

SEKOLAH MENENGAH RIMBA
SCHEME OF WORK 2006
MATHEMATICS FORM 1 (LEVEL 2)

DATE	TOPIC & SUBTOPIC	OBJECTIVES	REFERENCE	ACTIVITY/ REMARKS
Week 1 4/1 – 7/1	MB 1 ADMISSION & ASSEMBLY	To start teaching whenever possible		
Week 2 9/1 – 14/1	Topic 1. WHOLE NUMBERS 1.1 Place value. 1.2 The four operations on whole numbers.	1. State place value of any digit in a whole number up to millions. 2. Write numbers in words and vice versa. 3. Perform the addition, subtraction, multiplication and division on whole numbers with / without using a calculator. 4. Solve simple word problems involving whole numbers.	Counts 1 (pg.15-19), Workbook 1A (pg.1-4), Secondary Mathematics (pg.3 & 6)	
Week 3 16/1 – 21/1	1.3 Order of operations. 1.4 Properties of the four operations: Commutative, Associative and Distributive property.	1. Perform combined operations involving any two of the four operations with / without using a calculator. Examples: ➤ perform what is in the bracket first, ➤ x or ÷; from left to right, ➤ + or -; from left to right. (exclude emphasis on the use of BODMAS rule). 2. Made students aware of the properties of the four operations. Formal teaching of these laws are not necessary. 3. Use a scientific calculator with emphasis on the use of relevant keys.	Workbook 1A (pg.5-8), Counts 1 (pg.14), Secondary Mathematics 1A (pg.23)	
Week 4 23/1 – 28/1	1.5 Approximation. 1.5.1 Rounding off to nearest ten, hundred and thousand. 1.5.2 Rounding off to a given number of significant figures. 1.6 Estimation.	1. Round off whole numbers to the nearest ten, hundred and thousand. 2. Round off whole numbers to a given number of significant figures. 3. Use rounding off techniques to estimate the value of a given arithmetic expressions.	Workbook 1A (pg.10), Counts 1 (pg.112)	
Week 5 30/1 – 4/2	1.7 Factors and Multiples. 1.8 Highest Common Factor and Lowest Common Multiples.	1. List all the factors of a whole number. 2. List some multiples of a whole number. 3. Find the HCF and LCM of two or three numbers.	Secondary Mathematics 1A (pg.25 & 32), Counts1(pg. 21&27)	

Week 6 6/2 – 11/2	1.9 Prime Numbers. 1.10 Prime Factors. 1.11 Squares and Square Roots. 1.12 Cubes and Cube Roots.	1. List all the prime numbers within 100. 2. Express a whole number as a product of its prime factors including the use of index notation. 3. Find the square and square root of a given positive integer (include finding square and square roots of simple square numbers up to 100 without a calculator). 4. Find square and square root of square numbers above 100 using calculator. 5. Calculate the cube and cube root of a given positive integers using a calculator.	Counts 1 (pg.23-24 & 27-29)	Refer Workbook 1A pg 14 (Activity 1-3)
Week 7 13/2 – 18/2	Topic 2. INTEGERS 2.1 Positive and Negative integers. 2.2 Order of integers. 2.3 The four operations on Integers.	1. Explain the need for negative numbers in practical situation, examples measuring temperature below zero, diving below sea level etc. 2. Represent positive and negative integers on a number line. 3. Use number lines to order integers. 4. Use the symbols < and > to show relationship between integers. 5. Perform the four operations on integers (exclude combined operations involving integers) with / without a calculator.	Counts 1 (pg. 3-11), Workbook 1A (pg.23-25)	Refer Workbook 1A pg 22 (Question no. 4)
Week 8 20/2 – 25/2	REVISION WEEK			
Week 9 27/2 – 4/3	MONTHLY TEST 1 & CORRECTIONS			
Week 10 6/3 – 11/3	Topic 3. FRACTIONS 3.1 Concept and notation. 3.2 Different types of fractions. 3.3 Equivalent fractions.	1. Identify fractions as equal parts of a whole number, as equal parts of a set and as a division. 2. Identify proper fractions, improper fractions and mixed numbers. 3. Express an improper fraction as a mixed number and vice versa. 4. Obtain a fraction equivalent to a given fraction.	Counts 1 (pg. 39-46), Workbook 1A (pg.36-38).	
Week 11 13/3 – 18/3	3.4 Reduction of a fraction to its lowest terms. 3.5 Comparing fractions.	1. Reduce a given fraction to its lowest term. 2. Determine which of two given fraction is larger. 3. Arrange two or more fractions in order of size.	Counts 1 (pg. 44-49), Workbook 1A (pg. 39)	
Week 12 18/3 – 25/3	TERM 1 HOLIDAYS			
Week 13 27/3 – 1/4	3.6 The four operations on fractions.	1. Perform the four operations on fraction with / without using a calculator.	Counts1(pg. 49-57) Wkbk 1A (pg. 40-	

