Share Multi Academy Trust

Curriculum Planning Template

Subject: Maths Year 7 Ability Mixed

Half Term 1 / weeks	**Half-term 1 (Week 1-2)**	**Half-term 1 (Weeks 4-6)**	**Half-term 1 (Week 7)**	**Half-term 1 (Week 8)**
Topic	Place value	Number properties and the order of operations	Retention and Re-teach	Understanding decimals
Topic overview **Pupils will learn…**	To understand the value of numbers and know formal written methods for multiplication and division of integers	To recall the different types of number and can find factors and multiples. Students know, and can use, the order of operations.	Focus on the process of reteach and retention, knitting together the learning in reaction to the assessments completed	To perform basic arithmetic with calculations that include decimals
Components	a) Students be able to read and write numbers in words and state the value of a digit. Students be able to understand number lines and place a number on a number line. b) Students to be able to confidently multiply and divide by powers of 10. c) Students be able to write numbers in standard form and as ordinary numbers. d) Students be able to put numbers in order including negatives. Using inequalities to show which number is larger or smaller than the other. e) Students be able to use formal methods of addition and subtraction. f) Students to be able to add and subtract negative numbers. g) Students be able to use the GRID method to multiply integers. h) Students to be confident at using bus stop method to divide. i) Students be able to collect like terms together including positives and negatives. Multiplying and dividing terms together.	a) Use this time to cover key definitions and examples of: even, odd, primes, square, cubes, roots, rational and irrational numbers. Include reciprocals b) Students to be able to list out all factors of numbers. Students can determine the highest common factors of 2 or more integers by listing. c) Students to be able to list out multiples of a number. Students can determine the lowest common multiple of 2 or more integers by listing. d) Students to be able to work through problem solving and practice at deciding if LCM or HCF is the method. e) Students to be able to work with order of operations and discussing equal importance: subtraction and addition, multiplication and division f) Order of operations linking back previous golden knowledge of number properties.	Staff complete a program of adaptive reteaching on specific topics based on the individual/class needs within their groups. Regular assessments are used to identify gaps in learning. Any gaps found are then addressed in lessons to help support learning and retention. Clear areas for improvement are monitored by individual staff and at a departmental level.	a) Students to be able to identify the value of digits in decimals and know to state the value as 9 tenths (or 0.9). Students to also be able to increase decrease the decimals in place value position. b) Students to be able use the correct symbols less than or greater than to order decimals. Students to be able use the correct language of what holds the greater value, not which is biggest c) Students to be able to add and subtract decimals by placing in correct place value columns and using column method. d) Students to be able to multiply decimals together. e) Students to be able to divide decimals. Start with a decimal by an integer and then build to decimal by decimal.
What pupils should already know (prior learning components)	Place value number system, including negative numbers. Base ten number system	Pupils base understanding of number work, in particular factors and multiples will be needed for this. Students' ability to perform all basic operations will also be required here	All the half term content will have been covered by this point. Staff will use departmental tracking documents to analyse the gaps in learning from the most recent assessments and all previous assessments.	Place value number system, including negative numbers. Base ten number system

			The ability to structure and breakdown a problem-solving question as exemplified in the TFI questions throughout the course.	
Transferrable knowledge (skills)	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 in the future.	The order of operations take precedent in every maths calculation completed by students. These skills can underpin almost all of subsequent mathematics where calculations including more than one basic operation is present. This will also link into student's fluency with algebra, when students are substituting values into expressions.	This activity should serve to highlight and address areas of weakness in teaching and learning or retention. This early intervention to understand specific key areas for improvement or development. This should help to build confidence and improve students' ability to answer these and directly sequential problems.	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 later 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, negative, grid, bus stop, integer, zero pair, cancel, divide, multiply, column, addition, subtraction, power of 10, standard form.	quote, even, prime, square, cube, root, rational, irrational, reciprocal, common, operations, indices, powers, roots, multiply, divide		Place value, hundreds, tens, ones, tenths, hundredths, decimal, negative, grid, bus stop, integer, zero pair, cancel, divide, multiply, column, addition, subtraction, power of 10
Assessment activities	Weekly Sparx homework linked to the curriculum. End of unit reflection. Summative assessment 1	Weekly Sparx homework linked to the curriculum. End of unit reflection. Summative assessment 1	AFL and adaptive teaching will continue to support staff to assess the address areas.	Weekly Sparx homework linked to the curriculum. End of unit reflection. Summative assessment 2
Resources available	Sparx codes a) M763, M704 b) M113 c) M719 M678 d) M527 M384 e) M928 M347 f) M106 g) M187 h) M354 i) M288	Sparx codes a) M322, M261 b) M823 c) M227 d) M227, M698 e) M521 f) M952	Before any assessments are completed, revision and guidance materials are provided for students to assist in independent study.	Sparx codes a) Q127 b) Q509 c) Q986 d) M803 e) M491
Notes	The end of unit reflection will highlight which skills students are competent with, and which they need further practice on. Student will be directed to the relevant Sparx support and should work on their areas for development independently (alongside the in-class support) before the summative assessment to ensure progress is being made.		This is an important point in the curriculum plan that enables individual teachers to review the gaps in learning for the classes they teach. The half-termly assessments are used to track students' progress and enable teachers to react quickly to any gaps in knowledge and prepare students for the next assessment. The feedback and modelling of the exam answers enables students to pick up exam techniques and the ability to communicate effectively.	