Peicai Secondary School
Subject Overview for Semester 1 2023
Mathematics | Secondary 2 | Normal (Academic)

TERM 1 [3 Jan – 10 Mar]			
Week	**Chapter/Topic/Skill/Area**	**Assignment/ Homework**	**Weighted Assessment**
Week 1 [2 Jan – 6 Jan]	**Start Smart Program**	-	-
Week 2 [9 Jan – 13 Jan]	**Start Smart Program**	-	-
Week 3 [16 Jan – 20 Jan] *CNY Celebrations 20 Jan (Fri)*	**Chapter 11 Statistical Diagrams**		
	11.1 Dot Diagrams 11.2 Histograms 11.3 Stem-and-Leaf Diagrams	Refer to SLS package assigned	
Week 4 [23 Jan – 27 Jan] *CNY 23 & 24 Jan (Mon & Tues)*	**Chapter 12 Measures of Central Tendencies**		
	12.1 Mean	TB (2B) p.138 Ex 12.1 Level 1: Q3, Q4 Level 2: Q6, Q9, Q10, Q11 Level 3: Q16, Q22	
	12.2 Median	TB (2B) p.145 Ex 12.2 Level 1: Q2 Level 2: Q3, Q4, Q7, Q8 Level 3: Q11	
	12.3 Mode	TB (2B) p.154 Ex 12.3 Level 1: Q1, Q2 Level 2: Q4, Q5 Level 3: Q8, Q9	
Week 5 [30 Jan – 3 Feb] *HBL #1 – 1 Feb (Wed)*	**Chapter 1 Linear Equations and Inequalities in One Variable**		
	1.1 Simplifying Linear Expressions with Fractional Coefficients	TB (2A) p.5 Ex 1.1 Level 1: Q1c,1e, Q2a, 2b Level 2: Q3b, 3d Level 3: Q6	WA1: Alternative Assessment Topic: Chapters 11 & 12 Data Analysis **Week 5: Start of Preparation** **Due: Week 8**
	1.2 Solving Linear Equations with Fractional Coefficients	TB (2A) p.9, Ex 1.2 Level 1: Q1b, 1e, Q2b Level 2: Q3e, 3f, 3g, Q5 Level 3: Q12	
Week 6 [6 Feb – 10 Feb]	1.3 Solving Simple Fractional Equations	TB (2A) p.11, Ex 1.3 Level 1: Q1 Level 2: Q3b, 3f, Q4 Level 3: Q5	
	1.4 Simple Linear Inequalities	TB (2A) p.21, Ex 1.4 Level 1: Q1, Q4	

		Level 2: Q6, Q7, Q9 Level 3: Q12	
Week 7 [13 Feb – 17 Feb] *HBL #2 – 15 Feb (Wed)*	**Chapter 2 Linear Equations and Graphs**		
	2.1 Cartesian Coordinates	TB (2A) p.34, Ex 2.1 Level 1: Q1, Q2, Q3 Level 2: Q6 Level 3: Q7	
	2.2 Linear Functions and Linear Graphs	TB (2A) p.45, Ex 2.2 Level 1: Q4 Level 2: Q6, Q8 Level 3: Q12	
Week 8 [20 Feb – 24 Feb]	2.3 Gradient of Linear Graphs	TB (2A) p.58, Ex 2.3 Level 1: Q2, Q3 Level 2: Q5, Q6 Level 3: Q8	WA1: Alternative Assessment Topic: Chapters 11 & 12 Data Analysis **Week 8: Submission**
Week 8 [20 Feb – 24 Feb]	**Chapter 3 Linear Equations in Two Variables**		
	3.1 Graphs of Linear Equations in Two Variables ($ax + by = c$)	TB (2A) p.71, Ex 3.1 Level 1: Q1 Level 2: Q4 Level 3: Q7	
Week 9 [27 Feb – 3 Mar] *HBL #3 – 1 Mar (Wed)*	3.2 Solving Simultaneous Linear Equations by the Graphical Method	TB (2A) p.78, Ex 3.2 Level 1: Q1, Q2 Level 2: Q4 (students can use graphing software desmos.com/graphing to determine the solution) Level 3: Q6*	
	3.3 Solving Simultaneous Linear Equations by Algebraic Method	TB (2A) p.88, Ex 3.3 By substitution method: Q1a, 1d, Q2e, Q6a By elimination method: Q2a, 2b, Q3d, Q6a	
Week 10 [6 Mar – 10 Mar]	3.4 Applications of Simultaneous Equations	TB (2A) p.93, Ex 3.4 Level 1: Q2, Q3 Level 2: Q5, Q8 Level 3: Q11	