			42).	
Week 14 3/4 – 8/4	3.7 Combined operations on fractions.	1. Perform mixed operations including the use of brackets involving not more than two different operations. 2. Solve simple word problems involving fractions.	Counts 1 (pg. 57, 60-62).	
Week 15 10/4 – 15/4	Topic 4. DECIMALS 4.1 Place Values. 4.2 Order of decimals. 4.3 The four operations on decimals. 4.3.1 Addition and Subtraction.	1. State any place value of any digit in a decimal. 2. Arrange decimals in ascending or descending order using a number line and by comparing digits. 3. Perform addition and subtraction of decimals with / without using calculator.	Counts 1 (pg. 68-71, 79-84), Workbook 1A (pg. 58-60)	
Week 15/16 15/4 – 22/4	REVISION TEST & CORRECTIONS			
Week 16/17 22/4 – 29/4	4.3.2 Multiplication and Division	1. Perform multiplication and division on decimals with / without using a calculator (multiply and divide a decimal by a power of 10). 2. Perform combined operations involving decimals (with / without calculator). 3. Solve simple word problems involving decimals.	Counts 1 (pg. 85-98).	
Week 18 1/5 – 6/5	4.4 Fractions and decimals. 4.4.1 Convert fraction to decimal. 4.4.2 Convert decimal to fraction.	1. Convert a decimal to a fraction and vice versa.	Counts 1 (pg. 72-77)	
Week 19 8/5 – 13/5	REVISION WEEK			
Week 20/21 15/5 – 27/5	MID-YEAR EXAMINATION			
Week 21/22 27/5 – 3/6	4.5 Approximation. 4.5.1 Round off to the nearest given place value. 4.5.2 Round off to a given number of decimal places . 4.5.3 Round off to a given number of significant figures.	1. Round off a number to the nearest whole number, tenth, hundredth or thousandth. 2. Round off decimal numbers to a given number of decimal places. 3. Round off decimal numbers to a given number of significant figures.	Counts 1A (pg. 99-101, 105-107)	
Week 23 5/6 – 10/6	4.6 Estimations. Topic 5. MEASURES AND MONEY 5.1 S I Units. 5.2 Length. 5.2.1 Convert between units of	1. Use rounding off techniques to estimate a given expression involving (with / without calculator). 2. Use prefixes and symbols of the S I Units in relation to the units of measure. 3. Measure length in mm, cm, m and km using some common instrument.	Counts 1(pg. 110-112, 127-131),	Go to Exercise W5A (Workbook 1A pg 72).

