

**UNIT GRAPHIC ORGANIZER**



**SUBJECT:** Mathematics

**UNIT:** 2

**GRADE:** Second

**TEACHERS:** Estefanía González, Karen Arias

**DATE:** April 15th of 2024

**SUBTRACTION, MULTIPLICATION, UNITS OF LENGTH AND CAPACITY**

**THROUGHLINES:**

1. How can I apply subtraction algorithm with two and three-digit numbers?
2. When can I represent multiplicative structures in order to solve real life problems?
3. Is it simple to understand the correct multiplication algorithm?
4. Can I use length units in order to measure different objects in house and school?
5. How many ways can I measure liquids?
6. Have you ever imagined our planet without water?

**GENERATIVE TOPIC**



**UNDERSTANDING GOALS:**

The student will differentiate when to use subtraction using place value chart and evidencing the four steps of see, plan, do and check, remembering that addition and subtraction are inverse operations to represent problem situations.	The student will identify the conceptual understanding of multiplication, representing multiplicative structures using repeated addition, skip counting on the number line, and arrays to get a solution solving exercises from the book to find the correct algorithm.	The student will understand how to multiply using concrete materials like counters and number lines to discover patterns in multiplication algorithm through solution of real-life word problems.	The student will comprehend how to use the metric units in order to measure various attributes of different objects using rulers that indicate centimeters, millimeters and whole inches, making it easy to compare different objects.	The student will recognize how to use the capacity units to recognize different ways to measure liquids applying measurement ideas to liquid volume through the use of drawings of beakers containing liquid and marked with milliliter/liter measurement scales.
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	<b>UNDERSTANDING PERFORMANCES</b>	<b>TIME</b>	<b>ASSESSMENT</b>	
	<b>ACTIONS</b>		<b>WAYS</b>	<b>CRITERIA</b>
<b>Exploration Stage</b>	<ul style="list-style-type: none"> <li>• To model subtraction algorithm.</li> <li>• To solve problems.</li> <li>• To make groups to relate them with multiplication.</li> <li>• To understand skip counting.</li> <li>• To identify the different capacity units.</li> <li>• To describe the measurable characteristics of different objects around.</li> </ul>	<b>2 Weeks</b>	<ul style="list-style-type: none"> <li>• Modelling multiplication exercises using manipulative materials.</li> <li>• Identifying situations that need multiplicative process to find a solution making the relationship between addition and multiplication.</li> <li>• Using standard and no standard tools in order to compare the length.</li> <li>• Using different containers to identify the capacity units from the biggest to the smallest.</li> </ul> <p><b>SYNTHESIS PROJECT ADVANCE:</b></p> <ul style="list-style-type: none"> <li>• Showing the objectives of the project</li> <li>• Introducing the characters of the project; Rango and Ranita by groups of 5 students.</li> </ul>	<ul style="list-style-type: none"> <li>• To understand and follow instructions using basic math concepts.</li> <li>• To relate quantities and sequences through processes such as classification, deduction and counting.</li> </ul>
<b>Guided Stage</b>	<ul style="list-style-type: none"> <li>• To recall that addition and subtraction are inverse operations and use that relationship to check answer and to represent problem situations.</li> <li>• To remember place -value concepts when they regroup during subtraction.</li> <li>• To solve problems according to different kind of multiplicative structures.</li> <li>• To identify the appropriate process in order to solve different kind of</li> </ul>	<b>3 Weeks</b>	<ul style="list-style-type: none"> <li>• Using the Progress 3 Book and counters to solve subtraction exercises with whole numbers.</li> <li>• representing the appropriate use of subtraction algorithms through pictures with the solving problem process (see – plan – do – check).</li> <li>• Solving the exercises and problems from the book and guidebook.</li> <li>• Solving different subtraction using manipulative material.</li> <li>• Solving problems, reasoning and communicative competence.</li> <li>• using metric units through the appropriate manipulation of the rules.</li> </ul>	<ul style="list-style-type: none"> <li>• To interiorize cognitive skills those allow them to develop the logic math though.</li> <li>• To participate actively during the classes.</li> </ul>

	<p>multiplicative structures.</p> <ul style="list-style-type: none"> <li>To estimate length</li> </ul> <p>To organize the capacity units according to the different used containers.</p>		<ul style="list-style-type: none"> <li>Working on multiplication representations with drawings and numbers.</li> <li>Identifying and solving problem situations using the algorithm required to find a solution.</li> <li>Reporting the measure of length using standard tools.</li> </ul> <p><b>SYNTHESIS PROJECT ADVANCE</b></p> <p>Creating the mathematics' stage where students will apply multiplication and units of capacity to create friendly dynamics of the use of water in the school environment.</p>	
<p><b>Learning Evidence</b></p>	<p><b>RANGO AT THE WATER'S MUSEUM:</b> this project will seek to answer the question: <b>Have you ever imagined our planet without water?</b></p> <p>Through diverse dynamics focused on the care and proper use of the water in the school environments. This STEM project will include the subjects: Technology, Science, Spanish, Arts, Math, English, PDH, Music, Geography, History, Physical education.</p>	<p>3 Weeks</p>	<ul style="list-style-type: none"> <li>Creating a stage in the Rango in the water's museum, applying the topics of multiplication and units of capacity to create friendly dynamics of the use of water in the school environments.</li> </ul>	<ul style="list-style-type: none"> <li>To demonstrate comprehension of the topics learnt the correct presentation of them</li> </ul>

