

| Statistics | - Data Representation \& Counting Columns | Lesson Placed |
| :---: | :---: | :---: |
| Measurements | - Metric Units - Millilitres and litres <br> - Capacity of Measurements <br> - Time | Lesson Placed |
| Probability | - Chance Experiment | Lesson Placed |
| Algebra | - Number Pattern | Lesson Placed |
| YEAR 4 |  |  |
| Unit | Area of Focus | Length |
| Numbers | - Strategy to make calculations <br> - Problem Solve <br> - Multiplications <br> - Odd and Even <br> - Bingo <br> - Sentences in Number <br> - Fractions and Decimals | Lesson Placed |
| Geometry | - Symmetry <br> - Angles | Lesson Placed |
| Statistics \& Probability | - Data <br> - Minutes | Lesson Placed |
| Measurements | - Quadrilaterals <br> - Time word problems | Lesson Placed |
| YEAR 5 |  |  |
| Unit | Area of Focus | Length |
| Numbers | - Pace <br> - Fractions <br> - Group Numbers <br> - Decimal Numbers lowest to highest <br> - Number Sentence <br> - Budgets + Purchase <br> - Expenditure and Costing | Lesson Placed |
| Geometry | - Angles <br> - Locations <br> - 2 Dimensional Shapes <br> - Mapping | Lesson Placed |
| Statistics \& Probability | - Making Predictions of using results of experiments. | Lesson Placed |
| Measurements | - Substructions of Fractions with equivalent denominators. <br> - Decimals Patterns using Hundredths, tenths and wholes. <br> - Using time - 24 Hours | Lesson Placed |

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## YEAR 6

| Unit | Area of Focus | Length |
| :---: | :---: | :---: |
| Numbers | - Power - Calculating number to numbers <br> - How Tall <br> - Abstract Design - Percentages as Fractions and Decimals <br> - Calculations <br> - Percentages <br> - Brackets and the order of operations <br> - Expenditure and Costing <br> - Mixed Numbers and Proper Fractions with denominators that are multiples of two | Lesson Placed |
| Geometry | - 2 D Structure <br> - Square - Coordinates <br> - Understanding Angles | Lesson Placed |
| Statistics \& Probability | - Probability using percentages <br> - Calculating percentage from the result of a chance experiment | Lesson Placed |
| Measurements | - Area <br> - Lengths <br> - Calculating Capacity | Lesson Placed |
| YEAR 7 |  |  |


| Unit | Area of Focus | Length |
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| Numbers and Algebra | - Integers <br> - Indices <br> - Understanding Symbols <br> - Writing Algebraic representations of word phrases <br> - Substitutes given values for variables to evaluate simple algebraic expressions. <br> - Simplifying of algebraic expressions which does not always collect terms. <br> - Number Patterns <br> - Tables of Value <br> - Complex Problem Solving | Lesson Placed |
| Geometry | - Geometry Review <br> - Front / Side/ Top views of 3 Dimensional Objects. <br> - 3-Dimensional object constructed by multiple prism on isometric paper. | Lesson Placed |


|  | - Use different views of a 3-dimensional object to draw possible arrangement of prisms |  |
| :---: | :---: | :---: |
| Statistics \& Probability | - Calculating expected frequency of outcomes in a simple experiment. <br> - Tally numbers effectively <br> - Graphing dots based on gathers data from experiments. <br> - Reasoning comparisons in word <br> - Identifies the mode of a data set <br> - Calculating the experimental probability as a fraction <br> - Explaining outcomes in Sentences <br> - Construct stem-and-leaf plot and attempts to align the digits on the lead vertically. <br> - Calculate range, mode, median and mean of a data set. <br> - Identifies the statistical measure that best represents the data set. | Lesson Placed |
| Measurements | - Calculate Formulas for volume and area <br> - Calculate the volume of a prism <br> - Find the area of each face of a rectangular prism to calculate its total surface area. <br> - Understanding Conservation of Volume <br> - Describing Surface area in words (sentence) <br> - Understanding Dimensions and surface areas of rectangular prisms. <br> - Volume of 24 cubic centimetres on isometric paper <br> - Reflecting on Investigations in Paragraphs | Lesson Placed |
|  | YEAR 8 |  |
| Unit | Area of Focus | Length |
| Numbers | - Ratios <br> - Integers <br> - Percentages Complex <br> - Simplifies ratios using given quantities <br> - Factors of 5 <br> - Tables using Units of Measure <br> - Working Outs <br> - Estimate number of people to fed $\$ 50$ worth <br> - Simplifies and applies ratios to scale quantities up and down (table) | Lesson Placed |


