

# YEAR 10 LONG TERM PLAN with CURRICULUM STANDARDS IGCSE MATHEMATICS A

YEAR 10	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1	YR 10 /1	YR 10 /2	YR 10 /3	YR 10 /4	YR 10 /5	YR 10 /6	YR 10 /7	YR 10 /8
	Algebra7 (6)	Graph 4 ,Graph 7 (6)	Algebra 3,Graph 2 ,Algebra 9	Graph 5 ,	Number 5 ,Number 8	Shape and space 1 (6)	Shape and space 2,3,4 (6)	Shape and space 10(6)
	Solve quadratic equations by factorisation, use the quadratic formula and by completing the square. (7.1-7.4)	recognise and draw quadratic functions.(4.1,4.2) Find approximate solutions to quadratic equations graphically.(7.1)	Solve simultaneous equations algebraically (3.4) and graphically (2.3) Solve quadratic simultaneous. (9.1)	Solving linear inequalities (3.4) and shading region.(5.1) Solving quadratic inequalities. (7.5)	Convert between metric units of area. Calculate the maximum and minimum possible values of a	Draw and use scales on maps and scale drawings. Solve problems involving bearings. Draw a locus. Use loci to solve	Revision on Pythagoras theorem and Trigonometry 2.1,3.1-3.3,4.1-4.3	Find the area of a triangle and a segment of a circle. Use the sine rule to solve 2D problems. (10.2,10.4)
Term 1	YR 10 /9	YR 10 /10	YR 10 /11	YR 10 /12	YR 10 /13	YR 10 /14	YR 10 /15	
	shape and space 10(6)	Number 9 (4)	Shape and space 1,7 (4)	Shape and space 2	Shape and space 6	Revision of Year 9	Revision(12)	
	Use the cosine rule to solve 2D problems. Solve bearings problems using trigonometry.(10.3)	Decide which product of service is better value for money Carry out calculations involving money Solve real -life	To use the ratio of corresponding sides to work out scale factors (1.5).To find missing lengths on similar shapes(7.3)	Understand about tangents at a point and from a point. Prove and use facts about angles subtended at the centre and the circumference, angle in a semicircle and	Understand, use facts about cyclic quadrilaterals and alternate segment theorem.Solve angle problems using circle theorems	Revision topics from Year 9 [Numbers,1,2,3,4, Algebra1,3Shape and space1 (1.3.1.4) Shape and space ,3 (3.1-3.3)Shape and space 5	Reinforce all the concepts taught and discuss the worksheets for first summative exam	
YEAR 10	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2	YR 10 /16	YR 10 /17	YR 10 /18	YR 10 /19	YR 10 /20	YR 10 /21	YR 10 /22	YR 10 /23
	Shape and space 8 (6)	Shape and space 8 (6)		Handling Data2 (6)	Handling Data 3 ,4 (6)	Handling Data5 , (6)	Handling data 7 (6)	Set 1,Set 2,Set 3 (6)
	Understand and use vector notation. Calculate using vectors and represent the solutions graphically. Calculate the resultant of two vectors (8.1)	Solve problems using vectors. Use the resultant of two vectors to solve vector problemsExpress	Prove lines are parallel. Prove points are collinear Solve geometric problems in two dimensions using vector methods	Estimate the mean and range from a grouped frequency table.Find the modal class and the group containing median(2.1-2.3)	work out the median, quartiles and interquartile range from a cumulative frequency diagram. (3.1-3.3) Probability,experimental probability,Theoretical	Add probabilities of mutually exclusive events Find the probability of independent events,Draw and use tree diagrams to	Draw and more complex tree diagrams (7.1-7.3)	Use set notation,Use venn diagram to represent sets(1.1,1.2),three sets, set-builder notation,solving problems involving sets(2.1-2.4),Use Venn Diagram to calculate probability.(3.1-3.2)
Term 2	YR 10 /24	YR 10 /25	YR 10 /26	YR 10 /27	YR 10 /28	YR 10 /29	YR 10 /30	
	Shape and space 7 (6)	Algebra 6 Sequences	Graphs(3)	Number 2,Number 6 (6)	Number 3 ,Number 8 (6)	Revision of Year 9 topics(6)	Revision(12)	
	Solve problems involving volumes and surface areas. Calculate volume and surface area of pyramids and cones (7.2)	Find a general formula for the nth term of an arithmetic sequence,Determine whether a particular number is a term of a given arithmetic	Draw and interpret distance-time graphs. Average speed from a distance-time graph. Velocity-time graphs. Acceleration and distance from velocity-time	work out percentage increase and decrease. Solve real -life problem involving Percentages.(2.2.2.3) , Recognise and use direct and indirect	Solve problems involving compound measures.(8.4) Use relationships involving ratio.(3.3)	Revision topics from Year 9 [Numbers,1,2,3,4, Algebra1,3Shape and space1 (1.3.1.4) Shape and space ,3 (3.1-3.3)Shape and space 5	Reinforce all the concepts taught and discuss the worksheets including revision topics of year 9 { Unit 1- Unit 5} for final exam	
YEAR 11 LONG TERM PLAN with CURRICULUM STANDARDS								
YEAR 11	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 1	YR11/1	YR11/2	YR11/3	YR11/4	YR11/5	YR11/6	YR11/7	
	Unit 13 More Trigonometry	More Trigonometry(contd)	More Trigonometry(contd)	Unit 9 Proportion and Graphs	More Trigonometry(6)	Unit 6 Graphs(5)	Proportion and Graphs(8)	
	Use upper and lower bounds in calculations, Calculating areas and the sine rule, The cosine rule and 2D	Solving problems in 3D	Graphs of sine, cosine and tangent functions. Assessment - 1 Unit 13 and Revision topics Unit 5	Translating, Reflecting and Stretching graphs of functions	Reflecting, translating and stretching Trigonometric curves, Solve equations. Assessment - 2 Transformation	D/T, V/T and More real life graphs	Calculate the gradient of a tangent at a point, Estimate the area under a non linear graph. Assessment 3	
	YR11/8	YR11/9	YR11/10	YR11/11	YR11/12	YR11/13	YR11/14	

