Cromwell Academy
Maths Objectives

	Numbers and the number system	Addition and subtraction	Multiplication and division	FDP, ratio and algebra
Year 6	I can read and write numbers to at least 10,000,000. I can order and compare numbers to at least 10,000,000 and determine the value of each digit. I can use negative numbers in context. I can round any number (up to 10,000,000) to the nearest 10, 100, 1,000, 10,000, 100,000 and 1,000,000.	I can calculate intervals between negative numbers that go across zero. I can solve number and practical problems involving place value to 10,000,000. I can solve addition and subtraction number calculations that involve brackets. I can solve addition and subtraction problems with 3 or more steps. I can explain the methods I have used to solve problems. I can use estimation to check answers to calculations.	I can solve multiplication and division number calculations that involve brackets. I can identify common factors and multiples. I can multiply multi-digit numbers (up to four digits) by a two digit whole number. I can use the formal written method of long multiplication to record my calculations. I can use known facts to rapidly solve multi-step mental calculations, including times table facts beyond 12x12. I can divide 4 digit numbers by a two digit number using a formal written method. I can interpret remainders from division calculations and express them as fractions, decimals or by rounding. I can use the formal written method of short division to record my calculations. I can solve multi-step problems which involve a mixture of operations. I can use estimation to check answers to calculations. I can multiply and divide by 10, 100 and 1,000, giving answers up to three decimal places. I can multiply one digit numbers with up to two decimal places by a whole number. I can divide numbers which have decimal answers. I can solve problems which produce answers which need to be rounded. I can identify prime numbers beyond 19.	I can relate common factors to finding equivalent fractions. I can use common factors to simplify fractions. I can use common multiples to express fractions in the same denomination. I can compare and order fractions (including those less than 1). I can add and subtract fractions with different denominators. I can multiply simple pairs of proper fractions, writing the answer in its simplest form. I can divide proper fractions by whole numbers. I can convert decimals into fractions and find fractions of amounts. I can recall equivalent fractions, decimals and percentages rapidly. I can solve problems involving ratio and proportion. I can calculate percentages of numbers and compare the answers. I can solve problems involving unequal sharing (e.g. 1/2 and 1/4 of the same amount). I can use symbols and letters to represent numbers. I can create linear number sequences and describe them using simple formulae. I can express missing number sentences using symbols and letters to represent numbers. I can solve missing number equations that have two or more missing numbers and list all possible answers.

Number

Name

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	Numbers and the number system	Addition and subtraction	Multiplication and division	Fractions, decimals and percentages

