	1	2	3	4	5	6	7	8	9	10	11	12
Autumn	**Place Value** • read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit • count forwards or backwards in steps of powers of 10 for any given number up to 1000 000 • round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 • solve number problems and practical problems that involve all of the above • read Roman numerals to 1000 (M) and recognise years written in Roman numerals			**Addition and Subtraction** • add and subtract numbers mentally with increasingly large numbers • add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) • use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy • solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why • use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scalings, (measurement)		**Multiplication and Division A** • multiply and divide numbers mentally drawing upon known facts • multiply and divide whole numbers by 10, 100 and 1000 • multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers • divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context • identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers • recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) • solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign • solve problems involving multiplication and division where larger numbers are used by decomposing them into their factors • solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. • know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers • establish whether a number up to 100 is prime and recall prime numbers up to 19 • use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scalings, (measurement)		**Fractions A** • Compare and order fractions whose denominators are all multiples of the same number • recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$] • identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths • read and write decimal numbers as fractions [for example, $0.71=\frac{71}{100}$] • add and subtract fractions with the same denominator and denominators that are multiples of the same number" • multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams • solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates, (multiplication and division).		
		Baseline Assessment			Place Value Assessment			**Addition and Subtraction Assessment**		Multiplication and Division A Assessment		**Autumn term progress checks** **Paper 1 – Arithmetic** **Paper 2 - Reasoning**

Maths Long Term Plan and Assessment Schedule

Year 5 – 24/25

	1	2	3	4	5	6	7	8	9	10	11	12
Spring	**Multiplication and Division B** • multiply and divide numbers mentally drawing upon known facts • multiply and divide whole numbers by 10, 100 and 1000 • multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers • divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context • identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers • recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) • solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign • solve problems involving multiplication and division where larger numbers are used by decomposing them into their factors • solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. • know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers • establish whether a number up to 100 is prime and recall prime numbers up to 19 • use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling, (measurement)			**Fractions B** • Compare and order fractions whose denominators are all multiples of the same number • recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$] • identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths • read and write decimal numbers as fractions [for example, $0.71=\frac{71}{100}$] • add and subtract fractions with the same denominator and denominators that are multiples of the same number" • multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams • solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates, (multiplication and division).		**Decimals and Percentages** • read, write, order and compare numbers with up to three decimal places • recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents • round decimals with two decimal places to the nearest whole number and to one decimal place • solve problems involving number up to three decimal places • multiply and divide whole numbers and those involving decimals by 10, 100 and 1000, (multiplication and division). • use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling, (measurement) • recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal • 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 of a multiple of 10 or 25			**Area and Perimeter** • measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres • calculate and compare the area of squares and rectangles, including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes		**Statistics** • solve comparison, sum and difference problems using information presented in a line graph • complete, read and interpret information in tables, including timetables	
	Fractions A Assessment				Multiplication and Division B Assessment		Fractions B Assessment		**Decimals and percentages Assessment**		Area and Perimeter Assessment	Spring term progress checks Paper 1 – Arithmetic Paper 2 - Reasoning

	1	2	3	4	5	6	7	8	9	10	11	12
Summer	**Shape** • know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles • draw given angles, and measure them in degrees (°) • identify: angles at a point and one whole turn (total 360°); angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°); other multiples of 90° • • identify 3-D shapes, including cubes and other cuboids, from 2-D representations • use the properties of rectangles to deduce related facts and find missing lengths and angles • distinguish between regular and irregular polygons based on reasoning about equal sides and angles			**Position and Direction** • 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		**Decimals** • read, write, order and compare numbers with up to three decimal places • recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents • round decimals with two decimal places to the nearest whole number and to one decimal place • solve problems involving number up to three decimal places • multiply and divide whole numbers and those involving decimals by 10, 100 and 1000, (multiplication and division). • use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling, (measurement)			**Negative Numbers** interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero	**Converting units** • convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) • multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 (multiplication and division) • understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints • solve problems involving converting between units of time • use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling's.		**Volume** estimate volume (e.g. using 1 cm^3 blocks to build cubes and cuboids) and capacity (e.g. using water]
	Statistics Assessment			Shape Assessment		Summer term progress checks Paper 1 – Arithmetic Paper 2 - Reasoning	Position and Direction Assessment		Decimal Assessment	Negative numbers assessment	Converting units Assessment	Volume Assessment