| Geometry | - Congruence - Sides and angles of triangles in matching order <br> - Sorting Quadrilaterals <br> Reflect a figure in a vertical axis | Lesson Placed |
| :---: | :---: | :---: |
| Statistics \& Probability | - Making Predictions of using results of experiments. <br> - Finding the Mean, Median and Mode <br> - Using data to explain the result. | Lesson Placed |
| Measurements | - Perimeter and area <br> - Using appropriate formulas to determine the areas of typical plane shapes <br> - Using Pythagoras Theorem to calculate the lengths of unknown sides in order to determine the perimeter. <br> - Parts of Circle (area) <br> - Explanation of why area cannot be determined of some shapes <br> - Providing an Estimate for an area of a shape by apply an unknown formula and reasoning. <br> - Connect the concept of the circumference of a circle to solve a real-world problem in three dimensions. <br> - Finding the distance around the equator <br> - Calculating Speed <br> - Explain why the triangles have the same area using mathematical terminology. | Lesson Placed |
|  | YEAR 9 |  |
| Unit | Area of Focus | Length |
| Numbers | - Index Laws and Numbers - Correctly Evaluate most numerical expressions, leaving answers in an index form. <br> - Correctly Identifies the positive and negative powers of 10 . <br> - Writing number in scientific notation | Lesson Placed |
| Geometry | - Similar Triangles - Record angles of elevation, own height and distances as measured <br> - Observing heights correctly in finial calculations. <br> - Similarity | Lesson Placed |
| Statistics | - Data Displays - Creating Stem-and-leaf plot showing all data Values from smallest to largest on each sides of the stem. <br> - Finding Age Median from a steam-and-leaf plot | Lesson Placed |


| Probability | - Listing outcomes of a experiment <br> - Table evidence based on outcomes of experiment <br> - Calculating Frequencies <br> - Engaging in relationship between relative frequencies obtained from an experiment and theoretical probability. | Lesson Placed |
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| Measurements | - Trigonometry - Tangent ratio, Sine and cosine ratios. Using Trigonometry to find unknown sides of right- angled triangles solving both for hypotenuse and another side. Calculating the distance. <br> - Pythagoras Theorem <br> - Volume of a Cylinder - Finding Circumferences, units of capacity <br> - Volume of Prism <br> - Surface area and Volume <br> - Similarity in right angled triangles <br> - Cylinder Volume <br> - Heights and Radius | Lesson Placed |
| Algebra | - Linear Relationships- Constructing line in correct position using the ordered pairs. <br> - Identifies the common difference for table of values. <br> - Determines the equations of lines from a variety of given information. <br> - Problem Solving <br> - Using distance formula to determine the distance between two points and giving answer in decimals. | Lesson Placed |
|  | YEAR 10 |  |
| Unit | Area of Focus | Length |
| Geometry | - Similar or Congruent? - Identify Congruent triangles using correct symbol for similarity, uses reasoning to demonstrate why triangles are congruent. <br> - Numerical exercises in geometry - Recognise the straight angles and establishes an equation to solve the problem, Additional variables to assist in problem solving, equations to obtain correct values, Efficient approach to obtain the correct value by recognising that the exterior angle of a | Lesson Placed |


