

Medium-term plan: autumn term 1st half

Year 5

Sequence and Theme	Weeks	Pages	Learning objectives Pupils should be taught to:	Notes/Resources/Teaching Activities
5.1 NUMBER SENSE	1-3	<i>Planning Framework</i> p44	<p>Number and place value</p> <ul style="list-style-type: none"> ● <u>read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit</u> ● <u>count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000</u> ● <u>round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000</u> ● <u>solve number problems and practical problems that involve all of the above</u> <p>Multiplication and division</p> <ul style="list-style-type: none"> ● <u>multiply and divide whole numbers and those involving decimals by 10, 100 and 1000</u> <p>Fractions (including decimals and percentages)</p> <ul style="list-style-type: none"> ● <u>read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$]</u> ● <u>recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents</u> ● <u>round decimals with two decimal places to the nearest whole number and to one decimal place</u> ● <u>read, write, order and compare numbers with up to three decimal places</u> ● <u>solve problems involving number up to three decimal places</u> <p>Measurement</p> <ul style="list-style-type: none"> ● <u>convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)</u> ● <u>solve problems involving converting between units of time.</u> 	
ASSESSMENT TASK 5.1		<i>Assessment Tasks</i> <i>Years 5 and 6</i> pp8-9	<p>Success criteria</p> <p>Pupils can represent and explain the multiplicative nature of the number system, understanding how to multiply and divide by 10, 100 and 1000. Pupils make appropriate decisions about when to use their understanding of counting, place value and rounding for solving problems including adding and subtracting.</p>	TASK: Javelin Success USE WITH: Groups of 3

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

Year 5

Sequence and Theme	Weeks	Pages	Learning objectives Pupils should be taught to:	Notes/Resources/Teaching Activities
5.2 ADDITIVE REASONING	4-6	<i>Planning Framework</i> p45	<p>Addition and subtraction</p> <ul style="list-style-type: none"> ● <u>add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</u> ● <u>add and subtract numbers mentally with increasingly large numbers</u> ● <u>use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy</u> ● <u>solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</u> <p>Measurement</p> <ul style="list-style-type: none"> ● <u>use all four operations to solve problems involving measure [for example, length, mass, volume, money], using decimal notation including scaling</u> <p>Statistics</p> <ul style="list-style-type: none"> ● <u>solve comparison, sum and difference problems using information presented in a line graph</u> ● <u>complete, read and interpret information in tables including timetables.</u> 	
ASSESSMENT TASK 5.2		<i>Assessment Tasks</i> Years 5 and 6 pp10-11	<p>Success criteria</p> <p>Pupils can solve addition and subtraction problems 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.</p>	TASK: Around The World USE WITH: Groups of 3

Medium-term plan: autumn term 2nd half

Year 5

Sequence and Theme	Weeks	Page	Learning objectives Pupils should be taught to:	Notes/Resources/Teaching Activities
5.3 MULPLICATIVE REASONING	7–9	Planning Framework p46	<p>Multiplication and division</p> <ul style="list-style-type: none"> ● <u>identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers</u> ● <u>multiply numbers up to 4 digits by a one-digit number using a formal written method</u> ● <u>multiply and divide numbers mentally drawing upon known facts</u> ● <u>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</u> ● <u>multiply and divide whole numbers and those involving decimals by 10, 100 and 1000</u> ● <u>solve problems involving multiplication and division including using their knowledge of factors and multiples</u> ● <u>solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</u> <p>Measurement</p> <ul style="list-style-type: none"> ● <u>use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation including scaling.</u> 	
		Assessment Tasks Years 5 and 6 pp12–13	<p>Success criteria</p> <p>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 decisions.</p>	TASK: Multiple Problems USE WITH: Groups of 3
5.4 GEOMETRIC REASONING	10–11	Planning Framework p46	<p>Geometry: properties of shapes</p> <ul style="list-style-type: none"> ● <u>identify 3-D shapes, including cubes and other cuboids, from 2-D representations</u> ● <u>know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</u> ● <u>draw given angles, and measure them in degrees (°)</u> ● <u>identify:</u> <ul style="list-style-type: none"> – <u>angles at a point and one whole turn (total 360°)</u> – <u>angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°)</u> – <u>other multiples of 90°</u> ● <u>use the properties of rectangles to deduce related facts and find missing lengths and angles</u> ● <u>distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</u> 	
		Assessment Tasks Years 5 and 6 pp14–15	<p>Success criteria</p> <p>Pupils can explain angle as a measure of turn, draw and measure angles and use their understanding of angle to describe the properties of different shapes.</p>	TASK: Triangle Trio USE WITH: Groups of 3

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

Year 5

Sequence and Theme	Weeks	Page	Learning objectives Pupils should be taught to:	Notes/Resources/Teaching Activities
5.5 NUMBER SENSE	12–13	<i>Planning Framework</i> p47	<p>Number and place value</p> <ul style="list-style-type: none"> ● read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit ● count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 ● <u>interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero</u> ● round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 ● solve number problems and practical problems that involve all of the above ● <u>read Roman numerals to 1000 (M) and recognise years written in Roman numerals</u> <p>Multiplication and division</p> <ul style="list-style-type: none"> ● multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 <p>Fractions (including decimals and percentages)</p> <ul style="list-style-type: none"> ● 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 ● round decimals with two decimal places to the nearest whole number and to one decimal place ● read, write, order and compare numbers with up to three decimal places ● solve problems involving number up to three decimal places <p>Measurement</p> <ul style="list-style-type: none"> ● convert between different units of measure (e.g. kilometre and metre; metre and centimetre; centimeter and millimetre; kilogram and gram; litre and millilitre) ● solve problems involving converting between units of time. 	
ASSESSMENT TASK 5.5		<i>Assessment Tasks</i> Years 5 and 6 pp16–17	<p>Success criteria</p> <p>Pupils can make appropriate decisions about when to use their understanding of counting (including counting below zero), place value and rounding for solving problems including adding and subtracting. Pupils can explain the representation of three-digit positive numbers as Roman numerals.</p>	TASK: Mercury Rising USE WITH: Groups of 3