

SPRING TERM MATHEMATICS OVERVIEW – YEAR 6

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

Y6 target - 99 challenge/Platinum

BLOCKS	NATIONAL CURRICULUM OBJECTIVES KEY OBJECTIVES	SMALL STEPS	READY TO PROGRESS CRITERIA	Linked Step	
Ratio 2 weeks	❖ solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts ❖ solve problems involving the calculation/use of percentages for comparison ❖ solve problems involving similar shapes where the scale factor is known or can be found ❖ solve problems involving unequal sharing and grouping using knowledge of fractions and multiples	• Add or multiply? • Use ratio language • Introduction to the ratio symbol • Ratio and fractions • Scale drawing • Use scale factors • Similar shapes • Ratio problems • Proportion problems • Recipes	6AS/MD-1 Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number). 6AS/MD-3 Solve problems involving ratio relationships.	• Add or multiply? • Scale drawing • Use scale factors • Similar shapes • Ratio problems • Proportion problems • Recipes • Scale drawing • Use scale factors • Similar shapes • Ratio problems • Proportion problems • Recipes	End of block assessment
Algebra 2 weeks	❖ use simple formulae ❖ generate and describe linear number sequences ❖ express missing number problems algebraically ❖ find pairs of numbers that satisfy an equation with two unknowns ❖ enumerate possibilities of combinations of two variables	• 1-step function machines • 2-step function machines • Form expressions • Substitution • Formulae • Form equations • Solve 1-step equations • Solve 2-step equations • Find pairs of values • Solve problems with two unknowns	6AS/MD-4 Solve problems with 2 unknowns.	• Find pairs of values • Solve problems with two unknowns	End of block assessment

Decimals 2 weeks	❖ identify the value of each digit in numbers given to three decimal places ❖ associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$] ❖ recall and use equivalences between simple fractions, decimals and percentages, including in different contexts	• Place value within 1 • Place value – integers and decimals • Round decimals • Add and subtract decimals • Multiply by 10, 100 and 1,000 • Divide by 10, 100 and 1,000 • Multiply decimals by integers • Divide decimals by integers • Multiply and divide decimals in context	6NPV-4 Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts.	• Multiply by 10, 100 and 1,000 • Divide by 10, 100 and 1,000	End of block assessment
Fractions, Decimals & percentages 2 weeks	❖ associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$] ❖ recall and use equivalences between simple fractions, decimals and percentages, including in different contexts	• Decimal and fraction equivalents • Fractions as division • Understand percentages • Fractions to percentages • Equivalent fractions, decimals and percentages • Order fractions, decimals and percentages • Percentage of an amount – one step • Percentage of an amount – multi-step • Percentages – missing values			End of block assessment
Area, Perimeter & Volume 2 weeks	❖ recognise that shapes with the same areas can have different perimeters and vice versa ❖ recognise when it is possible to use formulae for area and volume of shapes ❖ calculate the area of parallelograms and triangles ❖ calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units	• Shapes – same area • Area and perimeter • Area of a triangle – counting squares • Area of a right-angled triangle • Area of any triangle • Area of a parallelogram • Volume – counting cubes • Volume of a cuboid	6G-1 Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems.	• Shapes - same area • Area and perimeter • Area of a triangle – counting squares • Area of a right-angled triangle • Area of any triangle • Area of a parallelogram	End of block assessment

Statistics 2 weeks	❖ interpret and construct pie charts and line graphs and use these to solve problems ❖ calculate and interpret the mean as an average	• Line graphs • Dual bar charts • Read and interpret pie charts • Pie charts with percentages • Draw pie charts • The mean			End of block assessment
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