for time.
I can measure and begin to record lengths and heights.
I can measure and begin to record capacity and volume.
I can measure and begin to record time.
I can recognise and know the value of different coins and notes.
I can tell the time using o'clock and half past.
I can draw hands on a clock face to show o'clock and half past.
I can sequence events in order and talk about them.
I can talk about days, weeks, months and years.
Geometry - Properties of shape
I can recognise and name 2D shapes; rectangle, square, circle and triangle.
I can recognise and name 3D shapes; cuboid, cube, pyramid and sphere.
Geometry - Position and Direction
I can talk about position, directions and movement.

## MATHS YEAR 2 CHILD SPEAK TARGETS

## NUMBER

## Number and Place Value

I can count in steps of 2,3 and 5 from 0 .
I can count in 10's from any number, forwards and backwards.
I can read and write numbers to at least 100 in numbers and words.
I can compare and order numbers from 0 up to 100; using 〈 > = signs.
I know what the value of each digit in a 2 -digit number.
I can find, show and estimate numbers using different ways.
I can solve problems use place value and number facts.

## Calculations

I know my addition and subtraction facts to 20 really well and use this for facts up to 100. (eg If I know $7+2=9$, I know $70+20=90$ ).
I can add and subtract mentally, a 2 digit and a 1 digit number (eg $26+6,41-8$ ).
I can add and subtract mentally, a 2 digit and a tens number (eg 32+10, 32-20).
I can add and subtract mentally, 2, 2 digit numbers (eg 23+34,32-17).
I can add and subtract a 2 digit and a 1 digit number, using objects and pictures.
I can add and subtract a 2 digit and a tens number, using objects and pictures.
I can add and subtract a 2 digit and a 2 digit number, using objects and pictures.
I can check calculations and missing number problems using the inverse.
I can solve problems with addition and subtraction using objects and pictures.
I can solve problems with addition and subtraction using mental and written methods.
I can recognise odd and even numbers
I can recall and use multiplication and division facts for the $2 X$ table.
I can recall and use multiplication and division facts for the 5 X table.
I can recall and use multiplication and division facts for the 10X table.
I can solve problems involving multiplication and division in lots of different ways.
I can show that addition can be done in any order and subtraction cannot.
I can show that multiplication can be done in any order and division cannot.

## Fractions

I can recognise, find, name and write fractions $1 / 3,1 / 4,2 / 4$ and $3 / 4$ of a length, shape, set of objects or quantity.
I can write simple fractions. (eg $\frac{1}{2}$ of $6=3$ )
I can recognise the equivalence of $2 / 4$ and $1 / 2$.

## SHAPE SPACE AND MEASURES

## Measurement

I can compare and order lengths, mass, volume/capacity and record the results using > < and $=$.
I can use $m$ and $c m$ to estimate and measure length/height, using rulers.
I can use kg and g to estimate and measure mass, using scales.
I can use ${ }^{\circ} \mathrm{C}$ to estimate and measure temperature, using thermometers.
I can use $I$ and ml to estimate and measure capacity, using measuring vessels.
I can recognise and use the symbols $£$ and $p$.
I can find different ways, using coins, to find the same amount of money.
I can solve simple problems involving addition and subtraction of money and give change.
I can tell and write the time to five minutes, including quarter to/past and draw the hands on a clock face to show these times.
I can compare and sequence intervals of time.
I can know the number of minutes in an hour, the number of hours in a day.

## Geometry - Properties of Shape

I can compare and sort common 2D shapes and everyday objects.
I can compare and sort common 3D shapes and everyday objects.
I can identify and describe the properties of 2D shapes (sides and lines of symmetry).
I can identify and describe the properties of 3D shapes (edges, vertices and faces).

## Geometry - Position and Direction

I can order and arrange mathematical objects in patterns and sequences.
I can use mathematical vocabulary to describe position, direction and movement.

## Statistics

I can read and construct simple pictograms.
I can read and construct tally charts.
I can read and construct block diagrams.
I can read and construct simple tables.
I can ask and answer simple questions using the data.

## MATHS YEAR- 3 CHILD SPEAK TARGETS

## NUMBER

## Number, Place Value, Approximation and Estimation/Rounding

I can count from 0 in multiples of 4,8,50 and 100.
I can compare and order numbers up to 1,000 .
I can read and write numbers to 1,000 in numerals and words.
I can find 10 or 100 more or less than a given number.
I can recognise the place value of each digit in a 3-digit number.
I can identify, represent and estimate numbers using different ways.
I can solve number problems and practical problems.

