

Primary National Curriculum Mathematics



Information Booklet for Parents/carers- The March CE Primary School

End of year expectations per
year group

MATHEMATICS TARGETS – An Early Years MATHEMATICIAN

Numbers

- I can recognise numbers that are important to me like my age, my flat number or the bus number that I go to nursery on.
- I can recognise the numbers 1 to 5.
- I can touch one thing and say the number name at the same time to help me count up to 3 or 4 things.
- I can count the number of things on a page in a book or on a birthday card.
- I can match the right number to a group of things from 1 to 5 to begin with, and then from 1 to 10.
- I can guess how many things I can see in a bucket and then count them to see how close my guess was.
- I can tell you which basket or bucket has got “more” or “fewer” things in.
- I can put two baskets of things together and tell you how many things I have altogether.
- I can tell you what “one more” is when you say a number.
- I can tell you what “one more” or “one less” is when you give me a group of up to 5 things, then up to 10 things.
- I can use words like “more”, “add”, “less” and “take away”
- I can use marks and pictures to show you my counting.
- I can use counting to help me solve problems that are important to me, like splitting my sandwich in half to share with my friend.

MATHEMATICS TARGETS – An Early Years MATHEMATICIAN

Shape, space and measure

- I am beginning to use shape names like “circle”, “square”, “cube” and “cylinder”.
- When I am playing on an obstacle course I can use words like “under”, “behind”, “on” or “in” to tell you where I am.
- I can tell you which thing is “heavy” and which thing is “light” when you give me 2 things. I can tell you which thing is “full” and which thing is “empty” when I am filling and emptying bottles.
- I can use things to make patterns, like buttons and bricks.
- I am beginning to use words like “money”, “pound” and “pence” when playing “shop”.
- I know the order I put my clothes on
- I can tell you what is happening tomorrow or what happened yesterday. I can tell you what day today is.

MATHEMATICS TARGETS - A YEAR 1 MATHEMATICIAN

Number and place value

I can count to and across 100, forward and backwards, beginning with 0 or 1 from any number.

I can count in multiples of 2, 5 and 10.

I can count, read and write numbers to 100 in numerals.

I can say what is one more or one less than any number.

I can read and write numbers from 1 to 20 in numerals and words.

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 least

Calculations

I can represent and use number bonds and related subtraction facts to 20.

I can add and subtract 1-digit and 2-digit numbers to 20, including zero.

I can read, write and interpret mathematical statements involving addition, subtraction and equals signs.

I can solve one-step problems that involve addition and subtraction, using objects and pictorial representations.

I can solve missing number problems.

I can solve one-step problems involving multiplication and division, by using concrete objects, pictorial representations and arrays.

Fractions

I can recognise, find and name a half of an object, shape or quantity.

I can recognise, find and name a quarter of an object, shape or quantity.

Measurement

I can compare, describe and solve practical problems for lengths and heights; mass/weight; capacity and volume; and time.

I can measure and begin to record lengths and heights; mass/weight; capacity and volume; and time.

I recognise and know the value of different denominations of coins and notes.

I can tell the time to the hour.

I can tell the time to half past the hour.

I can draw hands on a clock face to show these times.

I can sequence events in chronological order using language.

I recognise and use language relating to dates, including days, weeks, months and years

Geometry – properties of shapes

I recognise and can name common 2D shapes (rectangles, including squares, circles and triangles.)

I recognise and can name common 3D shapes (cuboids, including cubes, pyramids and spheres.)

Geometry – position and direction

I can describe position, directions and movement, including half, quarter and three-quarter turns.

Information for Parents/Carers

Mathematics Targets

Exceeding Year 1 Expectations

I can count reliably well beyond 100.

I count on and back in 3s from any given number to beyond 100.

I can say the number that is 10 more or 10 less than a number to 100.

I know the signs (+); (-); (=); (<); (>).

I can apply my knowledge of number to solve a one-step problem involving an addition, a subtraction and simple multiplication and division.

I can add and subtract 1-digit and 2-digit numbers to 50, including zero.

I can recognise all coins and notes and know their value.

I can use coins to pay for items bought up to £1.

I can use my knowledge of time to know when key periods of the day happen, for example, lunchtime, home time, etc.

I can recognise different 2D and 3D shapes in the environment.

MATHEMATICS TARGETS - A YEAR 2 MATHEMATICIAN

Page 1

Number and place value

I can count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward.

I can read and write numbers to at least 100 in numerals and in words.

