Term 1 Year 9 - Number

Year group 9	Subject: Number		
Prior learning- linked to National curriculum	Students will have already covered in some detail (at KS2 and KS3) how to perform all calculations but will incorporate decimals. Students will be directed towards the importance and relevance towards their GCSE with questions that may appear. Higher ability students will be introduced on Surds expanding on knowledge of squares and roots.		
Rationale	The unit is at the beginning of the year and provides a platform to set students up for the year with a foundation for numeracy skills which will help for all aspects of maths for the year. This unit was previously later in the year but has been moved to ease students back into the academic year.		
Vocabulary:	Keywords Decimals, integers, product, sum, quotient, difference, root, power, surd, factor, multiple, Pythagoras, hypotenuse.		
Cultural Capital:	This section provides an understanding for the most fundamental skills for maths. Basic numeracy skills are required, not only for the majority of the maths curriculum but also for all aspects of life beyond school.		
Key assessments- name the assessments	Mini Assessment for: Calculations with decimals and integers/Factors, primes and multiples Calculations with fractions Roots, squares and Pythagoras In addition for this a Unit wrapper for this Term.		
What do children know/ can do now (EDSM)	Many students will have an understanding of how to perform the 4 basic numeracy functions but the difficulty is increased when using decimals. Students will also spend time, with calculations with fractions and finally explore applying knowledge of squares and roots to Pythagoras' Theorem. For students to have mastered this topic, they will need to be fluent across the three mini assessment topics Any gaps will be addressed as we go on and Further highlighted in the unit wrapper.		
What amendments are you going to make following evaluation of this module?			

TERM 4				
Unit 9 - Using Percentages	Unit 10 - Maths and Money	Unit 11 - Rates		
Use the equivalence of fractions, decimals and percentages (R)	Solve problems with bills and bank statements	Solve speed, distance and time problems without a calculator		
Calculate percentage increase and decrease (R)	Calculate simple interest	Solve speed, distance and time problems with a calculator		
Express a change as a percentage (R)	Calculate compound interest	Use distance-time graphs		
Solve reverse percentage problems	Solve problems with Value Added Tax	Solve problems with density, mass and volume		
Recognise and solve percentage problems (non-calculator)	Calculate wages and taxes	Solve flow problems and their graphs		
Recognise and solve percentage problems (calculator)	Solve problems with exchange rates	Rates of change and their units		
Solve problems with repeated percentage change (H)	Solve unit pricing problems	Convert compound units		