


Unit 	Lesson name	Step No.	Learning objective	Expected Standard (EXS)	Greater Depth Standard (GDS)
<b>Place Value - Block 1</b>	<a href="#">Roman Numerals to 1000</a>	1	To read and write Roman numerals up to 1000 and understand their historical context.	Pupils read Roman numerals to 1000 and understand the use of zero.	Pupils explain patterns and rules within Roman numerals and convert between systems.
	<a href="#">Numbers to 10000</a>	2	To read, write, and understand numbers up to 10,000.	Pupils read, write and understand numbers to 10,000.	Pupils represent and compare numbers flexibly using different forms.
	<a href="#">Numbers to 100000</a>	3	To read, write, and understand numbers up to 100,000.	Pupils read, write and understand numbers to 100,000.	Pupils explain digit value in numbers up to 100,000 and use this to solve problems.
	<a href="#">Numbers to 1000000</a>	4	To read, write, and understand numbers up to 1,000,000.	Pupils read, write, and understand numbers up to 1,000,000.	Pupils reason about large numbers, comparing and applying place value knowledge.
	<a href="#">Read And Write Numbers to 1000000</a>	5	To read and write numbers up to 1,000,000 in numerals and words.	Pupils read and write numbers in numerals and words up to 1,000,000.	Pupils convert between forms fluently and use this knowledge in reasoning.
	<a href="#">Powers of 10</a>	6	To understand and use powers of 10 to describe place value.	Pupils recognise and use powers of 10 to understand place value.	Pupils identify patterns in scaling by 10, 100, and 1000 and explain using mathematical vocabulary.
	<a href="#">10,100,1000,10000, 100000 More or Less</a>	7	To find 10, 100, 1,000, 10,000 and 100,000 more or less than a given number.	Pupils find multiples of 10, 100, 1000, 10,000 and 100,000 more or less than a number.	Pupils explain the effect of each increase/decrease and apply it in context.
	<a href="#">Partition Numbers to 1000000</a>	8	To partition numbers up to 1,000,000 in different ways using place value.	Pupils partition numbers to 1,000,000 using standard and flexible methods.	Pupils explain different ways of partitioning and apply them to calculations.
	<a href="#">Number Line to 1000000</a>	9	To place and estimate numbers on a number line up to 1,000,000.	Pupils place and estimate numbers up to 1,000,000 on a number line.	Pupils justify placements and estimate intervals between large numbers.
	<a href="#">Compare And Order Numbers to 100000</a>	10	To compare and order numbers up to 100,000 using place value knowledge.	Pupils compare and order numbers up to 100,000 using place value knowledge.	Pupils justify order using precise mathematical vocabulary and representations.
	<a href="#">Compare And Order Numbers to 1000000</a>	11	To compare and order numbers up to 1,000,000 using place value.	Pupils compare and order numbers up to 1,000,000.	Pupils evaluate and explain relationships between numbers in different forms.
	<a href="#">Round To The Nearest 10, 100 or 1000</a>	12	To round numbers to the nearest 10, 100 and 1,000.	Pupils round numbers to the nearest 10, 100 and 1000.	Pupils justify rounding decisions and apply them to estimation and problem-solving.
	<a href="#">Round Within 100000</a>	13	To round numbers within 100,000 to the nearest 10, 100, 1,000 or 10,000.	Pupils round numbers within 100,000 to the nearest 10, 100, 1000, or 10,000.	Pupils solve contextual problems using rounding and evaluate the accuracy of estimates.
	<a href="#">Round Within 1000000</a>	14	To round numbers within 1,000,000 to a required degree of accuracy.	Pupils round numbers within 1,000,000 to a given degree of accuracy.	Pupils explain and apply rounding flexibly to different scales and real-life contexts.
<b>Addition And Subtraction - Block 2</b>	<a href="#">Mental Strategies</a>	1	To use a range of efficient mental strategies for addition, subtraction, multiplication and division.	Pupils use efficient mental strategies to add and subtract larger numbers.	Pupils select and explain strategies based on number properties and context.
	<a href="#">Add Whole Numbers With More Than 4 Digits</a>	2	To add whole numbers with more than 4 digits using formal written methods.	Pupils add numbers with more than 4 digits using formal written methods.	Pupils explain and justify their method choices in a range of real-life contexts.