I can compare and order numbers from 0 up to 100; using $<$ $>$ $=$ signs.

I recognise the place value of each digit in a 2-digit number.

I can identify, represent and estimate numbers using different representations, including the number line.

I can use place value and number facts to solve problems.

Calculations

I can recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.

I can add and subtract mentally, including:

A 2-digit number and ones

A 2-digit number and tens

Two 2-digit numbers

Adding three 1-digit numbers

I can add and subtract numbers using concrete objects and pictorial representations, including:

A 2-digit number and ones

A 2-digit number and tens

Two 2-digit numbers

Adding three 1-digit numbers

I recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.

I can solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures.

I can solve problems with addition and subtraction applying my increasing knowledge of mental and written methods.

I can recall and use multiplication and division facts for the 2, 5 and 10x 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, division and equals signs.

I can solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context.

I can show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.

I can show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.

Fractions

I recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity.

I can write simple fractions.

I recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.

Information for Parents/Carers

MATHEMATICS TARGETS - A YEAR 2 MATHEMATICIAN

Page 2

Measurement

I can compare and order lengths, mass, volume/capacity and record the results using $>$ $<$ and $=$.

I can choose and use standard units to estimate and measure length/height in any direction in m and cm using rulers.

I can choose and use standard units to estimate and measure mass in kg and g using scales.

I can choose and use standard units to estimate and measure temperature in $^{\circ}\text{C}$ using thermometers.

I can choose and use standard units to estimate and measure capacity in l and ml using measuring vessels.

I recognise and use symbols for £ and p and combine amounts to make a particular value.

I can find different combinations of coins that equal the same amount of money.

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 know the number of minutes in an hour.

I know the number of hours in a day.

I can solve simple problems in a practical context involving addition and subtraction of money of the same units, including giving change.

Geometry – properties of shapes

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, including the number of sides and line of 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.

Geometry – position and direction

I can order and arrange combinations of mathematical objects in patterns and sequences.

I can use mathematical vocabulary to describe position, direction and movement.

Statistics

I can interpret and construct simple pictograms.

I can interpret and construct tally charts.

I can interpret and construct block diagrams.

I can interpret and construct 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.

Information for Parents/Carers

Mathematics Targets

Exceeding Year 2 Expectations

I can count reliably up to 1000 in 2s, 5s and 10s.

I can count on and back in multiples of 4, 8, 25, 50 and 100 from any given number to beyond 1000.

I can add and subtract fractions with a common denominator.

I can apply knowledge of number up to 100 to solve a one-step problem involving a addition, subtraction and simple multiplication and division.

I can apply knowledge of addition and subtraction to pay for items, up to £10, within a problem solving context.

I can add and subtract two 2-digit and numbers to 100.

I can use an appropriate strategy to add and subtract numbers that move between and through 100, for example, $97 + 7$; $103 - 8$.

I know about right angles and where they can be seen in the environment.

I can tell the time to 5 minute intervals with both analogue and digital clocks and relate one to the other.

I can measure, compare, add and subtract using common metric measures.

MATHEMATICS TARGETS - A YEAR 3 MATHEMATICIAN

Page 1

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 representations.

I can solve number problems and practical problems using above.

Calculations

I can add and subtract mentally, including:

A 3-digit number and ones

A 3-digit number and tens

A 3-digit number and hundreds

I can add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.

I can estimate the answer to a calculation and use inverse operation to check answers.

I can solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.

I can recall and use multiplication and division facts for the 3, 4 and 8x tables.

I can write and calculate mathematical statements for multiplication and division using the multiplication tables, including for 2-digit numbers, using mental and progressing to formal written methods.

I can solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects.

Fractions, decimals and percentages

I can count up and down in tenths.

I recognise that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit numbers or quantities by 10.

I recognise and can find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.

I can compare and order unit fractions and fractions with the same denominators.

I can add and subtract fractions with the same denominator within one whole.

I can solve problems involving the above.

Information for Parents/Carers

MATHEMATICS TARGETS - A YEAR 3 MATHEMATICIAN

Page 2

Measurement

- I can compare lengths using m, cm & mm.
- I can compare mass using kg & g.
- I can compare volume/capacity using l & ml.
- I can measure lengths using m, cm & mm.
- I can measure mass using kg & g.
- I can measure volume/capacity using l & 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 l & 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 can estimate and read time with increasing accuracy to the nearest minute.
- I can record and compare time in terms of seconds, minutes and hours.
- I can use the following 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 duration 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 in a practical context.

