



### Course Description

Subject: Mathematics 3

Code: MA 13101

5 periods /Week

5.0 Credits

Class: Primary 3A-B

Semester 1-2 / 2014

Instructor: Mr.Ariel, Ms. Chanpen

Unit	Standard	Indicators
1. Numbers up to 100,000 1.1 Reading and writing up to 100,000 (ASEAN) 1.2 Comparing and ordering number 1.3 Number patterns	M.1.1  M.1.1  M.4.1  M.6.1	P.3/1 Write and read Hindu-Arabic and Thai numerals and written forms showing quantity of objects or cardinal numbers not exceeding 100,000 and 0.  P.3/2 Compare and arrange sequence of cardinal numbers not exceeding 100,000 and 0.  P.3/1 Tell the numbers and relation pattern of numbers that increases by 3s, 4s, 25s, and 50s, and decrease by 3s, 4s, 5s, 25s, and 50s and in repeated patterns.  P.3/1 Apply diverse methods for problem-solving
2. Addition and subtraction within 100,000 2.1 Addition 2.2 Subtraction 2.3 Using addition and subtraction to solve word problems (local)	M.1.2  M.1.2  M.6.1	P.3/1 Add, subtract, multiply, divide and mix addition and subtraction of cardinal numbers not exceeding 100,000 and 0 as well as be aware of validity of the answers.  P.3/2 Analyse and show method of finding answers to problems and mix-problems of cardinal numbers not exceeding 100,000 and 0 as well as be aware of validity of the answers.  P.3/2 Appropriately apply mathematical knowledge, skills and process for problem-solving in various situation.

Unit	Standard	Indicators
3. Length 3.1 Measuring & Comparing length (Botany) 3.2 Solving word problem involving length	M.2.1  M.2.2  M.6.1	P.3/1 Tell length in metres, centimeters and millimeters by using appropriate measuring tools, and compare length.  P.3/1 Solve problem involving measurement of length, weight, volume, money and time.  P.3/3 Suitably provide reasoning for decision-making and appropriately present the conclusions reached.
4. Mass 4.1 Measuring & Comparing Mass 4.2 Solving word problem involving mass	M.2.1  M.2.2  M.6.1	P.3/2 Tell weight in kilograms and grams by using appropriate weighting machine, and compare weights.  P.3/1. Solve problem involving measurement of length, weight, volume, money and time.  P.3/4 Accurately use mathematical language and symbols for communication, communication of concepts and presentation.
5. Multiplication 5.1 Multiplication of a 1-digit number by 2-4 digit number 5.2 Multiplication of a 2-digit number by 2 digit number 5.3 Using multiplication to solve word problem	M.1.2  M.1.2  M.6.1	P.3/1 Add, subtract, multiply, divide and mix addition and subtraction of cardinal numbers not exceeding 100,000 and 0 as well as be aware of validity of the answers  P.3/2 Analyse and show method of finding answers to problems and mix-problems of cardinal numbers not exceeding 100,000 and 0 as well as be aware of validity of the answers.  P.3/5 Link various bodies of mathematical knowledge, and link mathematics with other disciplines.

Unit	Standard	Indicators
<p>6. Division</p> <p>6.1 Dividing a 2-digit dividend by a 1-digit divisor</p> <p>6.2 Dividing a 2-4digit dividend by a 1-digit divisor using long division</p> <p>6.3 Using division to solve word problem</p>	<p>M.1.2</p> <p>M.1.2</p> <p>M.6.1</p>	<p>P.3/1 Add, subtract, multiply, divide and mix addition and subtraction of cardinal numbers not exceeding 100,000 and 0 as well as be aware of validity of the answers</p> <p>P.3/2 Analyse and show method of finding answers to problems and mix-problems of cardinal numbers not exceeding 100,000 and 0 as well as be aware of validity of the answers.</p> <p>P.3/6 Attain ability for creative thinking.</p>
<p>7. Combined Operation</p> <p>7.1 Results of combined operation</p> <p>7.2 Using combined operation to solve word problems</p>	<p>M.1.2</p> <p>M.1.2</p>	<p>P.3/1 Add, subtract, multiply, divide and mix addition and subtraction of cardinal numbers not exceeding 100,000 and 0 as well as be aware of validity of the answers</p> <p>P.3/2 Analyse and show method of finding answers to problems and mix-problems of cardinal numbers not exceeding 100,000 and 0 as well as be aware of validity of the answers.</p>

Unit	Standard	Indicators
8. Volume 8.1 Measuring & Comparing Volume 8.2 Solving word problem involving volume	M.2.1  M.2.2  M.6.1	P.3/3 Tell volume and capacity in litres and millilitres by using appropriate measuring tools, and compare weight and capacity by using the same units.  P.3/1 Solve problems involving measurement of length, weight, volume, money and time.  P.3/1 Apply diverse methods for problem-solving
9. Time 9.1 Reading & Writing Time 9.2 Calendar &Diary 9.3 Solving word problem involving time	M.2.1  M.2.1  M.2.2  M.2.2	P.3/4 Tell the time on a clock dial (period of 5 minutes); read, write, and tell the time by using numerals.  P.3/5 Tell the relationship between measuring units for length, height and time  P.3/1 Solve problems involving measurement of length, weight, volume, money and time.  P.3/ 3 Read and keep record of activities or events, specifying the time.
10. Money 10.1 Reading & Writing an amount of money using a dot 10.2 Solving word problem involving money 10.3 Statement of incomes and expenses	M.2.1  M.2.2  M.2.2  M.6.1	P.3/6 Read and write amount of money by using numerals.  P.3/1 Solve problems involving measurement of length, weight, volume, money and time.  P.3/2 Read and keep record of income and expenditure.  P.3/2 Appropriately apply mathematical knowledge, skills and process for problem-solving in various situation.