	<a href="#">Subtract Whole Numbers With More Than 4 Digits</a>	3	To subtract whole numbers with more than 4 digits using formal written methods.	Pupils subtract numbers with more than 4 digits using formal written methods.	Pupils use reasoning to select efficient methods and check for accuracy.
	<a href="#">Round To Check Answers</a>	4	To round numbers to estimate and check the accuracy of calculations.	Pupils round numbers to estimate and check answers to calculations.	Pupils evaluate the reasonableness of answers using rounding and inverse operations.
	<a href="#">Inverse Operations (Add and Subtract)</a>	5	To use inverse operations to check answers and solve missing number problems.	Pupils use inverse operations to check and solve calculations.	Pupils apply inverse operations to correct errors and solve multi-step problems.
	<a href="#">Multi-Step Addition And Subtraction</a>	6	To solve multi-step problems using addition and subtraction in context.	Pupils solve addition and subtraction problems involving more than one step.	Pupils break down problems, justify the steps used, and evaluate different solution paths.
	<a href="#">Compare Calculations</a>	7	To compare the efficiency and results of different calculation strategies.	Pupils compare calculations using $>$ , $<$ and $=$ , and reasoning.	Pupils explain comparisons with mathematical language and justify choices.

Multiplication And Division A - Block 3	Find Missing Numbers	8	To find missing numbers in equations using knowledge of inverse operations and number relationships.	Pupils use known facts and inverse operations to find missing values in calculations.	Pupils construct their own missing number problems and explain their reasoning.	
	Multiples	1	To identify and list multiples of numbers and use them in problem-solving.	Pupils identify and list multiples of a number.	Pupils reason about multiples and use them to solve pattern and scaling problems.	
	Common Multiples	2	To find and use common multiples of two or more numbers.	Pupils find common multiples of two or more numbers.	Pupils explain how common multiples help solve problems such as finding the lowest common multiple.	
	Factors	3	To identify all factors of a number and use factor pairs in reasoning.	Pupils identify factors of a given number.	Pupils explore factor pairs and use this knowledge to solve reasoning problems.	
	Common Factors	4	To find common factors of two or more numbers.	Pupils find common factors of two numbers.	Pupils explain how common factors are used in simplification and apply them in contexts.	
	Prime Numbers	5	To identify prime numbers and recall all prime numbers up to 100.	Pupils identify prime numbers up to 100 and understand what makes a number prime.	Pupils investigate and explain prime patterns and test numbers for primality.	
	Square Numbers	6	To recognise and use square numbers and understand their notation.	Pupils recognise and recall square numbers and their roots.	Pupils explore properties of square numbers and explain relationships within number patterns.	
	Cube Numbers	7	To recognise and use cube numbers and understand their notation.	Pupils recognise and use cube numbers and their notation.	Pupils solve complex problems involving cube numbers and powers.	
	Multiply by 10, 100 and 1000	8	To multiply whole numbers and decimals by 10, 100 and 1,000 using place value understanding.	Pupils multiply whole numbers and decimals by 10, 100, and 1000.	Pupils explain digit shifts using place value understanding and apply it in context.	
	Divide by 10, 100 and 1000	9	To divide whole numbers and decimals by 10, 100 and 1,000 using place value understanding.	Pupils divide whole numbers and decimals by 10, 100, and 1000.	Pupils explain place value shifts and solve related reasoning and problem-solving tasks.	
	Multiples of 10, 100 and 1000	10	To identify and use multiples of 10, 100 and 1,000 in calculations.	Pupils identify and use multiples of 10, 100, and 1000 in calculations.	Pupils apply knowledge of multiples to real-world contexts and scaling problems.	
	Decimals and Percentages - Block 4	Decimals Up to 2 Decimal Places	1	To read, write, and compare numbers with up to 2 decimal places.	Pupils read, write, and compare numbers with up to 2 decimal places.	Pupils explain the value of each digit in a decimal and use reasoning to solve contextual problems.
		Equivalent Fractions and Decimals Tenths	2	To recognise and write equivalent fractions and decimals involving tenths.	Pupils identify and match tenths as fractions and decimals.	Pupils convert between forms and explain the equivalence using visual and numerical representations.