## Calculations

I can add and subtract mentally, including a 3 digit and a 1 digit number:
I can add and subtract mentally, including a 3 digit and a 10.
I can add and subtract mentally, including a 3 digit and a 100.
I can add and subtract numbers with up to three digits, using column addition and subtraction.
I can estimate the answer to a calculation and use the inverse to check answers.
I can solve problems, including missing number problems.
I can recall and use multiplication and division facts for the $3 X$ tables.
I can recall and use multiplication and division facts for the $4 X$ tables.
I can recall and use multiplication and division facts for the $8 X$ tables.
I can write and calculate mathematical statements for multiplication and division.
I can solve problems, including missing number problems, involving multiplication and division.

## Fractions, Decimals and Percentages

I can count up and down in tenths.
I can know that tenths come from dividing an object into 10 equal parts and in dividing a quantity by 10 .
I can recognise, find and write factions of a set of objects.
I can compare and order fractions with the same denominators.
I can add and subtract factions with the same denominator within one whole.
(eg $5 / 7+1 / 7=6 / 7$ )
I can recognise and show, using diagrams, equivalent fractions.
I can solve problems using fractions.

| $\quad$MATHS YEAR- 3 CHILD SPEAK TARGETS <br> SHAPE SPACE AND MEASURES |
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| Measurement |
| I can compare lengths using $\mathrm{m}, \mathrm{cm}$ \& mm. |
| I can compare mass using kg \& g. |
| I can compare volume/capacity using I \& ml. |
| I can measure lengths using $\mathrm{m}, \mathrm{cm}$ \& mm. |
| I can measure mass using kg \& g. |
| I can measure volume/capacity using I \& ml. |
| I can add and subtract lengths using $\mathrm{m}, \mathrm{cm}$ \& mm. |
| I can add and subtract mass using kg \& g. |
| I can add and subtract volume/capacity using I \& ml. |
| I can tell and write the time from an analogue clock (12 hour clock). |
| I can tell and write the time from an analogue clock (24 hour clock). |
| I can tell and write the time from an analogue clock (Roman numerals - I to XII) |
| I can estimate and read time to the nearest minute. |
| I can record and compare time in terms of seconds, minutes and hours. |
| I can use the vocabulary: o'clock, am, pm, morning, afternoon, noon \& midnight. |
| I know the number of seconds in a minute. |
| I know the number of days in each month, year and leap year. |
| I can compare the length of events. |
| I can measure the perimeter of simple 2D shapes. |
| I can add and subtract amounts of money to give change, using both £ and p. |
| Geometry - Properties of Shape |
| I can identify horizontal, vertical lines and perpendicular and parallel lines. |
| I can draw 2D shapes. |
| I can make 3D shapes using modelling materials. |
| I can recognise 3D shapes in different ways and describe them. |
| I can recognise that angles are a property of shape or a turn. |
| I can identify right angles. |
| I can recognise that 2 right angles make a $1 / 2$ turn \& 3 make a 3/4 turn. |
| I can identify whether angles are greater than or less than a right angle. |
| Statistics |
| I can interpret and present data using bar charts, pictograms and tables. |
| I can solve one-step and two-step questions, using information presented in bar |
| charts with scales, pictograms and tables. |

## MATHS YEAR 4 CHILD SPEAK TARGETS

## NUMBER

## Number, Place Value, Approximation and Estimation/Rounding

I can count in multiples of $6,7,9,25$ and 1,000.
I can order and compare numbers beyond 1,000.
I can find 1,000 more or less than a given number.
I can recognise the place value of each digit in a 4-digit number.
I can read roman numerals to 100.
I can identify, represent and estimate numbers using different representations.
I can round any number to the nearest 10,100 or 1,000 .
I can count backwards through zero to include negative numbers.
I can solve number and practical problems.

## Calculations

I can add and subtract numbers (up to 4-digits) using column addition and subtraction.
I can estimate and use inverse operations to check answers in a calculation.
I can solve addition and subtraction 2-step problems in contexts, deciding which operations and methods to use and why.
I can recall multiplication and division facts up to $12 \times 12$.
I can multiply and divide mentally using place value, known and derived facts.
I can multiply 2 and 3 digit numbers by a 1-digit number using a written method.
I can solve problems involving multiplying and adding.

