Year 4 programme of study   Class: Name:

Number- number and place value Pupils should be taught to:	Fluency		Reasoning and Problem solving		Problem solving at a greater depth	
	Evidence	Hot Task	Evidence	Hot Task	Evidence	Hot Task
Count in multiplies of 6,7,9,25 and 1000						
Find 1,000 more or less than a given number						
Count backwards through 0 to include negative numbers						
Recognise the place value of each digit in a four-digit number (1,000s, 100s 10s and 1s)						
Order and compare numbers beyond 1,000						
Identify, represent and estimate numbers using different representations.						
Round any number to the nearest						
solve number and practical problems that involve all of the above and with increasingly large positive numbers						
read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value						

Addition and subtraction Pupils should be taught to:	Fluency		Reasoning and Problem solving		Problem solving at a greater depth	
	Evidence	Hot Task	Evidence	Hot Task	Evidence	Hot Task
add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate						
estimate and use inverse operations to check answers to a calculation						
solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why						

Multiplication and Division Pupils should be taught to:	Fluency		Reasoning and Problem solving		Problem solving at a greater depth	
	Evidence	Hot Task	Evidence	Hot Task	Evidence	Hot Task
recall multiplication and division facts for multiplication tables up to 12 × 12						
use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers						
recognise and use factor pairs and commutativity in mental calculations						
multiply two-digit and three-digit numbers by a one-digit number using formal written layout						

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

Number – fractions(including decimals) Pupils should be taught to:	Fluency		Reasoning and Problem solving		Problem solving at a greater depth	
	Evidence	Hot Task	Evidence	Hot Task	Evidence	Hot Task
recognise and show, using diagrams, families of common equivalent fractions						
count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10						
solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number						
add and subtract fractions with the same denominator						
recognise and write decimal equivalents of any number of tenths or hundreds						
recognise and write decimal equivalents to ¼, ½, 3/4						
find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths						
round decimals with 1 decimal place to the nearest whole number						
compare numbers with the same number of decimal places up to 2 decimal places						
solve simple measure and money problems involving fractions and decimals to 2 decimal places						

Measures Pupils should be taught to:	Fluency		Reasoning and Problem solving		Problem solving at a greater depth	
	Evidence	Hot Task	Evidence	Hot Task	Evidence	Hot Task
convert between different units of measure [for example, kilometre to metre; hour to minute]						
measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres						
find the area of rectilinear shapes by counting squares						
estimate, compare and calculate different measures, including money in pounds and pence						
read, write and convert time between analogue and digital 12- and 24-hour clocks						
solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days						

Geometry: Properties of shape Pupils should be taught to:	Fluency		Reasoning and Problem solving		Problem solving at a greater depth	
	Evidence	Hot Task	Evidence	Hot Task	Evidence	Hot Task
compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes						
identify acute and obtuse angles and compare and order angles up to 2 right angles by size						
identify lines of symmetry in 2-D shapes presented in different orientations						
complete a simple symmetric figure with respect to a specific line of symmetry						

Geometry: position and direction Pupils should be taught to:	Fluency		Reasoning and Problem solving		Problem solving at a greater depth	
	Evidence	Hot Task	Evidence	Hot Task	Evidence	Hot Task
describe positions on a 2-D grid as coordinates in the first quadrant						
describe movements between positions as translations of a given unit to the left/right and up/down						
plot specified points and draw sides to complete a given polygon						

Statistics Pupils should be taught to:	Fluency		Reasoning and Problem solving		Problem solving at a greater depth	
	Evidence	Hot Task	Evidence	Hot Task	Evidence	Hot Task
interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs						
solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs						