





Mathematics Long Term Plan

Ibis 2022-2023

Autumn

	National Curriculum Objectives	Small Steps	
Number: Place Value 4 weeks	 Count in multiples of 6, 7, 9, 25 and 1000. Find 1000 more or less than a given number. Recognise the place value of each digit in a four digit number (thousands, hundreds, tens and ones) Order and compare numbers beyond 1000 Identify, represent and estimate numbers using different representations. Round any number to the nearest 10, 100 or 1000 Solve number and practical problems that involve all of the above and with increasingly large positive numbers. Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and 	 Represent numbers to 1,000 Partition numbers to 1,000 Number line to 1,000 Thousands Represent numbers to 10,000 Partition numbers to 10,000 Flexible partitioning of numbers to 10,000 Find 1, 10, 100, 1,000 more or less Number line to 10,000 Estimate on a number line to 10,000 Compare numbers to 10,000 Order numbers to 10,000 Roman numerals Round to the nearest 10 Round to the nearest 1,000 Round to the nearest 10, 100 or 1,000 	
Number: Addition and Subtraction 3 weeks	 Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. Estimate and use inverse operations to check answers to a calculation. Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why. 	 Add and subtract 1s, 10s, 100s and 1000s Add up to two 4-digit numbers – no exchange Add two 4-digit numbers – one exchange Add two 4-digit numbers – more than one exchange Subtract two 4-digit numbers – no exchange Subtract two 4-digit numbers – one exchange Subtract two 4-digit numbers – one exchange Subtract two 4-digit numbers – more than one exchange Estimate answers 	

		 Checking strategies
Measurement: Area	• Find the area of rectilinear	What is area?
	shapes by counting squares.	Count squares
1 week		Make shapes
		Compare areas
Number: Multiplication and	 Recall and use multiplication 	Multiples of 3
Division A	and division facts for	 Multiply and divide by 6
	multiplication tables up to 12 ×	• 6 times-table and division facts
3 weeks	12.	 Multiply and divide by 9
	• Count in multiples of 6, 7, 9, 25	9 times-table and division facts
	and 1000	• The 3, 6 and 9 times-tables
	Use place value, known and	 Multiply and divide by 7
	derived facts to multiply and	 7 times-table and division facts
	divide mentally, including:	 11 times-table and division facts
	multiplying by 0 and 1; dividing	 12 times-table and division facts
	by 1; multiplying together three	 Multiply by 1 and 0
	numbers.	• Divide a number by 1 and itself
	 Solve problems involving multiplying and adding 	 Multiply three numbers
	including using the distributive	
	law to multiply two digit	
	numbers by one digit integer	
	scaling problems and harder	
	correspondence problems such	
	as n objects are connected to m	
	objects.	
Consolidation		
1 week		

Spring

	National Curriculum Objectives	Small Steps
Number: Multiplication and Division B 3 weeks	 Recall and use multiplication and division facts for multiplication tables up to 12 × 12. Count in multiples of 6, 7, 9, 25 and 1000 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. Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects. 	 Multiply by 10 Multiply by 100 Divide by 10 Divide by 100 Factor pairs Efficient multiplication Written methods Multiply 2-digits by 1-digit (1) Multiply 2-digits by 1-digit (2) Multiply 3-digits by 1-digit (1) Divide 2-digits by 1-digit (1) Divide 2-digits by 1-digit (2) Divide 3-digits by 1-digit Correspondence problems
Measurement: Length and Perimeter 2 weeks	 Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres Convert between different units of measure [for example, kilometre to metre] 	 Equivalent lengths – m and cm Equivalent lengths – mm and cm Kilometres Add lengths Subtract lengths Measure perimeter Perimeter on a grid Perimeter of a rectangle Perimeter of rectilinear shapes
Number: Fractions 4 weeks	 Recognise and show, using diagrams, families of common equivalent fractions. Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. 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. Add and subtract fractions with the same denominator. 	 Unit and non-unit fractions What is a fraction? Tenths Count in tenths Equivalent fractions (1) Equivalent fractions (2) Fractions greater than 1 Count in fractions Add fractions Add 2 or more fractions Subtract fractions Subtract 2 fractions Subtract from whole amounts Fractions of a set of objects (1) Fractions of a set of objects (2) Calculate fractions of a quantity Problem solving – calculate quantities

Number: Decimals A 3 weeks	 Recognise and write decimal equivalents of any number of tenths or hundredths. Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths Solve simple measure and money problems involving fractions and decimals to two decimal places. Convert between different units of measure [for example, kilometre to metre] 	 Recognise tenths and hundredths Tenths as decimals Tenths on a place value grid Tenths on a number line Divide 1 digit by 10 Divide 2 digits by 10 Hundredths Hundredths as decimals Hundredths on a place value grid Divide 1 or 2 digits by 100
-------------------------------	---	--

Summer

	National Curriculum Objectives	Small Steps
Number: Decimals B 2 weeks	 Compare numbers with the same number of decimal places up to two decimal places. Round decimals with one decimal place to the nearest whole number. Recognise and write decimal equivalents to ¼, ½ and ¾. Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths 	 Bonds to 10 and 100 Make a whole Write decimals Compare decimals Order decimals Round decimals Halves and quarters
Measurement: Money 2 weeks	 Estimate, compare and calculate different measures, including money in pounds and pence. Solve simple measure and money problems involving fractions and decimals to two decimal places. 	 Pounds and pence Ordering money Estimating money Convert pounds and pence Add money Subtract money Find change Four operations
Measurement: Time 2 weeks	 Convert between different units of measure [for example, kilometre to metre; hour to minute] Read, write and convert time between analogue and digital 12- and 24-hour clocks. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. 	 Telling the time to 5 minutes Telling the time to the minute Using a.m. and p.m. 24-hour clock Hours, minutes and seconds Years, months, weeks and days Analogue to digital – 12 hour Analogue to digital – 24 hour
Consolidation 1 week		
Geometry: Shape 2 weeks	 Identify acute and obtuse angles and compare and order angles up to two right angles by size. Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. Identify lines of symmetry in 2-D shapes presented in different orientations. Complete a simple symmetric figure with respect to a specific line of symmetry. 	 Turns and angles Right angles in shapes Compare angles Identify angles Compare and order angles Recognise and describe 2-D shapes Triangles Quadrilaterals Horizontal and vertical Lines of symmetry Complete a symmetric figure
Statistics 1 week	 Interpret and present discrete and continuous data using appropriate graphical methods, 	 Interpret charts Comparison, sum and difference Introducing line graphs Line graphs

	•	including bar charts and time graphs. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.		
Geometry: Position and Direction 2 week	•	Describe positions on a 2-D grid as coordinates in the first quadrant. Plot specified points and draw sides to complete a given polygon. Describe movements between positions as translations of a given unit to the left/ right and up/ down.	• • •	Describe position Draw on a grid Move on a grid Describe a movement on a grid