

Medium-term plan: summer term 1st half

Year 6

Sequence and Theme	Weeks	Page	Learning objectives Pupils should be taught to:	Notes/Resources/Teaching Activities
6.11 ADDITIVE REASONING	26–28	Planning Framework p63	<p>Addition, subtraction, multiplication and division</p> <ul style="list-style-type: none"> perform mental calculations, including with mixed operations and large numbers use their knowledge of the order of operations to carry out calculations involving the four operations solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why solve problems involving addition, subtraction, multiplication and division use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy <p>Fractions (including decimal and percentages)</p> <ul style="list-style-type: none"> add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions solve problems which require answers to be rounded to specified degrees of accuracy <p>Algebra</p> <ul style="list-style-type: none"> 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 <p>Measurement</p> <ul style="list-style-type: none"> solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to three decimal places <p>Statistics</p> <ul style="list-style-type: none"> interpret and construct pie charts and line graphs and use these to solve problems calculate and interpret the mean as an average. 	
		Assessment Tasks Years 5 and 6 pp56–57	<p>Success criteria</p> <p>Pupils can solve calculation problems in different contexts, appropriately choosing and using operations, number facts, understanding of place value and mental and written methods. They can explain their decision making and justify their solutions and levels of accuracy.</p>	TASK: Faster, Higher, Stronger USE WITH: Groups of 3
ASSESSMENT TASK 6.11				

Medium-term plan: summer term 1st half (cont.)

Year 6

Sequence and Theme	Weeks	Page	Learning objectives Pupils should be taught to:	Notes/Resources/Teaching Activities
6.12 NUMBER SENSE	29–30	<i>Planning Framework</i> p64	<p>Fractions (including decimals and percentages)</p> <ul style="list-style-type: none"> ● use common factors to simplify fractions; use common multiples to express fractions in the same denomination ● compare and order fractions, including fractions >1 ● 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 ● identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places <p>Algebra</p> <ul style="list-style-type: none"> ● 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 <p>Measurement</p> <ul style="list-style-type: none"> ● solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate ● use, read, write and convert between standard units, converting measurements of length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to three decimal places <p>Statistics</p> <ul style="list-style-type: none"> ● interpret and construct pie charts and line graphs and use these to solve problems. 	
ASSESSMENT TASK 6.12		<i>Assessment Tasks Years 5 and 6</i> pp58–59	<p>Success criteria</p> <p>Pupils can represent and explain the relationship between decimals, fractions and percentages and how decimals and fractions fit into the number system. They use this understanding to solve problems.</p>	TASK: Water Bottles USE WITH: Groups of 3

Medium-term plan: summer term 2nd half

Year 6

Sequence and Theme	Weeks	Page	Learning objectives Pupils should be taught to:	Notes/Resources/Teaching Activities
6.13 MULTIPLICATIVE REASONING	31–33	Planning Framework p65	<p>Addition, subtraction, multiplication and division</p> <ul style="list-style-type: none"> multiply multi-digit numbers up to 4 digits by a two-digit whole number using the efficient written method of long multiplication divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context perform mental calculations, including with mixed operations and large numbers identify common factors, common multiples and prime numbers use their knowledge of the order of operations to carry out calculations involving the four operations solve problems involving addition, subtraction, multiplication and division use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy <p>Fractions (including decimals and percentages)</p> <ul style="list-style-type: none"> multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$] divide proper fractions by whole numbers [for example, $\frac{1}{2} \div 2 = \frac{1}{6}$] multiply one-digit numbers with up to two decimal places by whole numbers use written division methods in cases where the answer has up to two decimal places <p>Ratio and proportion</p> <ul style="list-style-type: none"> solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison solve problems involving the relative sizes of two quantities, where missing values can be found by using multiplication and division facts solve problems involving unequal sharing and grouping using knowledge of fractions and multiples <p>Algebra</p> <ul style="list-style-type: none"> 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 <p>Measurement</p> <ul style="list-style-type: none"> solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate use, read, write and convert between standard units, converting measurements of length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to three decimal places <p>Statistics</p> <ul style="list-style-type: none"> interpret and construct pie charts and line graphs and use these to solve problems calculate and interpret the mean as an average. 	
ASSESSMENT TASK 6.13		Assessment Tasks Years 5 and 6 pp60–61	<p>Success criteria</p> <p>Pupils can solve calculation problems in different contexts, including those involving ratio and proportion, appropriately choosing and using operations, number facts, understanding of place value and mental and written methods. They can explain their decision making and justify their solutions and level of accuracy.</p>	TASK: Wiggo USE WITH: Groups of 3

Medium-term plan: summer term 2nd half (cont.)

Year 6

Sequence and Theme	Weeks	Page	Learning objectives Pupils should be taught to:	Notes/Resources/Teaching Activities
6.14 GEOMETRIC REASONING	34–36	Planning Framework p66	<p>Geometry: properties of shapes</p> <ul style="list-style-type: none"> draw 2-D shapes using given dimensions and angles recognise, describe and build simple 3-D shapes, including making nets compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles <p>Geometry: position, direction, motion</p> <ul style="list-style-type: none"> describe positions on the full coordinate grid (all four quadrants) draw and translate simple shapes on the coordinate plane, and reflect them in the axes <p>Algebra</p> <ul style="list-style-type: none"> use simple formulae express missing number problems algebraically find pairs of numbers that satisfy an equation with two unknowns enumerate possibilities of combinations of two variables <p>Measurement</p> <ul style="list-style-type: none"> recognise that shapes with the same areas can have different perimeters and vice versa calculate the area of parallelograms and triangles recognise when it is necessary to use the formulae for area and volume of shapes calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimeters (cm^3) and cubic metres (m^3) and extending to other units, [for example, mm^3 and km^3] <p>Ratio and proportion</p> <ul style="list-style-type: none"> solve problems involving similar shapes where the scale factor is known or can be found. 	
		Assessment Tasks Years 5 and 6 pp62–63	<p>Success criteria</p> <p>Pupils can use their understanding of properties of shapes, area and volume to solve problems and make generalisations.</p>	
ASSESSMENT TASK 6.14				