Medium-term plan: summer term 1st half — Year 5

Sequence and Theme	Weeks	Page	Learning objectives Pupils should be taught to:	Notes/Resources/Teaching Activities
5.11 **ADDITIVE REASONING**	26–28	*Planning Framework* p51	**Addition and subtraction** ● *add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)* ● *add and subtract numbers mentally with increasingly large numbers* ● *use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy* ● *solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why* **Fractions (including decimals and percentages)** ● *recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number [for example, 2/5 + 4/5 = 6/5 = 1 1/5]* ● add and subtract fractions with the same denominator and denominators that are multiples of the same number ● *solve problems involving number up to three decimal places* **Measurement** ● *use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation including scaling* ● *solve problems involving converting between units of time* **Statistics** ● *solve comparison, sum and difference problems using information presented in a line graph* ● *complete, read and interpret information in tables, including timetables.*	
ASSESSMENT TASK 5.11		*Assessment Tasks Years 5 and 6* pp28–29	**Success criteria** Pupils can solve addition and subtraction problems including with fractions) in different contexts, appropriately choosing and using number facts, understanding of place value and mental and written methods. They can explain their decision making and justify their solutions.	TASK: London Trip USE WITH: Groups of 3

Medium-term plan: summer term 1st half (cont.) Year 5

Sequence and Theme	Weeks	Page	Learning objectives Pupils should be taught to:	Notes/Resources/Teaching Activities
5.12 **NUMBER SENSE**	29–30	*Planning Framework* p51	**Multiplication and division** ● *multiply and divide whole numbers and those involving decimals by 10, 100 and 1000* **Fractions (including decimals and percentages)** ● *compare and order fractions whose denominators are all multiples of the same number* ● *recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$]* ● *read and write decimal numbers as fractions [for example, 0.71 = $\frac{71}{100}$]* ● *recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents* ● *recognise the per cent symbol (%) and understand that per cent relates to "number of parts per hundred", and write percentages as a fraction with denominator 100, and as a decimal.* **Measurement** ● *convert between different units of metric measure [for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre].*	
ASSESSMENT TASK 5.12		*Assessment Tasks Years 5 and 6* pp30–31	**Success criteria** 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.	TASK: Soup Water USE WITH: Groups of 3

Medium-term plan: summer term 2nd half — Year 5

Sequence and Theme	Weeks	Page	Learning objectives Pupils should be taught to:	Notes/Resources/Teaching Activities
5.13 **MULTIPLICATIVE REASONING**	31–33	*Planning Framework* p52	**Multiplication and division** ● *identify multiples and factors, including finding all factor pairs, and common factors of two numbers* ● *know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers* ● *establish whether a number up to 100 is prime and recall prime numbers up to 19* ● *multiply numbers up to 4 digits by a one- or two-digit number using a formal written method including long multiplication for two-digit numbers* ● *multiply and divide numbers mentally drawing upon known facts* ● *divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context* ● *multiply and divide whole numbers and those involving decimals by 10, 100 and 1000* ● *recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})* ● *solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes* ● *solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign* ● *solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.* **Fractions (including decimals and percentages)** ● *identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths* ● *multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams* ● *solve problems which require knowing percentage and decimal equivalents of ½, ¼, ⅕, ⅖, ⅘ and those with a denominator of a multiple of 10 or 25* **Measurement** ● *use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation including scaling* ● *understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints* ● *solve problems involving converting between units of time.*	
ASSESSMENT TASK 5.13		*Assessment Tasks Years 5 and 6* pp32–33	**Success criteria** Pupils can solve problems involving multiplication and division in different contexts, appropriately choosing and using number facts, understanding of place value and mental and written methods. They can explain their decision making and justify their solutions. They can explain and represent the connection between fractions and division.	TASK: Wimbledon Champions USE WITH: Groups of 3

Medium-term plan: summer term 2nd half (cont.) Year 5

Sequence and Theme	Weeks	Page	Learning objectives Pupils should be taught to:	Notes/Resources/Teaching Activities
5.14 **GEOMETRIC REASONING**	34–36	*Planning Framework* p53	**Geometry: properties of shapes** ● *use the properties of rectangles to deduce related facts and find missing lengths and angles* ● *distinguish between regular and irregular polygons based on reasoning about equal sides and angles* **Geometry: position and direction** ● *identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed* **Measurement** ● measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres ● calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes ● estimate volume [for example, using 1 cm^3 blocks to build cuboids (including cubes)] and capacity [for example, using water].	
ASSESSMENT TASK 5.14		*Assessment Tasks Years 5 and 6* pp34–35	**Success criteria** Pupils can explain how to find the perimeter and area of different shapes, using this knowledge and understanding to solve problems.	TASK: Fenced In USE WITH: Groups of 3