## BRACKEN RIDGE STATE HIGH SCHOOL

## Year 7 Subject Mathematics <br> Overview

| TERM <br> ALLOCATION AND LENGTH | UNIT | SUB TOPICS | ASSESSMENT |
| :---: | :---: | :---: | :---: |
| 1 | Number and <br>  <br> Measurement and Geometry | Students solve problems involving the comparison, addition and subtraction of integers. They make the connections between whole numbers and index notation and the relationship between perfect squares and square roots. <br> They describe different views of threedimensional objects. Students use formulas for the area and perimeter of rectangles and calculate volumes of rectangular prisms. Students classify triangles and quadrilaterals. | Exam - Investigating index notation, fractions and integersShort response, mathematical justification <br> In Class Assignment Investigating properties of shape and solving an authentic problem. - extended response, mathematical justification |
| 2 | Number and <br>  <br> Measurement and <br>  <br> Statistics and <br> Probability | Students use fractions, decimals and percentages, and their equivalences. They express one quantity as a fraction or percentage of another. <br> Students determine the sample space for simple experiments with equally likely outcomes and assign probabilities to those outcomes. | Exam - Solving algebra, Solving Linear equations Short response, mathematical justification <br> Exam - chance problems Short response with Mathematical Justification |
| 3 | Number and Algebra <br> Money and Financial Mathematics | Students solve problems involving addition and subtraction of integers. They make the connections between whole numbers and index notation. <br> They solve problems involving percentages and all four operations with fractions and decimals. They compare the cost of items to make financial decisions. Students represent numbers using variables. <br> Students use fractions, decimals and percentages, and their equivalences. They express one quantity as a fraction or percentage of another. | Exam - Applying Integer and real number concepts- Short response, mathematical justification <br> Genre: In Class Assignment Making financial decisions. extended response, mathematical justification |
| 4 |  <br> Statistics and Probability | They represent transformations in the Cartesian plane. They solve simple numerical problems involving angles formed by a transversal crossing two lines. Students identify issues involving the collection of continuous data. They describe the relationship between the $m$ They name the types of angles formed by a transversal crossing parallel line. . They calculate mean, mode, median and range for data sets. They construct stem-andleaf plots and dot-plots.edian and mean in data displays. | Exam - Applying data and geometry concepts- Short response, mathematical justification |



