Mathematics Curriculum	Key Programmes
In line with the requirements of the A Mathematics Syllabus, the teaching of A Math at YSS focuses on developing thinking, reasoning and problem-solving skills using Math Modelling, making conjectures, investigations and making connections among mathematical concepts.	

Term 1	Chapter	Assessment
Week 0 (Thu & Fri) Week 1 (Mon)	**Back to School Programme**	
Week 1	Teacher's expectations **Chapter 3: Surds** 3.1 Surds 3.2 Simplifying expressions involving surds	Use of SLS
Week 2	3.3 Solving equations involving surds	
Week 3	**Chapter 1: Quadratic Functions** 1.1 Quadratic functions of the form $y = a(x - p)(x - q)$ 1.2 Quadratic functions of the form $y = a(x - h)^2 + k$	
Week 4 28 Jan – CNY celebration, 29- 30 Jan Wed, Thu - CNY	1.3 Conditions for quadratic curve to lie completely above or below x-axis	
Week 5	1.4 Quadratic functions in real-world contexts **Chapter 2 Equations & Inequalities** 2.1 Solving quadratic equations by completing the square (coefficient of x^2 is not 1) 2.2 Solving quadratic equations (A) Quadratic Formula (Recap from E Math)	
Week 6	(B) Nature of roots 2.3 Solving linear and non-linear simultaneous equations	
Week 7	2.4 Solving quadratic inequalities Revision for WA1	
Week 8	**Chapter 4: Polynomials, Cubic Equations & Partial Fractions** 4.1 Polynomials 4.2 Remainder and Factor Theorem	
Week 9 (Fri - no lesson)	4.3 Cubic expressions, equations and identities	WA1
Week 10 (Fri - no lesson)	4.4 Partial Fractions	
March Holiday Assignment (Binomial Theorem Units 5.1, 5.2 on SLS)		

Term 2	Chapter	Assessment
Week 1	4.4 Partial Fractions (continued)	
Week 2 (31 Mar Mon-Hari Raya Puasa)	**Chapter 5: Binomial Theorem and Its Applications** 5.1 The Binomial Expansion of $(1 + b)^n$ 5.2 The Binomial Expansion of $(a + b)^n$	Consolidation of SLS assignments on units 5.1, 5.2
Week 3	5.3 Applications of Binomial Theorem in real-world contexts.	
Week 4 (18 Apr Fri – Good Friday)	**Chapter 6: Exponential and Logarithmic Functions** 6.1 Exponential expressions and equations	
Week 5	6.2 Introduction to Logarithms	
Week 6 (HBL - Fri)	6.3 Laws of Logarithms	
Week 7 (1 May Thu - Labour Day) (HBL - Fri)	6.3 Change of base formula Revision for WA2	SLS
Week 8 13 – 16 May (12 May Mon-Vesak day)	**Sec 3 Camp**	
Week 9	6.4 Logarithmic and Exponential equations	SLS WA2
Week 10	6.5 Exponential and Logarithmic Functions and graphs	
June Holiday Assignment (SLS Flipped Classroom: Coordinate Geometry Chapter 7)		

Term 3	Chapter	Assessment
Week 1	6.6 Applications of Exponential and Logarithmic Functions	
Week 2 (7 July Mon – School holiday for Youth Day)	**Chapter 7: Coordinate Geometry** 7.1 Mid-point of a Line Segment 7.2 Parallel and perpendicular lines 7.3 Equation of straight line 7.4 Areas of rectilinear figures	Consolidation of SLS assignment on units 7.1 – 7.4
Week 3 (HBL Tue - Thu)	**HBL due to National Oral Examination** 7.5 Equations of Circles	SLS Flipped Classroom
Week 4	7.5 Equations of Circles	SLS Flipped Classroom
Week 5	**Chapter 9: Trigonometric Functions & Graphs** 9.1 Trigonometric Ratios of acute angles and special angles	

Week 6 (8 Aug Fri – National Day celebration)	9.2 Trigonometric Ratios of general angles	
Week 7 (11 Aug Mon – school holiday)	9.3 Trigonometric functions and graphs	SLS
Week 8	**Chapter 10: Trigonometric Equations & Identities** 10.1 Trigonometric Equations A: Trig equations for acute or obtuse angle (recap) B: Trigonometric equations for general angle C: Solve trigonometric equations using basic angle and ASTC	WA3
Week 9	10.1 (continued) D: solve equations involving 0º, 90º, 180º, 270º, 360º E: solving more complicated trig equations	
Week 10 (4 Sep Thurs - Teachers' Day Celebration. 5 Sep Fri - Teachers' Day)	F: Principal values of $\sin^{-1}x$, $\cos^{-1}x$, $\tan^{-1}x$ **Revision for End-of-Year Exam**	
September Holiday Assignment (Past Year paper YSS EOY 2023)		

Term 4	Chapter	Assessment
Week 1	**Revision for End-of-Year Exam**	
Week 2	**Revision for End-of-Year Exam**	
Week 3 - 4	**End-of-Year Examination**	
Week 5	**Script Checking and Review of Exam Papers**	
Week 6 (20 Oct Mon – Deepavali)	**Post-Exam Programmes**	