

SPRING TERM MATHEMATICS OVERVIEW – YEAR 4

Daily Mathematics Lesson – 1 hour (one/two lessons each week to be a discrete arithmetic lesson)

1 x 30 minute discrete times tables lesson – Y4 target - 99 challenge (TTRS/use of tackling times table cards for early morning work)

BLOCKS	NATIONAL CURRICULUM OBJECTIVES KEY OBJECTIVES	SMALL STEPS	READY TO PROGRESS CRITERIA	Linked Step	
Multiplication & Division 3 weeks	❖ 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 three numbers ❖ recognise and use factor pairs and commutativity in mental calculations ❖ multiply 2-digit and 3-digit by a 1-digit number using formal written layout ❖ solve problems involving $\times$ and $+$, including using the distributive law to multiply 2-digit numbers by 1-digit, integer scaling problems & harder correspondence problems such as n objects are connected to m objects	• Factor pairs • Use factor pairs • Multiply by 10 • Multiply by 100 • Divide by 10 • Divide by 100 • Related facts – $\times$ and $\div$ • Informal written methods for multiplication • Multiply a 2-digit by a 1-digit number • Multiply a 3-digit by a 1-digit number • Divide a 2-digit by a 1-digit (1) • Divide a 2-digit by a 1-digit (2) • Divide a 3-digit by a 1-digit number • Correspondence problems • Efficient multiplication	4NPV-1 Know that 10 hundreds are equivalent to 1000, and 1,000 is 10 x the size of 100; apply to work out how many 100s there are in other 4-digit multiples of 100 4NF-1 Recall $\times$ and $\div$ facts up to 12×12 and recognise products in multiplication tables as multiples of the corresponding number. 4NF-2 Solve $\div$ problems, with 2-digit dividends and 1-digit divisors, with remainders, interpret appropriately according to the context. 4NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100). 4MD-1 $\times$ and $\div$ whole numbers by 10 & 100, understand as equivalent to making a number 10 or 100 x the size. 4MD-3 Understand and apply the distributive property of multiplication.	• Multiply by 10 • Multiply by 100 • Divide by 10 • Divide by 100 • Factor pairs • Use factor pairs • Related facts – $\times$ and $\div$ • Informal written methods for multiplication • Multiply a 2-digit by a 1-digit • Multiply a 3-digit by a 1-digit • Divide a 2-digit by a 1-digit (1) • Divide a 2-digit by a 1-digit (2) • Divide a 3-digit by a 1-digit	End of block assessment
Length & Perimeter 2 weeks	❖ Convert between different units of measure [for example, kilometre to metre; hour to minute] ❖ estimate, compare and calculate different measures ❖ measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres ❖ find the area of rectilinear shapes by counting squares	• Measure in kilometres and metres • Equivalent lengths (km and m) • Perimeter on a grid • Perimeter of a rectangle • Perimeter of rectilinear shapes • Find missing lengths in rectilinear shapes • Calculate perimeter of rectilinear shapes • Perimeter of regular polygons • Perimeter of polygons	4G-2 Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons.	• Perimeter of regular polygons • Perimeter of polygons	End of block assessment

Fractions 4 weeks	❖ recognise and show, using diagrams, families of common equivalent fractions ❖ add and subtract fractions with the same denominator ❖ 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 ❖ recognise and write decimal equivalents of any number of tenths or hundredths ❖ recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ ❖ round decimals with one decimal place to the nearest whole number ❖ compare numbers with the same number of decimal places up to two decimal places ❖ solve simple measure and money problems involving fractions and decimals to two decimal places	• Understand the whole • Count beyond 1 • Partition a mixed number • Number lines with mixed numbers • Compare and order mixed numbers • Understand improper fractions • Convert mixed numbers to improper fractions • Convert improper fractions to mixed numbers • Equivalent fractions on a number line • Equivalent fraction families • Add two or more fractions • Add fractions and mixed numbers • Subtract two fractions • Subtract from whole amounts • Subtract from mixed numbers	4F-1 Reason about the location of mixed numbers in the linear number system. 4F-2 Convert mixed numbers to improper fractions and vice versa. 4F-3 Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.	• Number lines with mixed numbers • Compare and order mixed numbers • Convert mixed numbers to improper fractions • Convert improper fractions to mixed numbers • Add fractions and mixed numbers • Subtract from whole amounts • Subtract from mixed numbers	End of block assessment
Decimals 3 weeks	❖ count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. ❖ solve simple measure and money problems involving fractions and decimals to two decimal places	• Tenths as fractions • Tenths as decimals • Tenths on a place value chart • Tenths on a number line • Divide a 1-digit number by 10 • Divide a 2-digit number by 10 • Hundredths as fractions • Hundredths as decimals • Hundredths on a place value chart • Divide a 1- or 2-digit number by 100	4NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100).	• Divide a 1- or 2-digit number by 100	End of block assessment