



Stephen's School – Carramar Campus

Mathematics Learning Area

Year 9 Practical Mathematics

Student Course Notes 2008

1. All students must have the following equipment as well as their textbook: pens; pencils; eraser; ruler; Math-Aid; Proliner; graph paper; and a suitable scientific calculator.
2. Students must keep and maintain a Mathematics Journal.
3. Investigations and problem solving form part of the assessment schedule.
4. Students must keep a portfolio containing all assessments. Parents are expected to sight and sign these.
5. At the end of each topic it is a good idea to file all work at home in a way that helps examination revision later in the semester.
6. Mathematics classes are grouped based on ability levels. It is normal for a small number of students to be moved into a more challenging or less demanding mathematics course depending on how well they are coping with their current mathematics course.
7. During significant assessments teachers may permit students to prepare 1 A4 page of notes to be used during the assessment. On occasions the student's mathematics journal may also be permitted.
8. In the interest of fairness and as stated in the school Assessment Policy, students who are absent for any significant mathematics assessment are expected to produce a medical certificate. Failure to do so may result in a zero score for the missed assessment.
9. Only approved calculators as stated on the booklist for this course are permitted in assessments. Some assessments or parts of assessment will be resource free. I.e. No calculators or notes permitted.
10. Homework is an integral part of our mathematics curriculum. Year 9 Practical Mathematics students should be completing an average of 20 - 25 minutes mathematics homework (fun work at home) at least 5 nights a week. Once class work and set homework has been completed students are expected to work on assignments, mathematics journals, extension work, revision, read ahead in text book etc.

Assessment Breakdown Year 9 Practical Mathematics Semester 1

Topic Tests and/or quizzes (Common to level)	65%
Investigations, problem solving and/or assignments	25%
Journal	10%

Assessment Breakdown Year 9 Practical Mathematics Semester 2

Topic Tests and/or quizzes (Common to level)	70%
Investigations, problem solving and/or assignments	25%
Journal	5%

Final mark for year will be the average of both semester's marks.

Grades allocated (from high to low) will be A, B, C, D and E.

Parent Signature:

Date:

TERM 1 - 2008

Week	Topic	Text Reference	Practical Application	Technology
1-3	Chapter 1 Numbers Whole Numbers Decimal And Fractions Directed Numbers Indices Percentages Mental Strategies Using the calculator	Maths for WA 2 Exercise 1A To 1R Dollars and Sense An introduction to the mathematics of money management – Sadler and Swan Mathematics for Living Maths in the Home - MAWA	- Managing Money; - Sports; - Travel	Companion Website Technology Applications - Coldest Temperatures - Percentages To Fractions And Decimals - Number Properties - Addition And Subtraction Of Directed Numbers
	Revision	Maths for WA 2 Revision Questions P 32	Test 1 week 3	Companion Website Review Questions
4,5	Chapter 2: Consumer Maths Percentages Of Quantities Percentage Change Discount And Commission Simple Interest And Best Buy	Maths for WA 2 Exercise 2A To 2H; 2J to 2L	- Retail sales - Bank accounts - Credit cards	Companion Website - Technology Applications - Petrol To Lpg - Percentage Puzzle - Money Puzzle
	Revision & Assessment	Maths for WA 2 Revision Questions P 56	Test 2 week 5	Companion Website Review Questions
6,7	Chapter 3: Measurement Circumference Composite Shapes Area Of Trapezium, Circles And Sectors Surface Area Of Prisms Introducing volume (counting unit cubes, etc.)	Maths for WA 2 Exercise 3C To 3I	- Building & construction - Garden design and agriculture	Companion Website Technology Applications - Luggage Volumes - Units Of Length Puzzle - Maths Terms Puzzle - Units Of Capacity And Volume - Area And Volume Formulas
	Revision	Maths for WA 2 Revision Questions P 86	Assignment 1 week 7	Companion Website Review Questions
8-10	Chapter 4 Pythagoras Pythagoras' Theorem Pythagorean Triples	Course book Exercise 4A To 4F	- Building & Construction - Surveying	Companion Website Technology Applications - Pythagorean Triples - Pythagoras Puzzle - Maths Terms Puzzle - Pythagoras Animation
	Revision	Course book Revision Questions P 112	Test 4 week 10	Companion Website Review Questions

