| **วิชา(Subject) .... Mathematics (PSLE)....****ช่วงชั้น (Level) …1 (P.1-3)…..****20 weeks(2 periods/week): Teaching 36 periods and Examination 4 periods** |
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| **ชั้นประถมศึกษาปีที่ 1 (Primary 1)** | **ชั้นประถมศึกษาปีที่ 2 (Primary 2)** | **ชั้นประถมศึกษาปีที่ 3 (Primary 3)** |
| **1** | **2** | **3** | **4** | **5** | **6** |
| **ภาคเรียนที่ (Semester) 1** | **ภาคเรียนที่ (Semester) 2** | **ภาคเรียนที่ (Semester) 1** | **ภาคเรียนที่ (Semester) 2** | **ภาคเรียนที่ (Semester) 1** | **ภาคเรียนที่ (Semester) 2** |
| 1. **Numbers to 10 (2 periods)**
	1. Counting to tell the number of objects in a given set
	2. Reading and writing numbers in numerals and in words
	3. Comparing the number of objects in two or more sets
	4. Comparing and ordering numbers
	5. Word problems
	6. Patterns in number sequence
2. **Number Bonds (2 periods)**
	1. Putting a set of objects into two or more groups in different ways
	2. Making number bonds
	3. Word problems
	4. Identifying as many number bonds as possible with a given number
3. **Addition within 10 (2 periods)**
	1. Adding using number bonds
	2. Differentiating parts within a whole from a number sentence/picture
	3. Adding two and three numbers
	4. Writing addition sentences
	5. Solving word problems
	6. Adding doubles
4. **Subtraction within 10 (2 periods)**
	1. Subtract two numbers
	2. Word problems
5. **Addition and Subtraction within 10 (2 periods)**
	1. Add and Subtract two numbers
	2. Word problems
6. **Numbers to 20 (4 periods)**

6.1. Count to 206.2. Count forward and backward6.3. Write the numbers in numerals and in words6.4. Compare and order the numbers1. **Addition and Subtraction within 20 (4 periods)**
	1. Add and subtract within 20
	2. Word problems
2. **Numbers to 50 (4 periods)**
	1. Counting to 50
	2. Place value
	3. Comparing, ordering and pattern recognition
3. **Addition within 50 (4 periods)**
	1. Adding within 50
	2. Word problems
4. **Subtraction within 50 (4 periods)**
	1. Subtract within 50
	2. Word problems
5. **Length (3 periods)**
	1. . Comparing things
	2. . Measuring things
	3. . Word problems
	4. . Finding length in units
6. **Shapes and Patterns (3 periods)**
	1. Recognizing and naming 2-dimensional (2D) shapes from pictures and objects around us
	2. Comparing and classifying 2D shapes
	3. Counting shapes within figures
	4. Identifying outline of 2D shapes from 3D objects
	5. Completing patterns with 2D shapes/according to one or two of the following attributes (Shape, Size, Color and Orientation(direction))
	6. Word problems
	7. Guessing the name of a shape through feature descriptions of the shapes
	8. Forming a whole 2D shape from cut-out pieces

***\*\*(Total 36 periods )\*\****  | 1. **Numbers to 100 (4 periods)**

13.1. Counting to 10013.2. Place value13.3. Comparing, ordering and pattern recognition1. **Ordinal Numbers (3 periods)**
	1. Reading and writing ordinal position in numbers and words
	2. Identifying the positions of objects with prepositions ’before’, ’after’ and ‘between’
	3. Recognizing the direction (left and right) of objects within a set
	4. Word problems
2. **Addition within 100 (3 periods)**
	1. Add number within 100
	2. Word problems
3. **Subtraction within 100 (4 periods)**
	1. Subtract number within 100
	2. Word problems
4. **Multiplication (4 periods)**
	1. Understand the meaning of multiplication as repeated addition
	2. Write multiplication sentence
	3. Multiply numbers whose product is not greater than 50
	4. Solve simple word problems
5. **Division (4 periods)**
	1. Sharing
	2. Grouping
	3. Word problems
6. **Mental Calculations (2 periods)**
	1. Mental addition and subtraction
7. **Time (4 periods)**

20.1. Period of time (morning, noon, afternoon, evening, night, day)20.2. To tell the time in o’ clock and half past20.3. Days of the week20.4. Months of the year1. **Money (4 periods)**
	1. Getting to know our money
	2. Telling the amount of money
	3. Addition and subtraction
	4. Word problems
2. **Picture Graphs (3 periods)**
	1. Read and interpret picture graphs
	2. Make picture graph of given data.