Term 1	Unit 15 Equations and	Unit 14 Further Statistics	Further Statistics(5)	Unit 17 More Algebra(5)	Unit 16 Multiplicative Reasoning	Unit 7 Area and	Revision	
	To find an accurate root of a quadratic and cubic equation by using iterative process. Assessment - revision unit 9 and	Sampling, cumulative frequency, box plots	Drawing and interpreting Histograms, comparing and describing population Assessment revision	Algebraic fractions, surds, solving algebraic fraction equations , functions	Growth, decay, compound measures, ratio and proportion	Prisms, circles, sectors of circles, cylinders and spheres, pyramids and cones	Reinforcing all the concepts done and discussion of past papers.	
YEAR 11	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8
Term 2	YR11/15	YR11/16	YR11/18	YR11/19	YR11/20	YR11/21	YR11/21	YR11/22
	Unit 16 Circle Theorems	Vectors and Geometric	Unit 10 Probability(5)	Similarity and Congruence	Similarity and Congruence	Representing and representing	Unit 8 Transformation	Transformation and Constructions
	To prove and apply all the circle theorems	Vector Arithmetic, Parallel and collinear vectors, Solving geometric problems Assessment 1	Mutually exclusive, Independent events, Experimental probability, conditional probability, venn	Similar , Congruent triangles,	similarity in 3D shapes. Assessment 2	Time series, scatter diagrams, line of best fit, averages and range	Reflection, Translation, enlargement and Rotation, Bearings and scale drawings	Constructions and loci
Term 2	YR11/							
	Revision							
	Reinforcing all the concepts taught. Discussion of sample papers and mock papers.							