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Curriculum Planning Template

Subject: Maths Year 7 Ability Mixed

Half Term 1 / weeks	**Half-term 1 (1 week)**	**Half-term 1 (2 weeks)**	**Half-term 1 (1 weeks)**	**Half-term 1 (2 weeks)**
Topic	Introduction lessons: History maths	Unit 1: Place value and base ten	Unit 2: Addition and subtraction	Unit 3: Arithmetic with decimals
Topic overview **Pupils will learn…**	To adapt knowledge of the place value number system and link to number systems in other cultures	To understand the value of numbers and apply this to skills such as rounding	To use different strategies to add and subtract integers linking to work with 2D shapes	To perform basic arithmetic with calculations that include decimals
Components	• To complete baseline assessments in number and reasoning • To be able to determine position of a digit within a number • To be able to identify numbers in different cultures, such as Roman and Egyptians	• To read and write whole numbers in figures and words. • To be able to state the value of a digit within a number. • To be able to mark the position of a number on a number line. • To be able to order numbers in ascending and descending order • To be able to multiply and divide a number by 10, 100 and 1000 • To be able to round a number to the nearest 10, 100 and 1000 • To use rounding to estimate calculations • To be able to state the minimum and maximum value for basic rounding • To be able to write a number in standard form	• To be able to use different methods to add and subtract integers • To add and subtract where calculations include negative numbers • To be able to work out the perimeter of a 2D shape with integer dimensions • To be able to work out the perimeter of a 2D compound shape • To write expressions for perimeters of compound shapes that include algebraic lengths	• To be able to identify the value of digits in decimals. • To be able to increase decrease the decimals in place value position • To be able to write decimals in ascending and descending order • To be able to calculate the perimeter of a shape where lengths include decimals • To be able to round to a given number of decimal places • To be able to estimate a calculation by rounding decimals • To be able to covert a fraction to a decimal or percentage when the denominator of the fraction is a multiple of 10 • To be able to use minimum and maximum values to calculate the lowest and highest perimeters • To be able to add and subtract numbers given in standard form
What pupils should already know (prior learning components)	Place value number system	Place value number system Rounding a number to the nearest 10, 100, 1000 from KS2	Place value number system Base ten number system Negative numbers 2D shapes Perimeter of a 2D shape	Place value number system Perimeter of 2D shapes Fraction notation Standard form notation (covered in unit 1)
Transferrable knowledge (skills)	The induction sessions will build students' confidence in the working and extend their understanding through different numbers systems. Elements of this unit will be built on using place value further to rounding and estimate calculations.	This unit extends students knowledge of the place value system to begin rounding values to the nearest 10, 100 and 1000. Students will then use their rounding to estimate values to calculations. This skill is at the forefront of mathematical reasoning and students being able to self-check to determine whether an answer is reasonable.	This unit begins with exploring the different strategies we can use when performing addition and subtraction calculations. This will develop to working with negative numbers, and linking this to calculations into algebraic expressions to plot functions.	This unit explores calculations with decimals and builds students confidence in working with calculations that include decimals. Links to decimals, fractions and percentage equivalence will be introduced to develop pupils' fluency with converting between the different forms a value can take. This versality will be a thread developed throughout the maths learning journey as pupils will

				need to be able to express surds, indices and FDP in other formats understanding equivalence throughout.
Key vocabulary pupil will know and learn	Place value, hundreds, tens, ones, tenths, hundredths	Ascending, descending, minimum, maximum, standard form	Addition, subtraction, perimeter, compound, expression, term, exchange, regroup, irregular, regular	Ascending, descending, fraction, decimal, percentage, standard index form
Assessment activities	Baseline assessment Paper 1: Number Baseline assessment Paper 2: Reasoning	Homework 1 on place value and rounding Year 7 Half term Test 1	Homework 2 on rounding and estimation Year 7 Half term Test 1	Homework 3 on working with decimals Year 7 Half term Test 1
Resources available	Maths watch clips:	Maths watch clips: 1, 2, 4, 30, 31, 32, 90, 91	Maths watch clips: 17,18, 22a, 33, 52, 91, N19a, N19b	Maths watch clips: 17,18, 22a, 30, 32, 33, 52, 83, 91,
Notes	The entry to this unit assesses students prior learning from KS2 to identify students starting points on their journey at TCA. The unit extends to explore numbers systems used in various cultures and how they differ, or are the same, as the systems we use today.	The entry to this unit develops skills within place value to be able to give the value of any number within a decimal. This then moves multiplying and dividing by powers of 10, with links into standard form for higher attaining students. The unit finishes with student to be able to use their skills to answer a range of rounding problems in contexts with other areas of maths, including perimeters.	This unit begins with exploring the different strategies we can use when performing addition and subtraction calculations. This will develop to working with negative numbers, with links to perimeter work to embed addition and subtraction within a content.	The entry to this unit develops students recall of place value and decimals. This then develops into ordering decimals in ascending and descending order. This then moves to linking decimals in other contexts, such as perimeters to continue to develop decimal work. The unit finishes with rounding decimals in a variety of context to estimate different calculations.