## Fractions, Decimals and Percentages

I can count up and down in hundredths.
I can know that hundredths are when dividing an object by a hundred and dividing tenths by ten.
I can recognise and show, using diagrams, families of common equivalent fractions.
I can add and subtract fractions within the same denominator.
I can recognise and write decimal equivalents to $1 / 4,1 / 2$ and $\frac{3}{4}$.
I can recognise and write decimal equivalents of any number of tenths or 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 2 decimal places.
I know that when dividing a 1-digit or 2-digit number by 10 and 100, the values of the digits in the answer are ones, tenths and hundredths.
I can solve problems involving increasingly harder factions to divide quantities.
I can solve simple measure and money problems involving fractions and decimals to 2 decimal places.

## MATHS YEAR- 4 CHILD SPEAK TARGETS SHAPE SPACE AND MEASURES

## Measurement

I can compare, estimate and calculate different measures.
I can read, write and convert time between analogue and digital 12 hour clocks.
I can read, write and convert time between analogue and digital 24 hour clocks.
I can solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
I can convert between different units of measurements
I can measure and calculate the perimeter of a straight lined shape in cm and m .
I can find the area of a straight lined shape by counting squares.
I can calculate different measures.
Geometry - Properties of Shape
I can compare and classify geometric shapes, including quadrilateral and triangles based on their properties and sizes.
I can identify lines of symmetry in 2D shapes presented in different orientations.
I can complete a simple symmetric figure with a specific line of symmetry.
I can identify acute and obtuse angles and compare and order.

## Geometry - Position and Direction

I can describe movements between positions as translations (left/right, up/down).
I can describe positions on a 2D grid as coordinates in the first quadrant.
I can plot specified points and draw sides to complete a given polygon.

## Statistics

I can interpret and present data using appropriate charts/graphs.
I can solve comparison, sum and difference problems using information in bar charts, pictograms, tables and other graphs.

## Number, Place Value, Approximation and Estimation/Rounding

I can count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.
I can read, write, order and compare numbers to at least 1,000,000.
I know the value of each digit in numbers up to $1,000,000$.
I can read Roman numerals to $1,000(M)$ and recognise years written in Roman numerals.
I can round any number up to $1,000,000$ to the nearest $10,100,1000,10000$ and 100000.
I can interpret negative numbers in context.
I can count forwards and backwards with positive and negative whole numbers.
I can solve number problems and practical problems with the above.
Calculations
I can add and subtract numbers (with more than 4 digits) mentally and including using written methods.
I can use rounding to check answers to calculations.
I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
I can identify multiples and factors, including finding all factor pairs or a number and common factor pairs of two numbers.
I can use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.
I can establish whether a number up to 100 is prime and the prime numbers up to 19 .
I can recognise and use square numbers and cube numbers, and use $\mathrm{cm}^{2}$ and $\mathrm{cm}^{3}$.
I can multiply and divide numbers mentally drawing on known facts.
I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.
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.
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 for the context.
I can solve problems involving multiplication and division using knowledge of factors and multiples, squares and cubes.
I can solve problems involving $+,-, x, \div$ and $=$.
I can solve problems involving multiplication and division including scaling by simple fractions and problems.

## Fractions, Decimals and Percentages

I can recognise mixed numbers and improper fractions and convert from one form to the other.
I can identify, name and write equivalent fractions of a given fraction.
I can compare and order fractions whose denominators are multiples of the same number.
I can add and subtract fractions with the same denominator and denominators that are
multiples of the same number.
I can multiply proper fractions and mixed numbers by whole numbers.
I can read and write decimal numbers as fractions.
I can recognise and can use thousandths and relate them to tenths, hundredths and decimal equivalents.
I can round decimals with 2 decimal places to the nearest whole number and 1 decimal place.

I can read, write, order and compare numbers with up to 3 decimal places and solve problems.
I can recognise the percent symbol (\%) and know this is 'parts per hundred'.
I can write percentages as a fraction with denominator hundred, and as a decimal.
I can solve problems which require knowing percentage/decimal equivalents of $\frac{1}{2}, \frac{1}{4}, 1 / 5,2 / 5$, $4 / 5$ \& those fractions with a denominator or a multiple of 10 or 25.