**\*\*(Total 36 periods )\*\*** | 1. **Numbers to 1000** **(2 periods)**
	1. Recognizing place values and number notation
	2. Reading and writing numbers in numerals and in words
	3. Identifying place values
	4. Comparing and ordering numbers
	5. Counting in tens/hundreds
	6. Identifying number patterns
	7. Word problems
2. **Addition within 1000 (2 periods)**
	1. Addition with regrouping in ones
	2. Addition with regrouping in tens
	3. Addition with regrouping in tens and ones
	4. Simple addition within 1000
	5. Word problems
3. **Subtraction within 1000 (2 periods)**
	1. Subtraction with regrouping in tens and ones
	2. Subtraction with regrouping in hundreds and tens
	3. Subtraction with regrouping in hundreds, tens and ones
	4. Subtraction with numbers containing zeros
	5. Word problems
4. **Addition and Subtraction up to 1000 (3 periods)**
	1. Word problems
5. **Using Models: Addition and Subtraction (3 periods)**
	1. Understanding Part-Whole Models
	2. Solving word problems using Part-Whole Models
	3. Solving word problems using Comparison Models
	4. Word problems
6. **Multiplication Tables of 2 and 3 (3 periods)**
	1. Building up of multiplication tables of 2 and 3
	2. Multiplication and division of numbers within multiplication tables
	3. Word problems
7. **Multiplication Tables of 4, 5 and 10 (3 periods)**
	1. Building up of multiplication tables of 4, 5 and 10
	2. Multiplication and division of numbers within multiplication tables
	3. Word problems
8. **Multiplication and Division (5 periods)**
	1. Multiplication using pictorial/abstract approach
	2. Two-step word problems involving addition and multiplication
	3. Two-step word problems involving the four operations
	4. Division by sharing using pictorial approach
	5. Division using abstract approach
	6. Two-step word problems involving the four operations
	7. Understanding relationship between multiplication and division sentences
9. **Length (3 periods)**
	1. Estimating the length of objects
	2. Using measurement units and their abbreviations: metres (m) and centimetres (cm)
	3. Measuring the length of objects in metres and centimetres
	4. Comparing lengths of different objects
	5. Addition and subtraction of lengths
	6. Multiplication and division of length
	7. Solving word problems involving length
10. **Mass (3 periods)**
	1. Measuring mass in grams and kilograms
	2. Addition and subtraction of mass
	3. Multiplication and division of mass
	4. Comparing mass
	5. Solving word problems involving mass
11. **Volume (3 periods)**
	1. Estimation and measurement of volume of liquid in litres
	2. Comparing volumes
	3. Volume involving the four operations
	4. Solving word problems involving volume
12. **Revision (4 periods)**

***\*\*(Total 36 periods )\*\**** | 1. **Mental calculation (2 periods)**
	1. Mental addition
	2. Mental subtraction
2. **Money (5 periods)**
	1. Counting money in dollars and cents
	2. Money conversion
	3. Addition and subtraction
	4. Comparing amounts of money
	5. Solving word problems involving money
3. **Fractions (6 periods)**
	1. Understanding fractions
	2. Comparing and ordering fractions with similar denominators
	3. Heuristics: Draw a diagram
	4. Addition of like fractions
	5. Subtraction of fractions
	6. Addition and Subtraction of fractions
	7. Solving word problems involving fractions
4. **Time (5 periods)**
	1. Conversion of time
	2. Reading and writing time
	3. Learning a.m. and p.m.
	4. Measuring time in hours
	5. Time taken in hours and minutes
5. **Picture Graphs (5 periods)**
	1. Reading and interpreting picture graphs with scales
	2. Solving problems using information presented in picture graphs
	3. Making picture graphs
6. **Lines, Curves and Surfaces (4 periods)**
	1. Identifying straight lines and curves
	2. Identifying flat and curved surfaces of 3-D objects
	3. Constructing figures using straight lines and curves
	4. Constructing figures using straight lines and curves on dot grid
7. **Shapes and Patterns (5 periods)**
	1. Identifying semicircles and quarter circles that make up a given figure
	2. Identifying basic shapes that make up a given 2-D figure
	3. Identifying basic shapes that make up a given 2-D figures with cut-outs of basic shapes
	4. Identifying basic shapes that make up a given 3-D figures with cut-outs of basic shapes
	5. Identifying and counting identical basic shapes that make up a given 2-D figures
	6. Copying figures on dot grid
	7. Completing patterns of 2-D figures
	8. Looking for number patterns within patterns of 2-D figures
	9. Using shapes to represent unknown numbers
	10. Evaluating number sentences by substitution
8. **Revision (4 periods)**

