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Curriculum Planning Template

Subject: Maths Year 7 Ability Mixed

Half Term 5 / weeks	**Half-term 5 (2 weeks)**	**Half-term 5 (2 weeks)**	**Half-term 5 (2 weeks)**	**(1 week)**
Topic	Unit 11: Understand and use fraction notation	Unit 12: Calculations with fractions		Reteach and Retention
Topic overview **Pupils will learn…**	An introduction to fraction notation and converting between fractions, decimals and percentages.	To use fraction notation to help calculate quantities of amounts	To understand and use the four operations with fractions	Focus on the process of reteach and retention, knitting together the learning in reaction to the assessments completed
Components	• To be able to represent fractions using area diagrams, bar models and number lines • To be able to recognise and name equivalent fractions • To be able to convert between mixed numbers and improper fractions • To be able to compare and order fractions • To be able to convert fractions and decimals to percentages • To be able to express one quantity as a fraction of another	• To be able to find a fraction of a quantity • To be able to represent one quantity as a fraction of another • To be able to calculate the whole quantity given a fraction of a quantity • To be able to solve worded problems relating to finding one fraction of a quantity given another	• To be able to multiply and divide by unit fractions • To be able to write unit fraction multiplication and division fact families • To understand the inverse calculations of multiplication and division • To understand that multiplying by a fraction is equivalent to dividing by its reciprocal • To be able to use fraction equivalence to simplify fractions before performing calculations • To be able to multiply and divide with integers, fractions and mixed numbers • To be able to order fractions and mixed numbers	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.
What pupils should already know (prior learning components)	Students should be able to give examples of fractions and may be able to recall key terminology (numerator and denominator) Students should be able to recall basic multiplication facts up to 12 x 12	Students should be able to recall the formation of a fraction and understand it is a part of a whole. This transferrable skill from Unit 9 will be developed to calculating fractions of amounts. Students should be able to divide and multiply by an integer	Pupils will need to understand what a fraction is, and can explain the conversions between FDP. Students should be able to simplify fractions, and convert between a mixed number and improper fraction	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. The ability to structure and breakdown a problem-solving question as exemplified in the TFI questions throughout the course.
Transferrable knowledge (skills)	This unit supports students' ability to represent number in a variety of different ways. Students' skills in fraction will be develop further in the learning journey and applied in ratio contexts and well as KS4 when gradients are explored These fraction skills underpin almost all of subsequent mathematics.	This topic supports students' ability to use fraction notation to calculate amounts of larger quantities, including working in reverse to work out the total. This unit will allow students to explore different ways of representing a problem developing our students' ability to interpret fraction questions.	The topic will build students' confidence with basic fraction skills. These skills can underpin almost all of subsequent mathematics where fractions are used as part of a larger question. This is particularly the case with confidence with mixed values which will be used repeatedly in any unit that uses substitution and formulae.	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.

Key vocabulary pupil will know and learn	Fraction, Numerator, denominator, unit, equivalent, express, quantity, multiply, divide	Fraction, Numerator, denominator, unit, equivalent, express, quantity, multiply, divide, whole	Fractions, Compare, Denominator, Simplify, Equivalent fractions, Multiply, Divide, Improper, Mixed number, Decimals, Percentages, Convert	
Assessment activities	Homework 7 Year 7 Half term Test 4	Homework 8 Year 7 Half term Test 4	Homework 9 Year 7 Half term Test 4	AFL and adaptive teaching will continue to support staff to assess the address areas.
Resources available	Maths watch clips: 24, 25, 26, 70, 71, 72, 73, 74, 76, 84, 85, 177	Maths watch clips: 24, 25, 26, 70, 71, 72, 73, 74, 76, 84, 85, 86, 87, 177	Maths watch clips: 24, 25, 26, 70, 71, 72, 73, 74, 76, 84, 85, 86, 87, 88, 89, 177	Before any assessments are completed, revision and guidance materials are provided for students to assist in independent study.
Notes	The start of this unit develops students' ability to represent values as diagrams. This is an important skill for abstract questions in maths where representing a diagram helps develops pupils understanding within a question. Students' are then taught how the same value can look slightly different, i.e. improper fraction and mixed numbers. Students then go onto ordering fractions developing further their understanding of equivalence. This skill will be thread in maths later when students are asked to order fraction, decimals and percentages and higher ability student begin to investigate and order surds	This unit develops understanding from Unit 9 and students further develop their bar modelling skills to calculate fractions of a quantity. Students will then calculate the whole given a fraction of a quantity. This will link further in the learning journey where bar modelling is used to calculate percentage change and work with ratio.	The start of this unit uses 2 of the 4 basic operations which have been covered numerous times in earlier years. Although it is often seen as basic more topics/marks visit the skills of fractions than many other that we teach. An advancement through these skills will lead to increasingly challenging values being used to work with and then into problems that use these skills "in context".	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.