

NAPARIMA COLLEGE

SCHEME OF WORK

MATHEMATICS

Form 1 Term1 2017 – 2018

Week	Topic	Objectives	Strategy
1	Whole Numbers	Students are expected to: <ul style="list-style-type: none"> <li>• Explain the historical development of the denary system.</li> <li>• Sequence the number names and numerals up to 999 999 999</li> <li>• State and place the value of each digit in a numeral up to 999 999 999.</li> <li>• Round numbers to the nearest tens, hundreds, thousands and up to millions.</li> <li>• Estimate a given quantity of items using 100 as a benchmark.</li> <li>• Differentiate between or among                             <ul style="list-style-type: none"> <li>(a) rectangular, triangular and square numbers.</li> <li>(b) Factors and multiples of numbers</li> <li>(c) Odd and even numbers.</li> <li>(d) Prime and composite numbers.</li> <li>(e) Square numbers and their square roots.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Use technology tools to conduct research and provide information about the origin of numbers.</li> <li>• Use technology tools to represent the position of numbers.</li> <li>• Independent practice.</li> <li>• Cooperative learning to describe patterns observed and explain rules.</li> </ul>
2	Whole Numbers	Students are expected to: <ul style="list-style-type: none"> <li>• Calculate the LCM and HCF of a set of numbers.</li> <li>• Solve problems involving whole numbers.</li> </ul>	<ul style="list-style-type: none"> <li>• Problem solving</li> <li>• Independent practice</li> </ul>
3.	Statistics	Students will be able to: <ul style="list-style-type: none"> <li>• Formulate a problem to be investigated or formulate questions that can be addressed via statistical data.</li> <li>• Collect discrete data to address the problem</li> <li>• Tally ungrouped data into a frequency table.</li> <li>• Construct pictographs and block graphs to represent data collected.</li> <li>• Interpret pictographs and block graphs.</li> <li>• Draw conclusions from block and pictographs.</li> <li>• Find the mode for the data taken from frequency table.</li> </ul>	<ul style="list-style-type: none"> <li>• Cooperative learning</li> <li>• Use of technology to conduct research and create data displays</li> <li>• Independent practice</li> <li>• Guided instruction</li> </ul>

Week	Topic	Objectives	Strategy
4	Solids and Plane Shapes	<p>Students are expected to:</p> <ul style="list-style-type: none"> <li>Classify the different solids according to their properties.</li> <li>Draw the net of a solid.</li> <li>Create a solid using its net.</li> <li>Classify polygons according to their properties.</li> <li>Create patterns involving tessellations of plane shapes.</li> <li>Solve problems involving solids and plane shapes.</li> </ul>	<ul style="list-style-type: none"> <li>Cooperative learning</li> <li>Use technology to draw and display shapes</li> <li>Discussion about solids constructed.</li> <li>Independent practice.</li> </ul>
5, 6 & 7	Algebra	<p>Students are expected to:</p> <ul style="list-style-type: none"> <li>Investigate varying quantities.</li> <li>Distinguish between variables and constants.</li> <li>Use symbols to represent variables.</li> <li>Translate word statements into mathematical expressions.</li> <li>Substitute whole numbers for variables in expressions.</li> <li>Identify like and unlike terms.</li> <li>Simplify algebraic expressions involving the four operations.</li> <li>Simplify algebraic expressions using the distributive law.</li> </ul>	<ul style="list-style-type: none"> <li>Use of technology tools.</li> <li>Use questioning to develop various concepts.</li> <li>Cooperative learning.</li> <li>Guided practice</li> <li></li> </ul>
8	Sets, Relations and Functions	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>Classify a set by describing and naming the set.</li> <li>Define sets by listing the elements or describing them in words.</li> <li>Apply knowledge of classification to divide a set into a given number of subsets.</li> <li>Distinguish among empty, equal, equivalent, finite and infinite sets.</li> <li>Describe the concepts of universal set, complement of a set, union of sets, subsets and disjoint sets.</li> <li>Use Venn diagram to represent the relationships between two sets.</li> </ul>	<ul style="list-style-type: none"> <li>Discussion</li> <li>Cooperative learning</li> <li>Direct Instruction</li> <li>Guided practice</li> </ul>
9	Introducing Measurements	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>Explain the need for standard units of measures.</li> <li>Distinguish between standard and non-standard units of measures.</li> <li>Compare equivalent measures qualitatively, between metric and imperial systems.</li> <li>Compare the metric systems with the denary system to determine the relationships between the sub-units of the metric system.</li> <li>Measure length using appropriate and different instruments.</li> <li>Convert linear measure from one unit to another.</li> <li>Solve problems using lengths.</li> </ul>	<ul style="list-style-type: none"> <li>Discussion</li> <li>Cooperative learning</li> <li>Direct Instruction</li> <li>Guided practice</li> </ul>