***\*\*(Total 36 periods )\*\**** | 1. **Whole Numbers (3 periods)**
* Number notation and place values
* Reading and writing numbers in numerals and in words
* Comparing and ordering numbers
* Number patterns
* Word problems
1. **Addition (3 periods)**
* Simple addition of numbers within 10 000
* Addition of numbers within 10 000 with regrouping
* Word problems
1. **Subtraction (3 periods)**
* Simple subtraction of numbers within 10 000
* Subtraction of numbers within 10 000 with regrouping
* Word problems
1. **Multiplication (4 periods)**
* Associate ’product’ with multiplication
* Multiplication tables of 6, 7, 8 and 9
* Multiplication without regrouping
* Multiplication with regrouping
* Word problems
1. **Division (5 periods)**
* Associate ‘quotient’ and ‘remainder’ with division
* Divide numbers by 6, 7, 8 and 9
* Division without remainder and regrouping
* Division with remainder and regrouping
* Word problems
1. **Money (3 periods)**
* Convert satang to baht and vice versa
* Count coins and bill/ notes
* Write money in decimal notation
* Add and subtract money in compound units using decimal notation
* Word problems

**7. Bar Graphs (2 periods)*** Reading and interpreting bar graphs in horizontal and vertical forms
* Read and interpret scales
* Complete bar graph from a given data
* Word problems

**8. Time (4 periods)*** Telling time
* Measure in hours (h) and minutes (min)
* Conversion of hours and minutes
* Tell and write time to 1 minute
* Find the start/finish time
* Find the duration of a time interval
* Add and subtract time
* Word problems

**9. Fractions (6 periods)*** Recognize and name equivalent fractions
* Write the equivalent fraction of a fraction, given its numerator or denominator
* Express a fraction in its simplest form
* Comparing fractions with respect to half
* Compare and order unlike fractions
* Add and subtract 2 related fractions
* Word problems

**10. Word Problems (3 periods)*** Addition and subtraction of numbers
* Multiplication and division of numbers
* Four operations of numbers

**11.** **Revision (4 periods)*****\*\*(Total 40 periods )\*\**** | **12. Length (3 periods)*** Measure in metres (m) and centimetres (cm) and Kilometres (km)
* Measure length in compound units
* Compare lengths or distances
* Convert measurement in compound units to the smaller unit, vice versa (kilometres and metres; metres and centimetres)
* Add and subtract length
* Multiply and divide length
* Word problems

**13. Mass (3 periods)*** Measure in grams (g) and kilograms (kg) Measure mass in compound units
* Convert measurement in compound units to the smaller unit, vice versa (kilograms and grams)
* Add and subtract mass
* Multiply and divide mass
* Word problems

**14. Volume** **(3 periods)*** Measure in millilitres (ml) and litres (l) Measure volume of liquid in compound units
* Compare volumes or capacities
* Convert measurement in compound units to the smaller unit, vice versa (litres and millilitres)
* Add and subtract volume of liquids
* Multiply and divide volume of liquids
* Word problems

**15. Angles (3 periods)*** Understanding angles
* Identifying angles
* Right angles, Obtuse angles, and Acute angles
* Word problems

**16. Lines (2 periods)*** Perpendicular lines
* Parallel lines
* Word problems

**17. Geometry -2D shapes ( 4 periods )*** Plane figures
* Sides and vertices
* Faces, edges, and corners
* 2D shapes in real life

**18. Geometry -3D shapes ( 6 periods )*** Curved and plane faces
* Straight and curved edges
* Cylinder and Cube
* Triangular prism and pyramid
* Sphere and Cone
* Cube and cuboid

**19. Perimeter (3 periods)*** Perimeter of a plane figure
* Perimeter of a square and rectangle
* Word problems

**20. Area (3 periods)*** Counting square units
* Area of a square and rectangle
* Word problems

**21. Mental Calculations**  **(4 periods)*** Mental addition
* Mental subtraction
* Mental addition and subtraction
* Mental multiplication and division
* Solving multi-step word problems

**22. Revision (3 periods)*****\*\*(Total 40 periods )\*\**** |