

# Math

## Syllabus: Grade 2

<b>Rationale for Learning Mathematics</b>  *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.	<b>Class Rules:</b>  <ol style="list-style-type: none"><li>1. Arrive on time, prepared, and ready to learn</li><li>2. Respect yourself and others</li><li>3. Make friends and be thoughtful</li><li>4. Take turns speaking and listening</li><li>5. Say Please and Thank you</li><li>6. Try your best!</li></ol>
<b>Math Strands</b>  The Palau mathematics curriculum framework is organized under the following 5 STRANDS, or content themes, that run across grades 1 through 12.  <ol style="list-style-type: none"><li>1. Number Sense, Properties, and Operations</li><li>2. Unit Systems and Measurement</li><li>3. Spatial Sense and Geometry</li><li>4. Data, Statistical Analysis, and Probability</li><li>5. Patterns, Functions, and Algebra</li></ol>	<b>Math Resources and Materials</b>  Grade 2 Primary Math Textbooks (Singapore math textbooks aligned to U.S) Volume A & B  <b>Computation of Letter Grade:</b>  <ul style="list-style-type: none"><li>• 90%-100%. ..... A</li><li>• 80%-89%. ..... B</li><li>• 70%-79%. ..... C</li><li>• 65%-69%. ..... D</li><li>• 0%-64%. ..... F</li></ul> <b>Methods of Evaluation:</b> 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 2
<b>Number Sense, Properties, and Operations</b>	<ul style="list-style-type: none"> <li>• Read and write numbers using base-ten numerals, number names and also expanded form (example: <math>2000+300+50+4 = 2,354</math>)</li> <li>• Count to 1000, start at any number less than 1000.</li> <li>• Identify place values for numbers from 1 to 1000 and use manipulative materials to represent packages of ones and tens or their combinations.</li> <li>• Round whole numbers to the nearest 10 or 100 using place value understanding.</li> <li>• Compare and order numbers in the range of 1 to 1000 based on meanings of the hundreds, tens, and ones digits, and use the symbols <math>&gt;</math>, <math>&lt;</math>, and <math>=</math> to record the results of comparisons.</li> <li>• Identify even or odd number of objects/members (from 1 to 1000) by pairing or matching objects or by counting them by 2s, and express an even number as a sum of two equal addends.</li> <li>• Skip count within 1000 by 2s, 3s, 4s, 5s, 10s and by 100s.</li> <li>• Mentally add or subtract 10 or 100, given a number from 1 to 999, without having to count.</li> <li>• Add and subtract within 1000 using concrete models (e.g. base-ten blocks), counters, or drawings, and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</li> <li>• Solve two-step word problems using the four operations, including an equation with an unknown quantity, and using mental computations and estimation strategies to assess “reasonableness” of the answer.</li> <li>• Illustrate and explain multiplication of 2-digit by 2-digit numbers by using equations, materials, and repeated addition on the number line, rectangular arrays, and/or area models.</li> <li>• Model division of two 1-digit whole numbers using materials, on the number line, and using successive subtraction.</li> <li>• Find and interpret the quotient of a 2-digit dividend and 1-digit divisor, with and without a remainder, in situational contexts involving the sharing model and concrete objects.</li> </ul>
<b>Unit Systems and Measurement</b>	<ul style="list-style-type: none"> <li>• Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</li> <li>• Describe at least 3 different methods used traditionally in Palau to measure length, volume, and weight.</li> <li>• Must be able to use ruler to measure objects in the classroom or home.</li> <li>• Compare, estimate, and measure the weight using units of ounces, pounds, grams, and kilograms.</li> <li>• Find the different combination of coins that make up 25 cents, 50 cents, and dollar bill.</li> <li>• Solve word problems involving addition and subtraction of money (within \$10), in dollar bills, quarters, dimes, and pennies, using \$ and ¢ symbols appropriately.</li> </ul>
<b>Spatial Sense and Geometry</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Identify different shapes that create figure.</li> <li>• 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.</li> </ul>
<b>Data, Statistical Analysis, and Probability</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.</li> <li><input type="checkbox"/> 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.</li> </ul>