

## Mathematics Higher

	Towns owns					
	Term one	Term Two	Term Three	Term Four	Term Five	
Week One	Place value & Estimating HCF and LCM Indices	Algebraic indices Expanding and factorising Equations and formulae Sequences	Angle properties of triangles and quadrilaterals Interior and exterior of polygon	Circle theorems	Numbers – aiming for g	
Week Two	Surds	Graphs (1) Linear graphs Graphing rate of change Line segments	Pythagoras Theorem Trigonometry	Vectors and notation Vector arithmetic Parallel vectors and collinear points Solving geometric problems	Algebra – aiming for gr	
Week Three	Fractions ratio and decimals	Graphs (2) Quadratic graphs Cubic and reciprocal graphs More graphs	Perimeter and area Prisms Circles, sectors of circles Cylinders, spheres, pyramids and cones	Interpreting and representing data Statistical diagrams Frequency polygons	Geometry – aiming for 9	
Week Four	Growth and decay Compound measures Ratio and proportion	Solving linear inequalities Solving quadratic equations Completing the square Simple simultaneous equations	Reflection, rotation, enlargement Translations & Transformations Scale drawings and bearings Constructions and loci	Further Statistics Cumulative frequency Box plots Histograms & Distributions	Statistics – aiming for g	
Week Five	Direct and inverse proportion Exponential functions Non-linear graphs Translating and reflecting graphs	More simultaneous equations Solving linear and quadratic simultaneous equations	Congruence Geometric proof Similarity	Algebraic proofs Surds revisited	Revision	
Week Six	Surds (2)	Solving simultaneous equations graphically Quadratic and cubic equations Using iteration to solve equations	Graph of sine, cosine, tangent function Calculating areas and the sine rule Cosine rule Transforming trigonometric graphs	Functions		
Week Seven	Probability	Rearranging formulae Algebraic fractions				

	Term Six
for grade 9	Calculating probabilities Listing outcomes Probability from experiment
or grade 9	Tree diagrams Conditional probability
g for grade	Sets
for grade 9	Probability for combined events •AND rule •OR rule •Using the AND/OR rule