## Holland Park School | Year 7 Maths: Autumn Term



| Overview | Year 7 Autumn Term Topics - 7.01 to 7.09 |  |  |  |  |  |  |  |
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| Assessment | Fortnightly Topic Assessment |  |  |  |  |  |  |  |
| Key words | Multiple Factor Venn diagram common factor (HCF) Divisibility Simplify | Prime number Horizontal | Prime factor Square Algebraic expression | Lowe Term | ommon m Formula | Itiple (LCM) Substitute | Highes Integer | Linear |


| Topics | Key content | Sparx Clips | Knowledge <br> Organiser link |
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| 7.01 Numerical Skills | Understand and use place value for decimals. Calculations with negative <br> numbers. Estimate calculations by rounding. | M763, M704, <br> $\mathrm{M} 522, \mathrm{M} 527$, <br> $\mathrm{M} 135, \mathrm{M} 111$, <br> $\mathrm{M} 431, \mathrm{M} 878$ |  |
| 7.02 Order of Operations |  | Solve calculations requiring understanding of B-I-D-M-AS (know that <br> the inverse of squaring is 'square rooting') | M521 |


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| 7.03 Introduction to Algebra | Introduce the concept of algebra, simplify expressions, manipulate expressions through simple one-step rearranging, substitute positive and negative integers into expressions, solve simple one step equations. Substitute and solve. | M106, M830, M813, M795, M531, M417, M327, M208, M979 |  |
| 7.04 Prime, Factors and Multiples | Use the concepts and vocabulary of prime numbers, factors (or divisors), multiples, common factors, common multiples, highest common factor, lowest common multiple | $\begin{gathered} \text { M227, M823, } \\ \text { M698, M322, } \\ \text { M829 } \end{gathered}$ |  |
| 7.05 Expanding and Factorising | Simplify and manipulate algebraic expressions to maintain equivalence by multiplying a single term over a bracket or by taking out common factors | $\begin{aligned} & \text { M288, M237, } \\ & \text { M792, M100 } \end{aligned}$ |  |
| 7.06 Addition and Subtraction | Use Addition and Subtraction, including formal written methods, applied to integers, decimals | $\begin{gathered} \text { M928, M429, } \\ \text { M347, M152, } \\ \text { M899 } \end{gathered}$ |  |
| 7.07 Perimeter | Calculate and solve problems involving perimeters of rectangles and compound shapes (not circles) | $\begin{gathered} \text { M920, M635, } \\ \text { M690 } \end{gathered}$ |  |
| 7.08 Multiplication and Division | Use Multiplication and Division, including formal written methods, applied to integers \& decimals | M113, M911, <br> M187, M803, <br> M462, M354, <br> M873, M262 |  |
| 7.09 Mean | Describe, interpret and compare observed distributions of a single variable through the use of the mean | M940 |  |