	length.	4. Perform conversion between units of length.		
Week 24/25 12/6 – 24/6	TERM 2 HOLIDAYS			
Week 26 26/6 – 1/7	5.2.2 Addition and Subtraction involving units of length. 5.3 Mass. 5.3.1 Convert between units of mass. 5.3.2 Addition and Subtraction involving g and kg.	1. Perform subtraction and addition involving mm, cm, m and km. 2. Give examples of some common instruments to measure mass. 3. Perform conversion between units of mass involving kg and g. 4. Perform addition and subtraction involving kg and g.	Counts 1 (pg. 137-138)	Go to Exercise W5C (Workbook 1A pg. 74).
Week 27 3/7 – 8/7	5.4 Capacity. 5.4.1 Convert between units of capacity. 5.4.2 Addition and Subtraction involving millilitre and litre. 5.5 Time. 5.5.1 The 12-hour and the 24-hour time notation.	1. Give examples of some common instruments to measure capacity. 2. Perform conversion between units of capacity (millilitre and litre). 3. Perform addition and subtraction involving millilitre and litre. 4. Give some examples of some instruments to measure time. 5. Express and convert time from the 12-hour time notation to the 24-hour time notation and vice versa.	Counts 1 (pg. 139-140 & 125), Workbook 1A (pg. 76 & 78)	
Week 28 10/7 – 15/7	5.5.2 Convert between units of time. 5.5.3 Addition and Subtraction involving units of time.	1. Perform conversion between units of time involving second, minute and hour. 2. Perform addition and subtraction of time.	Counts 1 (pg. 124-125), Workbook 1A (pg. 77)	
Week 29 17/7 – 22/7	5.6 Money. 5.6.1 Convert \$ to ¢ and vice versa. 5.6.2 Addition and Subtractions. 5.7 Word problems. Topic 6. INTRODUCTION TO ALGEBRA 6.1 Algebraic concepts and notations. 6.2 Algebraic Expressions.	1. Use the symbol ¢ and \$ to represent cost. 2. Perform the addition and subtraction involving the use of ¢ and \$. 3. Solve simple word problems involving length, mass, capacity, time and money. 4. Represent unknown by symbols and letters. 5. Write basic arithmetic processes algebraically. 6. Identify the variables, terms, coefficients, and constants, like terms and unlike terms in algebraic expression.	Counts 1 (pg. 116-119, 146 & 149-150), Workbook 1A (pg. 82-84),	
Week 30 24/7 – 29/7	6.3 Simplify algebraic expressions. 6.3.1 Collecting like terms. 6.3.2 Multiplication and Division.	1. Simplify algebraic expressions involving addition and subtraction by collecting like terms. 2. Simplify algebraic expressions involving multiplication and division.(exclude the removal of brackets at this level)	Counts 1 (pg. 150-152), Workbook 1A (pg. 85-86), Secondary Math (pg. 184-185)	

Week 31 31/7 – 5/8	REVISION WEEK			
Week 31/32 3/8 – 12/8	MONTHLY TEST 2 & CORRECTIONS			
Week 32/33 10/8 – 19/8	6.4 Evaluation of algebraic expressions. 6.5 Linear Equations.	1. Find the value of simple algebraic expression by substitution, given values of variable (exclude expressions with brackets). 2. Solve simple linear equation in one variable (exclude equations involving fractional and decimals coefficients and brackets).	Counts 1A (pg. 147-148), Workbook 1A (pg. 86,) Counts 2 (pg. 80-81, 85)	
Week 34 21/8 – 26/8	Topic 7. INTRODUCTION TO GEOMETRY 7.1 Angles and angle properties. 7.1.1 Types of angle. 7.1.2 Symbols for angles. 7.1.3 Measure and draw an angle. 7.2 Angles formed with common vertex.	1. Recognise different types of angles : acute, right, obtuse, straight and reflex angles. 2. Use the following symbols for angles: ➤ \angle or \wedge for $\angle ABC$ or $\hat{A}BC$ ➤ \perp right angles ➤ x° for x degrees. 3. Apply the following properties of angles: ➤ Measure and draw angles using protractor. ➤ Find unknown angles on a straight line. ➤ Find unknown vertically opposite angles. ➤ Find unknown angles at a point. (include the use terms complementary and supplementary angles)	Counts 1 (pg. 197-218)	Use geo-strip to demonstrate the different angles. Include paper folding activities to help students explore and come to an understanding of the angle properties.
Week 35 28/8 – 31/8	7.3 Parallel lines and Perpendicular lines 7.4 Angles formed with parallel lines. 7.5 Simple Constructions.	1. Identify parallel and perpendicular lines. 2. Use the symbols \parallel and \perp to denote parallel and perpendicular lines respectively. 3. Calculate unknown angles involving corresponding, alternate and interior angles. 4. Apply the properties of the above mentioned angles to solve problems. 5. Use a protractor, a set-square, a ruler and compasses to construct: -angle equal to a given angle, -angle bisectors, -perpendiculars, -perpendicular bisectors, and -parallel lines.	Counts 1 (pg. 221, 224-225 & 227-230)	Use paper folding activities to illustrate perpendicular and parallel lines.

