## Year 8 Mathematics Scope and Sequence 2021

## Semester 1

## DATA DRIVEN FOCUS AREAS

| Topic | Algebraic Techniques 2 MA4-8NA | Equations 2 <br> MA4-10NA | Operations with Number MA4-5NA | Right Angled Triangles (Pythagoras) <br> MA4-16MG | Properties of 2D figures MA4-17MG | Financial Mathematics MA4-6NA |
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| Time | Wk 1-4 | Wk 5-7 | Wk 8-10 | Wk 1-3 | Wk 4-7 | Wk 8-10 |
| Concepts | Generalises number properties to operate with algebraic expressions | Using algebraic techniques to solve simple linear and quadratic equations | Performs operations with Fractions, Decimals and Percentages | Uses Pythagoras Theorem to solve problems | Classifies, describes and uses the properties of triangles and quadrilaterals | Solves financial problems involving purchasing goods |
| Topic assessment |  | Rich task Developing understanding through reverse process | Catalogue assignment | Literacy taskinvestigation of the origins of Pythagoras Theorem | Mind map of quadrilateral properties | Best Buys investigation |
| Assessment Tasks Major | Assessment Task 1 -Open Book Examination Notice: Term 1, Week 6 Due: Term 1, Week 8 |  |  | Assessment Task 2- Summary Sheet Examination Notice Term 2 Week 7 Due Term 2 Week 9 |  |  |
| Revision Excel Book | Chapter 6 | Chapter 11 | Chapter 2 and 3 | Chapter 7 unit 4/5 | Chapter 12 | Chapter 2 and teacher supplied |

## Year 8 Mathematics Scope and Sequence 2021

| Semester 2 |  |  |  |  |  |  |
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| DATA DRIVEN FOCUS AREAS |  |  |  |  |  |  |
| Topic | Length, Area and Volume MA4-12MG, MA4-13MG, MA4-14MG | Ratio and Rates MA4-7NA | Congruency MA4-17MG | Linear Relationships MA4-11NA | Indices MA4-9NA | Data and Single Variable <br> Analysis $\begin{aligned} & M_{4}-19 S P, \\ & \text { MA4-20SP }^{2} \end{aligned}$ |
| Time | Wk 1-6 | Wk 7-10 | Wk 1-2 | Wk 3-5 | Wk 6-7 | Wk 8-10 |
| Concepts | Calculates the perimeter, Area and Volume of 2D and 3D figures. | Operates with ratios and rates and explores their graphical representation | Determines congruent triangles to find unknown side lengths and angles. | Creates and displays number patterns; graphs and analyses linear relationships; and performs transformations on the Cartesian plane | Operates with positive-integer and zero indices of numerical bases | Collects, represents and interprets single sets of data, using appropriate statistical displays Analyses single sets of data using measures of location, and range |
| Topic Test/rich task |  |  |  | Design a list of coordinates to create a diagram/picture |  | Utilise technology to investigate local statistics \& present findings graphically\& in tables |
| Assessment Tasks Major | Assessment Task 3-Measurement Assignment <br> Notice: Term 3, Week 8 <br> Due: Term 3, Week 10 |  | Assessment Task 4 - Summary Sheet Examination <br> Notice Term 4 Week 6 <br> Due Term 4 Week 8 |  |  |  |
| Revision Excel Book | Chapter8 and 9 | Chapter 5 <br> (unit 6-9) | Chapter 12 <br> (Units 7-13) | Chapter 10 | Chapter 4 | Chapter 14 |

