Math

Syllabus: Grade 3

Rationale for Learning Mathematics

*Gain an appreciation for the important role mathematics plays in modern society.

*Develop enough mathematical literacy to enable students to function at their maximum potential in a modern economy.

*Develop the ability to estimate solutions, compute accurately, assess the reasonableness of their answers, and reason logically and critically.

Class Rules:

1. Arrive on time, prepared, and ready to learn
2. Respect yourself and others
3. Make friends and be thoughtful
4. Take turns speaking and listening
5. Say Please and Thank you
6. Try your best!

Math Strands

The Palau mathematics curriculum framework is organized under the following 5 STRANDS, or content themes, that run across grades 1 through 12.

1. Number Sense, Properties, and Operations
2. Unit Systems and Measurement
3. Spatial Sense and Geometry
4. Data, Statistical Analysis, and Probability
5. Patterns, Functions, and Algebra

Math Resources and Materials

Grade 3 Primary Math Textbooks (Singapore math textbooks aligned to U.S) Volume A & B

Computation of Letter Grade:

- 90%-100%. ..... A
- 80%-89%. ..... B
- 70%-79%. C
- 65%-69%. ..... D
- 0%-64%. ..... F

Methods of Evaluation:

Quarterly grade for Grade 1-8 is based on :

A. 85% = Class Average
   * Class Average = 70% Test + 30% Other Components such as quizzes, group works, classwork, homework, self-assessments, experiments/demonstrations/research/project

B. 15% = Quarter Exam

Strand/Topics	Grade 3
Number Sense, Properties, and Operations	• Read and write numbers to 10,000 using base-ten numerals, number names and expanded form (example: 30,000+6,000+700+50+2 = 36,752) • Identify place values for numbers from 1 to 10,000 and use manipulative materials to represent packages of ones, tens, hundreds, and thousands, or a combination of these. • Round whole numbers to the nearest 10, 100 or 1000 using place value understanding. • Compare and order numbers in the range of 100 or 1000 based on meanings of the hundreds, tens, and ones digits, and use the symbols >, =, and < to record the results of comparisons. • Explain the rule for determining if a number from 1 to 10,000 is even or odd number of objects/members, and express an even number as a sum of two equal addends. • Skip-count within 10,000 by 2s, 3s, 4s, 5s, 10s, 100s, and by 1000s. • Mentally add, subtract by 10, 100, or 1000, given a number from 1 to 9999, without having to count. • Add and subtract within 10,000 using strategies based on place value (column addition or subtraction), properties of operations, and/or the relationship between addition and subtraction. • Add up to four 2-digit numbers using strategies based on place value and properties of operations. • Solve addition and subtraction problems in expanded notation, with and without regrouping, or using concrete models, drawings and other strategies based on place value, properties of operations. • Multiply a whole number of up to 2-digits by a 1-digit whole number. • Determine the unknown whole number in a multiplication or division equation relating three whole numbers. • Determine the unknown whole number in a multiplication or division equation relating three whole numbers. Multiply 1-digit whole numbers by multiples of 10 in the range 10-90 using strategies based on place value and properties of operations. • Multiply or divide within 100 to solve word problems in everyday situations involving equal groups, arrays, and measurement quantities. • Find and interpret the quotient of a multi-digit dividend and a 1-digit divisor, with and without a remainder, in situational contexts. • Solve two-step word problems using the four operations, including an equation with an unknown quantity, and using mental computation and estimation strategies to assess "reasonableness" of the answer. • Model division as a missing multiplicand or an unknown-factor problem using base-10 blocks
Unit Systems and Measurement	• Measure and estimate lengths, mass, capcity of objects using U.S. customary units or metric system. • Must be able to use ruler to measure objects in the classroom or home. • Describe at least three different methods used traditionally in Palau to measure length, volume, and weight. • Express measurements in a larger unit in terms of a smaller unit, and record measurement equivalents in a two-column table. • Tell and write time from analog and digital clocks to the nearest hour or minute, using *a.m.* and *p.m.* Measure and find the duration and relative magnitude of a time interval by adding or subtracting time in hours and minutes.
Spatial Sense and Geometry	• Identify both 2-D shapes and 3-D solids using specified attributes, such as a given number of angles or a given number of equal faces. • Identify different shapes that create figure. • Manipulate 3-D solids (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite figure, and compose new shapes from the composite shape.

Strand/Topics	Grade 3
Data, Statistical Analysis, and Probability	• Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. • Draw a picture graph, line graph, and a bar graph (with single-unit scale) to represent a data set with up to four categories, where the horizontal scale is marked off in whole-number units. • Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. • Draw a scaled picture graph, bar graph, and line graph to represent a data set, organized into several categories, where the horizontal scale is marked off in appropriate units.