

Number

Grade	I can....
9	Rationalise the denominator of a fraction when the denominator has rational or irrational parts
8	Manipulate surds including multiplying out brackets Rationalise the denominator of a fraction when it is irrational Decide when it is appropriate to use upper and lower bounds
7	Simplify surds and rationalise the denominator in simple cases Leave values in exact terms of Pi Calculate addition and subtraction with standard form Use upper and lower bounds to calculate Simplify algebraic fractions by factorising and cancelling terms Apply the four arithmetic rules to algebraic fractions
6	Calculate multiplication and division with standard form Find the upper and lower bound of a value when rounded Calculate with powers and roots, including fractional and negative powers Simplify simple algebraic fractions
5	Round to 1 significant figure and use this to estimate Convert between decimal numbers and numbers written in standard form Know that measurements given to the nearest whole number could be half a unit bigger or smaller Add, subtract, multiply and divide combinations of fractions, decimals and integers Use simple laws of indices
4	Round to significant figures Understand what happens when you multiply or divide a number between 0 and 1 Estimate square roots Use prime factor decomposition to identify the HCF or LCM Add, subtract, multiply and divide mixed numbers
3	Express one number as a fraction or percentage of another Understand when fractions, decimals and percentages are equal Round to decimal places Calculate squares, cubes and small powers of numbers Calculate square roots and cube roots Write a number as a product of its prime factors Add, subtract, multiply and divide fractions
2	Multiply and divide numbers by 10, 100 and 1000 Add, subtract, multiply and divide numbers up to 2 decimal places Multiply and divide a three digit number by a two digit number without a calculator Estimate answers by rounding to the nearest place value Order, add and subtract negative numbers Identify equivalent fractions and simplify
1	Multiply and divide integers by 10 and 100 Add, subtract, multiply and divide integers Find and use inverse problems to solve Know up to my 12x12 times tables Add and subtract decimal numbers with up to 2 decimal places Identify common factors Identify common multiples
E3	Show understanding of place value by ordering numbers to 1000. Use this to make approximations and multiply and divide by ten Begin to use decimal notation with money and measures. Order decimals with one or two places. Find and recognise factors and multiples of numbers Recognise negative numbers e.g. when reading the temperature Multiply and divide two digit numbers by 2, 3, 4, 5 and 10 Add and subtract two and three digit numbers Know the 2, 3, 4, 5 and 10 times tables
E2	Multiply and divide whole numbers When solving problems recognise what operation to use. Know that multiplication is repeated addition Add and subtract multiples of 10 Solve simple number problems, including those involving money Show understanding of place value by ordering numbers to 100
E1	Add and subtract numbers up to ten Read, write and order numbers up to ten Count up to ten