### 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 ÷, 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 2X table.

I can recall and use multiplication and division facts for the 5X 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.

# MATHS YEAR- 2 CHILD SPEAK TARGETS 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 cm to estimate and measure length/height, using rulers.

I can use kg and g to estimate and measure mass, using scales.

I can use  $^{\circ}C$  to estimate and measure temperature, using thermometers.

I can use I and mI to estimate and measure capacity, using measuring vessels.

I can recognise and use the symbols  $\pounds$  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 3X tables.

I can recall and use multiplication and division facts for the 4X tables.

I can recall and use multiplication and division facts for the 8X 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. (eq 5/7 + 1/7 = 6/7)

I can recognise and show, using diagrams, equivalent fractions.

I can solve problems using fractions.

# MATHS YEAR- 3 CHILD SPEAK TARGETS SHAPE SPACE AND MEASURES

#### Measurement

I can compare lengths using m, cm & mm.

I can compare mass using kg & g.

I can compare volume/capacity using I & ml.

I can measure lengths using m, cm & mm.

I can measure mass using kg & g.

I can measure volume/capacity using | & ml.

I can add and subtract lengths using m, 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  $\pounds$  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  $1,\overline{000}$ .

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.

#### MATHS YEAR- 5 CHILD SPEAK TARGETS NUMBER

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 cm<sup>2</sup> and cm<sup>3</sup>.

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 (cm<sup>2</sup> and cm<sup>3</sup>) 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°.

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 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.