Geometry – properties of shapes

- I can identify horizontal, vertical lines and pairs of perpendicular and parallel lines.
- I can draw 2D shapes.
- I can make 3D shapes using modelling materials.
- I recognise 3D shapes in different orientations and describe them.
- I recognise that angles are a property of shape or a description of a turn.
- I can identify right angles.
- I recognise that two right angles make a half-turn & three make a three quarter 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 scaled bar charts, pictograms and tables.

Information for Parents/Carers

Mathematics Targets

Exceeding Year 3 Expectations

I can recognise the value of each digit in a 4-digit number and the value of a tenth.

I know all multiplication facts up to 10×10 and can instantaneously answer questions such as, how many 7s in 42?

I can add and subtract numbers with any number of digits using formal written methods.

I am beginning to have an understanding about negative numbers recognising they are smaller than zero.

I can multiply and divide any 2-digit number by a single digit number and have an understanding of 'remainder'.

I can find fractional values (from $\frac{1}{2}$ to $\frac{1}{10}$) of amounts up to 1000.

I can use my knowledge of number to solve problems related to money, time and measures.

I know that the total internal angles of a triangle measure 180° and can measure each angle

I can use my knowledge of time to help me solve problems related to timetables.

I can measure, compare, add and subtract when solving more complex problems using common metric measures set out in Kg,gms; Kl,litres; Km and metres, etc.

MATHEMATICS TARGETS - A YEAR 4 MATHEMATICIAN

Page 1

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 recognise the place value of each digit in a 4-digit number.

I can read Roman numerals to 100 and know that over time the numeral system changed to include the concept of zero and place value.

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 with the above (involving increasingly large numbers).

Calculations

I can add and subtract numbers with up to 4-digits using the formal written methods of columnar 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 12×12 .

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 three numbers.

I recognise and use factor pairs and commutativity in mental calculations.

I can multiply 2-digit numbers by a 1-digit number using formal written layout.

I can solve problems involving multiplying and adding, including using the distributive law to multiply 2-digit numbers by 1-digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.

Fractions, decimals and percentages

I can count up and down in hundredths.

I recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.

I recognise and show using diagrams, families of common equivalent fractions.

I can add and subtract fractions within the same denominator.

I recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$.

I 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 can find the effect of dividing a 1-digit or 2-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths.

I can solve problems involving increasingly harder fractions and fractions to divide quantities, including non-unit fractions where the answer is a whole number.

I can solve simple measure and money problems involving fractions and decimals to 2 decimal places.

MATHEMATICS TARGETS - A YEAR 4 MATHEMATICIAN

Page 2

Measurement

I can compare different measures, including money in £ and p.

I can estimate different measures, including money in £ and p.

I can calculate different measures. Including money in £ and p.

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 rectilinear figure in cm and m.

I can find the area of rectilinear shapes by counting squares.

I can calculate different measures

Geometry – properties of shapes

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 respect to a specific line of symmetry,

I can identify acute and obtuse angles and compare and order angles up to two right angles by size.

Geometry – position and direction

I can describe movements between positions as translations of a given unit to the left/right and 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 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.

Mathematics Targets

Exceeding Year 4 Expectations

I can use tenths, hundredths and thousandths when comparing values and solving addition and subtraction problems.

I can round any number to 100,000 to the nearest 10, 100, 1,000 or 10,000.

I can relate tenths and hundredths to fractional values.

I can rapidly recall answer when multiplying and dividing a whole or decimal number by 10.

I can solve multi-step problems involving more than one of the operations.

I can work out simple percentage values of whole numbers, for example, as met in on-going learning in science, history and geography.

I can compare and add fractions whose denominators are all multiples of the same number.

I can use a 24-hour timetable to find out times for journeys between various places.

I can use my knowledge of perimeter to work out the perimeter of large areas around school, using metres and centimetres.

I can collect my own data on a given project and present information in graphical formats of my choosing.

MATHEMATICS TARGETS - A YEAR 5 MATHEMATICIAN

Page 1

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 can determine 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, count forwards and backwards with positive and negative whole numbers, including through zero.

I can solve number problems and practical problems with the above.

Calculations

I can add and subtract numbers mentally with increasingly large numbers.

I can add and subtract whole numbers with more than 4 digits, including using formal written methods.

I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.

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 of a number and common factor pairs of two numbers.

I 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 recall prime numbers up to 19.

I recognise and use square numbers and cube numbers, and the notation for squared and cubed.

