Year 4 MATHEMATICS

Aspect	Autumn	Spring	Summer
Number and Place Value	• I count backwards through zero to include negative numbers • I count in multiples of 6, 7, 9, 25 and 1000.	• I read Roman numerals to 100 and understand that over time, the numeral system changes to include the concept of zero and place value. • I find 1000 more or less than a given number.	• I compare and order numbers beyond 1000. • I round any number to the nearest 10, 100 or 1000.
Addition and Subtraction	• I add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction, where appropriate. • I estimate and use inverse operations to check answers to a calculation.		• I solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
Multiplication and Division	• I recall multiplication and division facts for tables up to 12x12. • I recognise and use factor pairs and commutativity in mental calculations. • I multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout.	• I divide 2-digit and 3-digit numbers by a 1-digit number using formal written layout with no remainder. • I use place value, known and derived facts to multiply and divide mentally, including multiplying by 0 and 1; multiplying three numbers together. • I find the effect of multiplying a number with up to 2 decimal places by 10 and 100, identifying	

Year 4 MATHEMATICS

Aspect	Autumn	Spring	Summer
		the value of the digits in the answer as ones, tenths and hundredths.	
Fraction		• I recognise and show, using diagrams, families of common equivalent fractions. • I add and subtract fractions with the same denominator.	• I 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 count up and down in hundredths; recognise that hundredths arise from dividing an object into one 100 equal parts and in dividing numbers or quantities by 100. • I recognise and write decimals equivalents of any number of tenths or hundredths. • I recognise and write decimal equivalents to ¼, ½ and ¾. • I round decimals with one decimal place to the nearest whole number. • I compare numbers with the same number of decimal places up to two decimal places.
Measures	• I read, write and convert time between analogue and digital 12- and 24-hour clocks. • I measure and calculate the perimeter of a rectilinear figure (including squares) in cm and m.	• I find the area of rectilinear shapes by counting squares.	• I convert between different units of measure (e.g. km to m; hr to min).

Year 4 MATHEMATICS

Aspect	Autumn	Spring	Summer
Geometry	• I compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.	• I describe positions on a 2D grid as coordinates in the first quadrant. • I identify lines of symmetry in 2D shapes presented in different orientations. • I complete a simple symmetric figure with respect to a specific line of symmetry.	• I describe positions on a 2D grid as coordinates in the first quadrant. • I describe movements between positions as translations of a given unit to the left/right and up/down. • I plot specified points and draw sides to complete given polygon. • I identify acute and obtuse angles and compare and order angles up to two right angles by size.
Statistics	• I interpret and present discrete and continuous data using appropriate graphical methods, including: bar charts; time graphs.		• I solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

Working at a HIGHER STANDARD (Greater Depth)

YEAR 4 MATHEMATICS

Number and Place Value	4 Operations (+, -, X, ÷)	Fractions	Measures	Geometry	Statistics
• Given a sequence involving positive and negative numbers I can work out the nth number in the sequence.	• I deal very confidently and rapidly with addition and subtraction operations involving up to four digits. • I solve multi-step problems related to on-going learning in science, geography and history.	• I know which fractional value is an odd one out in a given set. • I apply my knowledge of fractions to solve problems involving money, time, weight and length.	• I cope with problems involving time even when working backwards from a given time.	• Given an area, I can draw at least two different rectangles with the given area.	• I collect my own data on a given topic and present information in graphical formats of my choosing.

- I make suggestions about ways to tackle a range of problems making connections to previous work.
- I have developed and applied a systematic approach to my learning, predicting possibilities from results already obtained.
- I show good levels of resilience when encountering a new challenge.
- I present information and results in a clear and organised way (abstract).
- I check answers and ensure solutions make sense in the context of the problem.
- I willingly search for a solution by trying out own ideas and proving justification.
- I spot patterns and form generalisations or rules in words independently.
- I make conjectures that make sense and can explain my reasoning.