PROGRAM – TERM 2 - 2008

Week	Topic	Text Reference	Assessments	Technology
1-2	Chapter 5 Trigonometry Labelling Right-Angle Triangles Tangent Ratios Finding Sides And Angles Using Tan Sine And Cosine Ratios	Maths for WA 2 Exercise 5A To 5G		
3	Applications Of Trigonometry:	Maths for WA 2 Applications P 138 Shooting For Goal Measuring Tan Extensions P 140 Complex Problems Areas Of Shapes Bushwalking		Companion Website Technology Applications Shooting For A Goal Trigonometry Puzzle Trig Ratios Animation
	Revision	Maths for WA 2 Revision Questions P 142		Companion Website Review Questions
	Assessment Task 5	Teacher's Resource Chapter Test 5	Test 5 week 3 on Ch 5	
4	Chapter 6 Ratio And Rates Ratio And Proportion Simplifying Ratios	Maths for WA 2 Exercise 6A		
5	Develop New Concepts: Using Ratios Rates And Speed, Distance And Time Graphs And Time	Maths for WA 2 Exercise 6B To 6G		
6	Applications Of Ratio And Rates:	Maths for WA 2 Applications P 168 The Parthenon Living Golden Ratios Designing Houses Favourite Rectangles		Companion Website Technology Applications Speed, Distance And Time Simplifying Ratios Puzzle Rates Puzzle Equivalent Ratios Puzzle
	Revision	Coursebook Revision Questions P 172		Companion Website Review Questions
	Assessment Task 6	Teacher's Resource Chapter Test 6	Test 6 week 6 on Ch 6	
7	Chapter 7 Polygons And Polyhedra Naming Angles Complementary And Supplementary Triangles, Quadrilaterals And Polygons Angles In Parallel Lines Congruent Shapes	Coursebook Exercise 7A - 7E		Geometer's Sketchpad
8	Develop New Concepts: Similar Shapes Applications Of Similar Triangles Drawing 3d Shapes	Coursebook Exercise 7F -7I Exercise 7K		Companion Website Quicktime Movies Nets Of Polyhedra

	Revision	Coursebook Revision Questions P 208		Companion Website Review Questions
	Assessment Task 7	Teacher's Resource Chapter Test 7	Test 7 week 8 on Ch 7	
9	Chapter 8 Transformations And Location Transformations Enlargements	Coursebook Exercise 8A -8E		Geometer's Sketchpad
10	Revision	Coursebook Revision Questions P 234	Test 8 week 10 on Ch 8	Companion Website Review Questions

PROGRAM - TERM 3 - 2006*See alternative Garden Design Program***PROGRAM – TERM 4 - 2007**

Week	Topic	Text Reference	Assessments	Technology
1-3	Chapter 13 Chance Develop New Concepts: • Sample Space Grids • Tree Diagrams • Simulations • Using Sampling Revision	Coursebook Exercise 13A – 13F Puzzles P 382 Coursebook Revision Questions P 390	 Test end week 3 on chapter 13	Companion Website Technology Applications • Two Dice • Maths Terms • Spinners Puzzle • Probability Of Simple Events Companion Website Review Questions
4-5	Chapter 14 Statistics Revision: • Collecting Data • Column Graphs And Histograms Develop New Concepts: • The Interquartile Range • Stem And Leaf Plots • Mean And Median • Line Graphs Revision	Coursebook Exercise 14A -14B Coursebook Exercise 14C – 14F Puzzles P 416 Coursebook Revision Questions P 422	 Test end week 5 on chapter 14	Companion Website Technology Applications • World Temperatures • Types Of Graphs • Table Types Puzzle • Maths Terms Puzzle Companion Website Review Questions

Week	Topic	Class Work	Assessments	Technology
6-7	Chapter 11 Linear Graphs Revision: - Plotting Points Develop New Concepts: - Linear Patterns And Simple Rules - Plotting Points From Rules - Horizontal And Vertical Lines - Gradients Of Straight Lines - Finding Equations Of Lines - The Gradient And Y-Intercept Revision	Coursebook Exercise 11A Coursebook Exercise 11B -11I Puzzles P 328 Coursebook Revision Questions P 334	Test Week 3 on chapter 11	Companion Website Technology Applications - Points On A Line - Plotting Co-Ordinates Lingraph Animation Companion Website Review Questions
8	Year 9 Camp Final Awards Assembly			