Equivalent Fractions and Decimals Hundredths		3	To recognise and write equivalent fractions and decimals involving hundredths.	Pupils identify and match hundredths as fractions and decimals.	Pupils explain the relationship between tenths and hundredths and apply this to solve problems.	
Equivalent Fractions and Decimals		4	To convert between common fractions and their decimal equivalents.	Pupils convert between common fractions and their decimal equivalents.	Pupils explain patterns and derive decimal equivalents for less common fractions (e.g. 3/8).	
Thousandths as Fractions		5	To recognise thousandths and write them as fractions.	Pupils represent and understand thousandths in fractional form (e.g. 27/1000).	Pupils compare and reason about values involving thousandths, linking to place value.	
Thousandths as Decimals		6	To write and interpret thousandths as decimals.	Pupils write thousandths as decimals (e.g. 0.027).	Pupils fluently convert between thousandths in fraction and decimal form and use them in context.	
Thousandths on Place Value Chart		7	To identify and represent thousandths on a place value chart.	Pupils identify and represent thousandths on a place value chart.	Pupils explain how decimal digits relate to place value and use this to compare and order numbers.	
Order and Compare Decimals – Same Number of Decimal Places		8	To compare and order decimals with the same number of decimal places.	Pupils compare and order decimals with the same number of decimal places.	Pupils reason about size and explain comparisons using place value knowledge.	
Order and Compare Any Decimal – Up to Three Decimal Places		9	To order and compare decimals with up to three decimal places.	Pupils order and compare decimals with up to three decimal places.	Pupils explain strategies for comparing decimals with different decimal lengths, justifying decisions.	
Round to the Nearest Whole Number		10	To round decimals to the nearest whole number.	Pupils round decimals to the nearest whole number.	Pupils explain and apply rounding in a range of real-life problems and estimate solutions.	
Round to 1 Decimal Place		11	To round numbers with decimals to one decimal place.	Pupils round numbers to 1 decimal place.	Pupils compare rounding strategies and apply them to contexts such as money, measures and estimation.	
Understand Percentages		12	To understand that percentages are parts of 100 and relate them to fractions and decimals.	Pupils recognise percentages as parts of 100 and relate them to fractions and decimals.	Pupils explain percentages using diagrams and apply them in problem solving.	



[Multiplication And Division A - Block 3](#)

Percentages as Fractions	13	To convert percentages to fractions and simplify where possible.	Pupils convert simple percentages to fractions (e.g. $25\% = 1/4$ ).	Pupils simplify and convert percentages to equivalent fractions using factor knowledge.
Percentages as Decimals	14	To convert between percentages and decimals.	Pupils convert percentages to decimals and vice versa.	Pupils explain and justify their conversions in both directions and apply to multi-step problems.
Equivalent Fractions, Decimal and Percen	15	To identify and represent equivalents between fractions, decimals and percentages.	Pupils identify equivalent values across fractions, decimals, and percentages.	Pupils explore and create their own sets of equivalent values and explain their relationships.
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Understand Negative Numbers	1	To understand that negative numbers represent values less than zero and appear in real-life contexts.	Pupils understand that negative numbers are values less than zero and can appear in contexts such as temperature.	Pupils explain real-world examples of negative numbers and represent them on number lines or scales.
Count Through Zero in 1s	2	To count forwards and backwards through zero in steps of 1.	Pupils count forwards and backwards through zero using steps of 1.	Pupils confidently identify patterns and explain position and value of numbers across zero.
Count Through Zero in Multiples	3	To count through zero in multiples such as 2s, 5s or 10s.	Pupils count in multiples (e.g. 2s, 5s, 10s) through zero.	Pupils identify and explain patterns when counting through zero in multiples and apply this to problems.
Compare and Order Negative Numbers	4	To compare and order negative and positive numbers using number lines and inequality symbols.	Pupils compare and order negative and positive numbers using number lines and inequality symbols.	Pupils explain comparisons using mathematical language and justify order in real-world contexts.
Find the Difference	5	To find the difference between two numbers, including those that cross zero.	Pupils find the difference between two numbers including crossing zero.	Pupils choose appropriate strategies (e.g. number lines, mental calculation) and explain their reasoning when calculating across zero.
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