**Year 8 Mathematics Syllabus 2010**

**DIRECTED NUMBERS (NUMBER) CHAPTER 2**

Are you ready?

Integers on the number line Exercise 2A  
Maths 300 Activity - Protons and Anti-protons Lesson 76

Multiplication Exercise 2F

Division Exercise 2G

Combined Operations Exercise 2H

Selected items from the Chapter Review

Assessment Test

**ALGEBRA (STRUCTURE) CHAPTER 5**

Are you ready?

Maths 300 Activity – Match Triangles Lesson 164

Maths 300 Activity – 4 Arms Lesson 40

Simplifying Expressions Exercise 5F

Multiplying Pronumerals Exercise 5G

Dividing Pronumerals Exercise 5H

Expanding Brackets Exercise 5I

Factorising Exercise 5J

Selected items from the Chapter Review

Assessment Create your own Math 300 Task Card

**GEOMETRY (SPACE) CHAPTER 8**

Are you ready?

Maths 300 Activity – Cube Nets Lesson 116

Maths 300 Activity – Hunting for Stars Lesson 51

Angles and parallel lines Exercise 8G

Isometric Drawing and visualising 3D shapes Exercise 8I

Nets and Solids Exercise 8K

The Mobius Strip Heinemann pg 412

Selected items from the Chapter Review

Assessment Cubes Assignment

**PERCENTAGES (NUMBER) CHAPTER 4**

Are you ready?

Maths 300 Activity – First Principals Percent Lesson 9

Converting percentages to fractions Exercise 4A

Converting percentages to decimals Exercise 4B

Maths 300 Activity – Chocolate Cake

(This talks about fractions, you then need to

convert these to percentages) Lesson 135

Decimals to Percentages Exercise 4D

Percentages of an amount using Decimals Exercise 4F

Amount as a Percentage of another Exercise 4G

Applications of Percentages Exercise 4H

Selected items from the Chapter Review

Assessment Test

**PROBABILITY (MEASUREMENT, CHANCE & DATA) CHAPTER 13**

Maths 300 Activity – Greedy Pig Lesson 5

Probability Scale 13A

Experimental Probability 13B

Sample space and Theoretical Probability 13C

Maths 300 Activity – Problem Dice Lesson 2

Maths 300 Activity – Duelling Dice Lesson 59

(You can from these 2 activities, but Lesson 2 requires computers

and Lesson 59 requires you to make the dice first)

Maths 300 Activity – Counter Escape Lesson 88

Tree Diagrams for Multiple events and 2-way diagrams 13E

Selected items from the Chapter Review

Assessment Test

**EQUATIONS (STRUCTURE) CHAPTER 6**

Are you ready?

Keeping Equations balanced Exercise 6B

Using algebra to Solve Equations Exercise 6C

Pronumerals on both sides Exercise 6D

Solving Worded Problems Exercise 6F

Inequalities and Inequations Exercise 6G

Selected items from the Chapter Review

Assessment Test

**RATIO (NUMBER) CHAPTER 7**

Are you ready?

## Introduction to ratios and Simplifying ratios Exercise 7A and 7B

## Maths 300 Activity-Matts Rod Lesson 144

Comparing ratios Exercise 7D

## Increasing and decreasing in a given ratio Exercise 7E

## Dividing in a given ratio Exercise 7F

## Scale drawing Exercise7G

Selected items from the Chapter Review

Assessment Test

**Cartesian Graphs (STRUCTURE) CHAPTER 11**

Are you ready?

Interpreting graphs Exercise 11A

The Cartesian plane and Linear patterns Exercise 11B and 11C

Maths 300 Activity - Pulse rate Lesson 68

Plotting linear graphs (using table of values) Exercise 11E

Gradient and y-intercept Exercise 11F

Finding the rule Exercise 11G

Sketching linear graphs Exercise 11H

Selected questions from Chapter Review

Assessment Test

**Measurement (MEASUREMENT, CHANCE AND DATA) CHAPTER 9**

Are you ready?

Perimeter 9C

Maths 300 Activity- Circumference of a circle Lesson 45

The circumference formula 9D

Area of triangles, rectangles and parallelograms 9E and 9F

Area of a trapezium 9H

Maths 300 Activity – Area of a circle Lesson 43

Area of a circle 9G

Areas of composite figures and TSA 9I and 9J

Maths 300 Activity – Biggest Volume Lesson 81

Volume 9K

Selected questions from Chapter Review

Assessment Test