Year 5	I can read and write numbers to at least 1,000,000.	I can add and subtract whole numbers with 4 or more digits.	I can identify multiples and factors.	I can use decimals and fractions in context.
	I can order and compare numbers to at least 1,000,000 and determine the value of each digit.	I can use formal methods to add and subtract numbers with 4 or more digits.	I can identify common factors of two numbers.	I can recognise number sequences, including sequences with fractions and decimals.
	I can count forwards and backwards in steps of powers of 10 from any number up to 1,000,000.	I can add and subtract 6 digit numbers (which are multiples of 100/1,000) mentally.	I can use the vocabulary of prime numbers and composite numbers.	I can describe the rule of a number sequence, including those with fractions and decimals.
	I can interpret negative numbers in context.	I can use rounding to predict and check answers to calculations.	I can use the vocabulary linked to prime factors.	I can solve problems which involve scaling by simple fractions.
	I can count forwards and backwards with positive and negative whole numbers.	I can solve addition and subtraction problems with 2 or more steps.	I can recall prime numbers up to 19.	I can compare and order fractions whose denominators are multiples of the same number.
	I can round any number (up to 1,000,000) to the nearest 10, 100, 1,000, 10,000 and 100,000.	I can explain the methods I have used to solve problems.	I can test whether a number up to 100 is a prime number.	I can identify and write equivalent fractions.
	I can solve number and practical problems involving place value to 1,000,000.	I can solve multi-step problems which involve a mixture of operations.	I can multiply four digit numbers by a one or two digit number.	I can recognise mixed number and improper fractions.
	I can read Roman numerals to 1,000 and recognise years written in Roman numerals.		I can use a formal written method to record my multiplication calculations.	I can convert improper fractions to mixed numbers.
			I can use known facts to multiply and divide two digit numbers (beyond 12x12) mentally.	I can write number sentences using fractions.
			I can divide 4 digit numbers by a one digit number using a formal written method.	I can add and subtract fractions with the same denominator.
			I can interpret remainders from division calculations and express them as fractions, decimals or by rounding.	I can add and subtract fractions with denominators that are multiples of the same number.
			I can multiply and divide whole numbers and decimals by 10, 100 and 1,000.	I can use diagrams and resources to help me multiply proper fractions and mixed numbers.
			I can recognise and use the notation for squared and cubed numbers.	I can read and write decimal numbers as fractions.
			I can solve multiplication problems using my knowledge of factors and multiples, squared and cubed numbers.	I can add and subtract decimals with two decimal places.
			I can solve division problems.	I can round two digit decimal to the nearest whole number.
			I can multiply and divide by powers of 100 and 1,000 when converting between units of measure.	I can compare numbers with up to three decimal places.
			I can apply my knowledge of times tables to 12x12 to help solve larger calculations.	I can solve problems that involve numbers with three decimal places.
			I can solve multi-step problems which involve a mixture of operations.	I can use the % symbol and understand what it represents.
			I can use the equals sign to balance equations.	I can express percentages as fractions and decimals.
				I can solve problems involving percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5.
				I can solve problems involving fractions with a denominator of a multiple of 10 or 25.

Maths Teacher Assessment

Measurement   Name

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	Measures	Money	Time
Year 6	I can solve problems where I have to convert between units of measure. I can convert between miles and kilometres. I can investigate whether shapes with the same areas have the same perimeters. I can use formulae to express the area of shapes, when it is appropriate. I can calculate the area of parallelograms and triangles. I can estimate the volume of cubes and cuboids using cm³ and m³ when recording my answers. I can calculate the volume of cubes and cuboids using cm³ and m³ when recording my answers.		
Year 5	I can convert between different units of measure. I can accurately measure lines to the nearest mm. I can compare different units of measurements, including imperial and metric units. I can calculate the perimeter of rectangular shapes. I can calculate and compare the area of rectangles. I can estimate the area of irregular shapes. I can use cm² and m² when recording the area of shapes. I can estimate volume and capacity. I can use all four operations to solve problems involving measure. I can use all four operations to solve problems involving scaling. I can use decimal notation when solving problems involving measures.		I can solve problems that involve converting between units of time (e.g. days and weeks).

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Geometry and Statistics   Name

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	Shape including angles	Position, direction and movement	Statistics
Year 6	I can draw 2D shapes using given dimensions and angles. I can describe and build 3D shapes using nets. I can compare and classify geometric shapes using their properties and sizes. I can calculate missing angles on a straight line or when they are opposite each other. I can find missing angles in triangles, quadrilaterals and regular polygons. I can name parts of a circle (including the radius, diameter and circumference). I know that the diameter is twice the radius.	I can reflect shapes in horizontal and vertical axes. I can draw and translate simple shapes using co-ordinates. I can use co-ordinates in all four quadrants to describe the position of shapes.	
Year 5	I can identify 3D shapes from 2D representations. I can identify regular and irregular polygons. I can use □ to represent right angles. I can find missing lengths and angles of rectangles. I know that angles are measured in degrees and use ° when recording angles. I can estimate angles. I can compare acute, obtuse and reflex angles. I can draw angles. I can measure angles using a protractor. I can use number facts about angles to deduce the size of missing angles.	I know that there are 360° in a whole turn. I can recognise angles on a straight line total 180°. I know that a 3/4 turn is 270°. I can use \\ to represent parallel lines. I can use diagonal, horizontal and vertical to describe lines. I can reflect shapes in lines parallel to the axes. I can translate shapes on a grid. I can use positional vocabulary to describe positions on a grid.	I can use information in a line graph to solve problems. I can read timetables. I can complete, read and interpret information in tables.