

Y7 Place Value

Place Value			
Expected Outcomes - Learners will understand and use place value in whole numbers and decimals. - Learners will read, write, compare, and order numbers up to 1,000,000 and decimals to 2 decimal places. - Learners will develop confidence in using number lines and rounding.			
Developmental Focus Opportunities - Building number confidence and reducing maths anxiety. - Developing working memory through repetition and retrieval. - Encouraging verbal reasoning and structured thinking. - Supporting emotional regulation through predictable routines.			
Key Learning Points		Powerful Knowledge	
- Place value in large numbers and decimals. - Reading and writing numbers in digits and words. - Comparing and ordering integers and decimals. - Rounding to the nearest 10, 100, 1000 and decimal place. - Using number lines for representation.		- Understanding the base-10 number system. - Recognising the importance of place value in all number operations. - Applying place value knowledge to real-life contexts (e.g. money, measurement). - Laying the foundation for arithmetic, algebra, and data handling.	
Subject-Specific Vocabulary		Reading Opportunities	
- Place value - Digit - Integer - Decimal - Fractional representation - Compare - Order - Rounding - Estimate		Reading in mathematics is far more integral than it might first appear—it's not just about decoding word problems. It's about navigating a unique linguistic landscape that blends technical vocabulary, symbolic representations, and logical reasoning. Why Reading Matters in Maths Mathematics has its own language: Terms like “difference,” “volume,” or “factor” have specific meanings in maths that differ from everyday usage. Word problems require comprehension: Pupils often perform 10–30% worse on word problems compared to numeric ones, highlighting the need for strong reading strategies. Multi-modal representation: Maths texts often combine symbols, diagrams, and written explanations, requiring students to interpret across formats.	
Possible Misconceptions		Cross-Curricular Links	
- Confusing place value with digit value (e.g. thinking the 2 in 204 is “2” not “200”). - Misunderstanding rounding rules (e.g. rounding 3.45 to 3.5 instead of 3.4). - Believing that more digits always means a larger number. - Thinking decimals are whole numbers with “dots”.		- Geography: Population sizes, distances, coordinates. - Science: Measurement, temperature, data logging. - PSHE: Budgeting and money management.	