

Pinehurst Junior College Mathematics Overview Year 8 2017

Mathematics is the exploration and use of patterns and number and the relationships between them. By studying Mathematics students develop the ability to think creatively, critically, strategically and logically.

Term 1	Term 2
<u>Number and Calculation</u> (6 weeks) <ul style="list-style-type: none"> • Number Investigation • Assessment- Week 2 PAT/Number • Computation • Fractions • Decimals • Percentages/ratio • Problem Solving • Integers, powers, roots • Rounding • End of unit test- Week 6 <u>Algebra</u> (5 weeks) <ul style="list-style-type: none"> • Assessment- Algebra • Equations • Formulae/expressions • Linear functions • Sequences and rules • End of unit test- Week 10 	<u>Geometry</u> (5 weeks) <ul style="list-style-type: none"> • Assessment- Geometry • Angles and angle properties • Shape and geometric reasoning • Construction • Transformations- reflect, rotate, translate • Transformations- enlargement, scale drawings • End of unit test- Week 5 <u>Measures</u> (4 weeks) <ul style="list-style-type: none"> • Assessment- Measures • Length and mass • Time and rates of change • Area, perimeter and volume • End of unit test
Term 3	Term 4
<u>Handling Data</u> (7 weeks) <ul style="list-style-type: none"> • Assessment- Handling Data • Statistical investigation • Presenting, analysing and reporting on data • Probability • End of unit test- Week 7 <u>Number</u> (2 weeks) <ul style="list-style-type: none"> • Problem solving <p style="text-align: right;">(Camp Week)</p>	<u>All areas</u> (2 weeks) <ul style="list-style-type: none"> • Revision in all areas <p>END OF YEAR EXAMINATION (Week 4)</p> <u>Problem Solving/Statistics/Algebra/Geometry</u> (6 weeks) <ul style="list-style-type: none"> • Investigations/practical activities <u>Preparation for Year 9</u>

Assessment

Each unit of work (e.g. Number, Algebra) is pre-tested to identify areas of strength and need. At the conclusion of the unit, a post-test is completed and analysed by the student and teacher against set criteria. The end of year examination covering the full year's work is in Term 4.

Homework Expectations

Homework related to the concepts covered in class is issued weekly. Generally, it is expected students complete 40 minutes each week including basic facts.