|  | triangle is equal to the sum of the opposite two interior angles. <br> - Angle sum of a quadrilateral to establish an equation and solve problem <br> - Using Geometrical notation to communicate reasoning and solve problem |  |  |
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| Statistics | - Quartiles - Determin ranges from ordered | artiles and inter-quartile of data. | Lesson Placed |
| Probability | - Probability and Venn table correctly to calc <br> - Understanding the con calculate the probabilit <br> - Represents the inform <br> - Determines the inters the answer. | grams -Interpreting to probability of an event. t of "at-least" to of a Venn diagram. of the two sets to find | Lesson Placed |
| Measurements | - Trigonometry - Explain relationship between examples of possible angle, relationship be trigonometric ratios. <br> - Comparing Variables, <br> - Graphing the compari <br> - Calculating the cost | e three ratios and the es and sides. Giving ulations to side and an n similarity and <br> Water if different years of variables riable | Lesson Placed |
| Algebra | - Heptathlon Scoring problem and table co calculations. <br> - Simultaneous equation <br> - Quadratic equations <br> - Problem Solving - co | stituting values from ly into given formula and | Lesson Placed |
|  | SENIOR: YEAR | YEAR 12 |  |
| Unit | Area of Focus | Description |  |
| Money, measurement and relations <br> (TERM FOCUS) | - Consumer arithmetic <br> - Shape and Measurement <br> - Linear equations and their graphs | Consumer arithmetic re rate and percentage ch earning and managing opportunity for the use and measurement build knowledge and skills stud $\mathrm{P}-$ <br> 10 Australian Curriculum similarity and problems compound geometric sh these skills in a range | ews the concepts of ge in the context of oney, and provides an spreadsheets. Shape on and extends the dents developed in the with the concept of volving simple and pes. Students apply practical contexts, |


|  |  | including those involving three-dimensional shapes. Linear equations and their graphs uses linear equations and straight-line graphs, as well as piece-wise linear graphs and step graphs, to model and analyse practical situations. |
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| Applied trigonometry, algebra, matrices and univariate data <br> (TERM FOCUS) | - Applications of Trigonometry <br> - Algebra and matrices <br> - Univariate data analysis | Applications of trigonometry extends students' knowledge of trigonometry to solve practical problems involving non-right-angled triangles in both two and three dimensions, including problems involving the use of angles of elevation and depression and bearings in navigation. <br> Algebra and matrices continue the study of algebra and introduces the new topic of matrices. <br> Univariate data analysis develops students' ability to organise and summarise univariate data in the context of conducting a statistical investigation. |
| CONTINUE IN YEAR 12 |  |  |
| Bivariate data, sequence and change, and earth geometry <br> (TERM FOCUS) | - Bivariate data analysis <br> - Time series analysis <br> - Growth and decay in sequences <br> - Earth geometry and time zones | Bivariate data analysis introduces students to some methods for identifying, analysing and describing associations between pairs of variables, including the use of the leastsquares method as a method for analysing linear associations. Time series analysis continues students' study of statistics by introducing them to the concepts and techniques of time series analysis. Growth and decay in sequences employs recursion to generate sequences that can be used to model and investigate patterns of growth and decay in discrete situations. These sequences find application |


|  |  | in a wide range of practical situations, including modelling the growth of a compound interest investment, the growth of a bacterial population or the decrease in the value of a car over time. <br> Sequences are also essential to understanding the patterns of growth and decay in loans and investments that are studied in detail in Unit 4. Earth geometry and time zones offers an opportunity to use contexts relevant to students. |
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| Investing and networking <br> (TERM FOCUS) | - Loans, investments and annuities <br> - Graphs and networks <br> - Networks and decision mathematics | Loans, investments and annuities aims to provide students with sufficient knowledge of financial mathematics to solve practical problems associated with taking out or refinancing a mortgage and making investments. Graphs and networks introduces students to the language of graphs and the ways in which graphs, represented as a collection of points and interconnecting lines, can be used to model and analyse everyday situations such as a rail or social network. Networks and decision mathematics uses networks to model and aid decision-making in practical situations. |