Week 35/36 2/9 – 9/9	TERM 3 HOLIDAYS			
Week 37 11/9 – 16/9	Topic 8. POLYGONS 8.1 Triangles 8.1.2 Types of triangle. 8.1.3 Angle properties of a triangle.	1. Identify the types of triangles : equilateral, isosceles, scalene, right-angled, acute-angled, and obtuse-angled. (use the following geometrical terms: points, perpendicular, right angle, acute angle, obtuse angle, base angles, interior and exterior angles in describing these figure) 2. Calculate unknown angles using angle properties of triangle such as: <ul style="list-style-type: none"> ➤ sum of the interior angles of a triangle, ➤ angles of an equilateral triangle, ➤ base angles of an isosceles triangle and, ➤ exterior angle of a triangle. 	Counts 1 (pg. 235-240) Workbook 1B (pg. 24-25)	Do Activity 9-1 & 9-2 (workbook 1B pg. 28-29)
Week 38 18/9 – 23/9	8.1.4 Constructing triangles. 8.2 Quadrilaterals 8.2.1 Types of quadrilateral.	1. Construct triangles given: <ul style="list-style-type: none"> ➤ its three sides, ➤ two angles and an included side and, ➤ two sides and an included angle. 2. Identify and name quadrilaterals: square, rectangle, parallelogram, rhombus, trapezium and kites. (use the following geometrical terms to describe these figure: points, line, plane, parallel, perpendicular, right angle, complementary angle, supplementary angles, interior angles, diagonals and vertices)	Counts 1 (pg. 241-242 & 244)	Do Activity 9-3 (workbook 1B pg. 30)
Week 39 25/9 – 30/9	8.2.2 Angle properties of quadrilateral. Topic 9. STATISTICS 9.1 Collecting, processing and tabulating data. 9.2 Read and interpret data.	1. State and apply the angle properties to determine unknown angles of: <ul style="list-style-type: none"> ➤ square, ➤ rectangle, ➤ parallelogram, ➤ rhombus ➤ kite and, ➤ trapezium. 2. Collect, process and tabulate data including frequency distribution table. 3. Read and interpret data in the form of tables and charts including frequency tables.	Counts 1 (pg. 244)	

Week 40 2/10 – 7/10	9.3 Bar Graph. 9.4 Pictogram.	1. Display data in the form of bar graph and pictogram.	Counts 1 (pg. 313-325)	
Week 41/42 9/10 – 19/10	REVISION WEEKS			
Week 42/43 21/10–28/10	RAMADHAN & HARI RAYA AIDILFITRI HOLIDAYS			
Week 44 30/10–31/10	REVISION WEEK			
Week 44-46 1/11 – 13/11	END OF YEAR EXAMINATION			
Week 46 13/11–18/11	REVIEW ON FINAL YEAR EXAM PAPERS			
Week 47/48 20/11–30/11	MATHS PROJECT / ACTIVITIES / QUIZ			
Week 48-52 2/12 – 31/12	TERM 4 HOLIDAYS			