## YEAR-STAGE 5 - SHAPE SPACE AND MEASURES

## Measurement

I can solve problems involving converting between units of time.
I can convert between different units of metric measure.
I can understand and use approximate equivalences between metric units and common imperial units.
I can measure and calculate the perimeter of composite rectilinear shapes (several straightlined shapes which make one) in cm and m .
I can calculate and compare the area of rectangles (inc. squares), and including using standard units ( $\mathrm{cm}^{2}$ and $\mathrm{cm}^{3}$ ) to estimate the area of irregular shapes.
I can estimate volume and capacity.
I can use all four operations to solve problems.
Geometry - Properties of Shape
I can use the properties of rectangles to deduce related facts and find missing lengths and angles.
I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
I can identify 3D shapes, including cubes and other cuboids, from 2D representations.
I know angles are measured in degrees.
I can estimate and compare acute, obtuse and reflex angles.
I can identify angles at a point and one whole turn.
I can identify angles at a point on a straight line and $\frac{1}{2}$ a turn.
I can identify other multiples of $90^{\circ}$.
I can draw given angles and measure them in degrees.
Geometry - Position and Direction
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.

## Statistics

I can complete, read and interpret information in tables, including timetables.
I can solve comparison, sum and difference problems using information presented in a line graph.

## MATHS YEAR 6 CHILD SPEAK TARGETS

NUMBER

## Number, Place Value, Approximation and Estimation/Rounding

I can read, write, order and compare numbers up to $10,000,000$.
I can determine the value of each digit in numbers up to $10,000,000$.
I can round any whole number.
I can use negative numbers in context, and calculate intervals across zero.
I can solve number problems and practical problems with the above.

## Calculations

I can use estimation to check answers to calculations.
I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
I can identify common factors, common multiples and prime numbers.
I can perform mental calculations, including mixed operations and large numbers.
I can multiply multi-digit numbers up to 4 digits by a 2 digit whole number using the formal written method of long multiplication.
I can divide numbers up to 4 digits by a 2 digit whole number using the formal written long method, and interpret remainders according to the context.
I can divide no's up to 4 digits by a 2 digit no. using the formal written short method, interpreting remainders according to context.
I can solve problems involving addition, subtraction, multiplication and division.
I can use my knowledge of the order of operations to carry out calculations involving the four operations.

## Fractions, Decimals and Percentages

I can use common factors to simplify fractions and use common multiples to express fractions in the same denomination.
I can compare and order fractions, including fractions $>1$.
I can add and subtract fractions with different denominators and mixed numbers.
I can multiply simple proper fractions, writing the answer in the simplest form.
I can divide proper fractions by whole numbers.
I can associate a fraction with division to calculate decimal fractions equivalents for a simple fraction.
I can identify the value of each digit to 3 decimal places and multiply and divide numbers by 10 , 100 and 1000 giving answers up to 3 decimal places.
I can multiply 1-digit numbers with up to 2 decimal places by whole numbers.
I can use written division methods in cases where the answer has up to 2 d.p.
I can solve problems which require answers to be rounded.
I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts

## MATHS YEAR 6 CHILD SPEAK TARGETS <br> SHAPE SPACE AND MEASURES

## Ratio and proportion

I can solve problems involving the relative sizes of two quantities, where missing values can be found using integer multiplication and division facts.
I can solve problems involving the calculation of percentages and the use of percentage 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.

## Algebra

I can express missing number problems algebraically.
I can use a simple formula.
I can generate and describe linear number sequences.
I can find pairs of numbers that satisfy an equation with two unknowns.
I can enumerate possibilities of combinations of two variables.

## Measurement

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 of up to 3 decimal places.
I can convert between miles and kilometres.
I can recognise that shapes with the same areas can have different perimeters and vice versa.
I can calculate the area of parallelograms and triangles.
I can recognise when it is possible to use the formulae for the area of shapes.
I can calculate, estimate and compare volume of cubes and cuboids, using standard units.
I can recognise when it is possible to use the formulae for the volume of shapes.
I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate.

## Geometry - Properties of Shape

I can compare and classify geometric shapes based on the properties and sizes.
I can describe simple 3D shapes.
I can draw 2D shapes given dimensions and angles.
I can recognise and build simple 3D shapes, including making nets.
I can find unknown angles in any triangles, quadrilaterals and regular polygons.
I can recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
I can illustrate and name parts of circles, including radius, diameter and circumference.
I can know the diameter is twice the radius.

## Geometry - Position and Direction

I can draw and translate simple shapes on the co-ordinate plane, and reflect them in the axes.
I can describe positions on the full co-ordinate grid (all four quadrants).

## Statistics

I can interpret and construct pie charts and line graphs and use these to solve problems I can calculate and interpret the mean as an average.

