

| Topic | Knowledge |
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| General Number Sense - Multiplication | I can show multiplication as a diagram |
| | I can multiply 1-digit positive numbers |
| | I can multiply multi-digit positive integers |
| | I can multiply multi-digit positive integers |
| | I can multiply and divide in base 10 |
| | I can divide multi-digit integers |
| | I can use multiplication facts to test for divisibility. |
| | I can add positive and negative mixed number fractions |
| | I can add together like terms |
| | I can calculate the perimeter of 2D shapes |
| | I can list prime numbers and write a number as a product of primes |
| | I can multiply negative integers |
| | I can multiply integers by positive unit fractions |
| | I can multiply integers by positive fractions |
| | I can multiply integers by negative fractions |
| | I can calculate a percentage of an amount |
| | I can multiply an integer by a decimal |
| | I can divide integers by a decimal |
| I can multiply decimals | |
| General Number Sense - Multiplication | I can divide decimals |
| | I can multiply a vector by a scalar |
| | I can multiply algebra |
| | I can divide algebra |
| | I can expand a single bracket by an integer |
| | I can find factors of integers and algebra |
| | I can calculate the HCF |
| | I can calculate the LCM |
| Number Sense Indices | I can calculate the square of any number |
| | I can calculate the square root of any number |
| | I understand the concept rational and irrational numbers |
| | I can identify irrational numbers |
| | I can simplify surds |
| | I understand the hierarchy of operations and can use the concept for any calculation |
| | I can identify and a cube number |
| | I can convert numbers to standard form and vice-versa |
| | I can multiply and divide numbers in standard form |
| | I can add numbers in standard form |
| Into the Unknown | I can substitute values into an expression |
| | I can rearrange a formula |
| | I can solve a linear equation |
| | I can identify quadratic and geometric sequences |
| | I can find terms of a sequence |
| I can generate a sequence from its nth term | |

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| | I can calculate the nth term of a sequence |
| | I can calculate the nth term of a quadratic sequence |
| | I can plot a linear equation |
| | I can calculate the equation of a line |
| Ratio | I can convert fractions to ratios and vice-versa. |
| | I can manipulate and simplify ratios |
| | I can use unitary method |
| | I can find increase and decrease by percentages using a multiplier. |
| | I can convert between metric units using ratio. |
| | I can find best buys |
| | I can use ratios in maps and scales (interpreting scale drawings) |
| | I can solve problems involving ratios, where the difference between the two parts is given |
| | I can convert between different units of area/volume |
| | I can convert between Speed Distance Time |
| | I can convert Force Pressure and Area. |
| Units | I can convert Mass Density and Volume. |
| | I can find lower and upper bound. |
| Congruence & Similarity | I can identify congruence (SSS, SAS, RHS, ASA). |
| | I can label angles and sides in a triangle appropriately and prove congruence. |
| | I can calculate lengths in similar triangles. |
| | I can calculate lengths in similar shapes |
| | I can use scale factors to calculate areas and volumes |
| | I can express scale factors in ratio notation |
| | I can problem solve with similarity and unknowns |