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-digit 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 including using knowledge of factors and multiples, squares and cubes.

I can solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.

I can solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates.

Information for Parents/Carers

MATHEMATICS TARGETS - A YEAR 5 MATHEMATICIAN

Page 2

Fractions, decimals and percentages

I can recognise mixed numbers and improper fractions and convert from one form to the other.

I can write mathematical statements >1 as a mixed number.

I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.

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, supported by materials and diagrams.

I can read and write decimal numbers as fractions.

I 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.

I can solve problems involving numbers up to 3 decimal places.

I recognise the percent symbol and understand that percent relates to 'number 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 and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator or a multiple of 10 or 25.

Measurement

I can solve problems involving converting between units of time.

I can convert between different units of metric measure.

I understand and use approximate equivalences between metric units and common imperial units, such as inches, pounds and pints.

I can measure and calculate the perimeter of composite rectilinear shapes in cm and m.

I can calculate and compare the area of rectangles (incl. squares), and including using standard units (cm^2 and cm^3) to estimate the area of irregular shapes.

I can estimate volume and capacity.

I can use all four operations to solve problems involving money using decimal notation, including scaling.

Information for Parents/Carers

MATHEMATICS TARGETS - A YEAR 5 MATHEMATICIAN

Page 3

Geometry – properties of shapes

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.

Information for Parents/Carers

Mathematics Targets

Exceeding Year 5 Expectations

I have a concept of numbers well beyond 1,000,000 and their relative association to distances to planets; historical data and geographical aspects.

I can divide whole numbers (up to 4 digits) by 2-digit numbers, using my preferred method.

I can use rounding as a strategy for quickly assessing what approximate answers ought to be before calculating.

I can link working across zero for positive and negative numbers, for example, to work out time intervals between BC and AD in history

I can recognise the symbol for square root ($\sqrt{\quad}$) and work out square roots for numbers up to 100.

I can calculate number problems algebraically, for example, $2x - 3 = 5$

I can use my knowledge of measurement to create plans of areas around school, such as the classroom, field, outside play area, etc.

I can relate the imperial measures still used regularly in our society to their metric equivalents, for example, miles to Km and lbs to Kg.

I can use a range of timetables to work out journey times on a fictional journey around the world, for example, "How long would it take to reach the rainforests in the Amazon?"

I can collect my own data on a personal project and present information in formats of my choosing using charts, graphs and tables.

Information for Parents/Carers

MATHEMATICS TARGETS - A YEAR 6 MATHEMATICIAN

Page 1

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 to a required degree of accuracy.

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 and determine, in the context of a problem, an appropriate degree of accuracy.

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 with 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 method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.

I can divide numbers up to 4 digits by a 2 digit number using the formal written method of short division where appropriate.

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.

MATHEMATICS TARGETS - A YEAR 6 MATHEMATICIAN

Page 2

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, using the concept of equivalent fractions.

I can multiply simple pairs of 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 decimal places.

I can solve problems which require answers to be rounded to specified degrees of accuracy.

I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts

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 simple formulae.

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.

Information for Parents/Carers

MATHEMATICS TARGETS - A YEAR 6 MATHEMATICIAN

Page 3

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 recognise that shapes with the same areas can have different perimeters and vice versa.

I can calculate the area of parallelograms and triangles.

I 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 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 shapes

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 recognise and build simple 3D shapes, including making nets.

I can find unknown angles in any triangles, quadrilaterals and regular polygons.

I 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 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.

Information for Parents/Carers

Mathematics Targets

Exceeding Year 6 Expectations

I can compare, order and convert between fractions, decimals and percentages, for example, in contexts related to science, history or geography learning

I can move beyond squared and cubed numbers to calculate problems such as $X \times 10^n$ where n is positive.

I can use =, ≠, <, >, ≤, ≥ correctly.

I can multiply all integers, (using efficient written methods) including mixed numbers and negative numbers.

I can recognise an arithmetic progression and find the n th term.

I can use a formula for measuring the area of a shape, such as a rectangle and triangle to work out the area of an irregular shape in the school environment

I can use the four operations with mass, length, time, money and other measures, including the use of decimal quantities.

I can create a scaled model of an historical or geographical structure showing an acceptable degree of accuracy using known measurements.

I can calculate the costs and time involved of a visit to a destination in another part of the world relating to on-going learning in history or geography.

I can collect my own data on a personal project and present information in formats of my choosing, using charts, graphs and tables, and answer specific questions related to my research.