Unit	Standard	Indicators
11. Data, Pictograms and Bar Charts 11.1 Collecting & organizing Data 11.2 Pictograms and Bar Charts	M.5.1  M.5.1 M.6.1	P.3/1 Collect and categorize data about oneself and the surroundings in daily life.  P.3/2 Read data from simple pictograms and bar charts  P.3/3 Suitably provide reasoning for decision-making and appropriately present the conclusions reached.
12. Geometric Shapes 12.1 2-D and 3-D geometric shapes 12.2 Polygon & Non polygon 12.3 Lines of symmetry 12.4 Shape Pattern	M.3.1  M.3.1  M.3.2  M.3.2  M.4.1  M.6.1	P.3/1 Identify two-dimensional geometric figures that are components of an object in the form of three-dimensional geometric figure.  P.3/2 Identify two-dimensional geometric figures with axis of symmetry from a given figure  P.3/1 Draw two-dimensional geometric figures given in various models.  P.3/2 Identify various geometric figures in the surroundings.  P.3/2 Identify the form and relations in pattern in which form are related in two of the following respects: shape, size or color.  P.3/4 Accurately use mathematical language and symbols for communication, communication of concepts and presentation.
13. Points, lines, Line segments, Rays and Angles 13.1 Points, lines, Rays 13.2 Line segments, Intersecting Point 13.3 Angles	M.3.1  M.3.2  M. 3.2  M.6.1  M.6.1	P.3/3 Write linear points, straight lines, rays, part of straight line, angles and symbols.  P.3/1 Draw two-dimensional geometric figures given in various models.  P.3/2 Identify various geometric figures in the surroundings  P.3/5 Link various bodies of mathematical knowledge, and link mathematics with other disciplines  P.3/6 Attain ability for creative thinking.

## Measurement and Evaluation

Total 100 Marks (Classroom assessment 60: Mid-term / Final 40)

Measurement and Evaluation	Assessments/Evaluation	Assessments tool	Marks	Standard : Indicator
1 Pre-Midterm	Assignment, Test	RUBIC, Questionnaires	25	<b>Semester1</b> M.1.1 P.3/1,P.3/2 M.4.1 P.3/1 M.1.2 P.3/1,P.3/2 <b>Semester2</b> M.2.1 P.3/3,P.3/4 M. 2.1 P.3/5 M.2.2 P.3/1, P.3/2
2. Midterm	Examination	Test paper	20	<b>Semester 1</b> M.1.2 P.3/1,P.3/2 M.2.1 P.3/1,P.3/2 M.2.2 P.3/1 <b>Semester2</b> M.2.1 P.3/5 M.2.2 P.3/1, P.3/2
3. Pre-Final	Assignment, Test	RUBIC, Questionnaires	25	<b>Semester 1</b> M.1.2 P.3/1,P.3/2 <b>Semester2</b> M.3.1 P.3/1, P.3/2 M.3.2 P.3/2 M.5.1 P.3/1

Measurement and Evaluation	Assessments/Evaluation	Assessments tool	Marks	Standard : Indicator
4. Final	Examination	Test paper	20	<b>Semester 1</b> M.1.2 P.3/1,P.3/2 <b>Semester2</b> M4.1 P.3/2 M.5.1 P.3/2
5. Desirable Characteristics	Participation, Behavior	Assessments tool for observation	10	Desirable
6. Competencies	Observation	Assessments tool for Observation	-	1.Communication capacity 2.Thinking capacity 3.Problem-solving capacity, 4.Capacity for apply life skills 5. Capacity for technological application
7. reading/thinking/writing	Assignment, Observation	Assessments tool for assignment and observation	-	

### คุณลักษณะอันพึงประสงค์ 10 ข้อ

1. รักชาติ ศาสน์ กษัตริย์
2. ซื่อสัตย์สุจริต
3. มีวินัย
4. ใฝ่เรียนรู้
5. อยู่อย่างพอเพียง
6. มุ่งมั่นในการทำงาน
7. รักความเป็นไทย
8. มีจิตสาธารณะ
9. ปลอดภัยเสพติดและอบายมุข
10. มีความเป็นผู้นำและกล้าแสดงออก

### สมรรถนะ 5 ข้อ

1. ความสามารถในการสื่อสาร
2. ความสามารถในการคิด
3. ความสามารถในการแก้ปัญหา
4. ความสามารถในการใช้ทักษะชีวิต
5. ความสามารถในการใช้เทคโนโลยี