TERM 2 [20 Mar – 26 May]			
Week	**Chapter/Topic/Skill/Area**	**Assignment/ Homework**	**Weighted Assessment**
Week 1 [20 Mar – 24 Mar] *HBL #4 – 22 Mar (Wed)*	**Chapter 4 Expansion and Factorisation of Algebraic Expressions**		
	4.1 Factorisation by Extracting Common Factors	TB (2A) p.109, Ex 4.1 Level 1: Q1a, 1d, Q2b, 2f Level 2: Q3d, Q4b, Q5a Level 3: Q8	
	4.2 Quadratic Expressions	TB (2A) p.117, Ex 4.2 Level 1: Q1b, Q2c, 2f, Q3a, 3d Level 2: Q4c, 4f, Q6, Q7 Level 3: Q10	
Week 2 [27 Mar – 31 Mar]	4.3 Expansion of the Product of Algebraic Expressions	TB (2A) p.124, Ex 4.3 Level 1: Q1b, 1f, Q2c, 2e, Q3a, 3e Level 2: Q4b, 4e, Q5a, 5d Level 3: Q9	
	4.4 Expansion Using Special Products of Algebraic Expressions	TB (2A) p.132, Ex 4.4 Level 1: Q1a-1d, Q2a-2d, Q3d-3g Level 2: Q5a, 5d, Q6a, 6d, 6g Level 3: Q7	
Week 3 [3 Apr – 7 Apr] *HBL #5 – 5 Apr (Wed)* *Good Friday 7 Apr (Fri)*	4.5 Factorisation of $ax^2 + bx + c$	TB (2A) p.146, Ex 4.5 Level 1: Q1a, 1c, 1d, 1e, 1h, Q2a, 2g Level 2: Q3a, Q4d Level 3: Q9*	
Week 4 [10 Apr – 14 Apr]	4.6 Factorisation Using Special Products of Algebraic Expressions	TB (2A) p.150, Ex 4.6 Level 1: Q1a, 1b, Q2a, 2b, Q3b, 3f Level 2: Q5, Q7 Level 3: Q9	
Week 4 [10 Apr – 14 Apr]	**Chapter 5 Algebraic Fractions**		
	5.1 Simplifying Algebraic Fractions	TB (2A) p.159, Ex 5.1 Level 1: Q1, Q2c Level 2: Q3, Q4, Q5	
Week 5 [17 Apr – 21 Apr] *HBL #6 – 19 Apr (Wed)*	5.2 Multiplication of Algebraic Fractions	TB (2A) p.161, Ex 5.2 Level 1: Q1, Q2c, Q3a Level 2: Q4a, 4c, Q5b Level 3: Q7	
	5.3 Division of Algebraic Fractions	TB (2A) p.164, Ex 5.3	

		Level 1: Q1a-1c, Q2c-2d Level 2: Q3, Q4d Level 3: Q6	
Week 6 [24 Apr – 28 Apr] *Hari Raya Puasa 24 Apr (Mon)*	**Chapter 6 Proportion**		
	6.1 Direct Proportion	TB (2A) p.179, Ex 6.1 Level 1: Q1a, 1b, Q2, Q4 Level 2: Q6, Q7, Q9 Level 3: Q13	
	6.2 Inverse Proportion	TB (2A) p.191, Ex 6.2 Level 1: Q1a, 1b, Q2, Q4, Q5 Level 2: Q9, Q11, Q12 Level 3: Q15, Q16	
Week 7 [1 May – 5 May] *Labour Day 1 May (Mon)* *HBL #7 – 3 May (Wed)*	Revision for Weighted Assessment 2		
Week 8 [8 May – 12 May]	Weighted Assessment 2 + Error Analysis		WA 2
Week 9 [15 May – 19 May] *HBL #8 – 17 May (Wed)*	**Chapter 7 Congruence and Similarity**		
	7.1 Congruence	TB (2A) p.208, Ex 7.1 Level 1: Q1a, Q2a, Q3a, Q4a, Q5a Level 2: Q6, Q7 Level 3: Q12, Q13	
	7.2 Similarity	TB (2A) p.219, Ex 7.2 Level 1: Q1, Q2b, Q3b, Q4, Q5d Level 2: Q6, Q7 Level 3: Q10, Q13	
Week 10 [22 May – 26 May]	7.3 Construction of triangles and Quadrilaterals	TB (2A) p.226, Ex 7.3 Level 1: Q1a, Q2, Q4, Q5 Level 2: Q7, Q8	

The subject overview is tentative and is subject to changes.