**UNIT GRAPHIC ORGANIZER**

**SUBJECT**: Mathematics **UNIT**: 2 **COURSE**: Second Grade

**TEACHER**: Adriana Romero, Paola Bustacara and Mercy Moreno **DATE**: April 13th 2021

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

**TITLE**:

**THROUGHLINES**:

1. How can I apply subtraction algorithm with three digit numbers?
2. How can I solve problems applying subtraction algorithms?
3. How can I represent multiplicative structures in order to real life problems?
4. How can I use length units in order to measure different objects in house and school?
5. How many ways can I measure liquids?
6. H

**GENERATIVE TOPIC**

**MEASURE CIRCUS!**

**UNDERSTANDING GOALS:**

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| The student will comprehend when to use subtraction according to the structure of a problem, keeping in mind the correct process to get a solution. | The student will understand how to represent multiplicative structures to find the correct algorithm using arrays to get a solution. | The student will understand how to apply multiplication algorithm in a real context using concrete materials like counters. | The student will understand how to use the metric units in order to measure length using standard tools. | The student will understand how to use the capacity units in order to recognize different ways to measure liquids. |

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|  | UNDERSTANDING PERFORMANCES | TIME | ASSESSMENT | |
|  | **ACTIONS** |  | **WAYS** | **CRITERIA** |
| **Exploration**  **Stage** | * To model subtraction algorithm in real word problems. * To solve problems identifying key words about subtraction of three digits numbers. * To make groups of elements to relate them with multiplication (arrays). * To describe the measurable characteristics of different objects in the classroom. * To recognize the different capacity units to store liquids using different containers. | **Weeks 2** | * Using the Sadlier Math Workbook and digital tool to solve subtraction exercises with whole numbers. * Modeling multiplication exercises using figures and clay with manipulative materials. * Identify problems that need multiplicative process to find a solution. * To represent the appropriate use of subtraction algorithms through pictures with the solving problems process (See-Plan-Do-Check) * Using standard tools in order to compare the length of some students. * Using different bottles to identify the capacity units to the biggest to the smallest. | To understand and follow instructions using basic math concepts.  To relate quantities and sequences through processes such as classification, deduction and counting. |
| **Guided**  **Stage** | * Solving problems according to different kind of multiplicative structures. * To solve problems using subtraction algorithm through didactic money. * To identify the appropriate process in order to solve different kind of multiplicative structures. * To estimate length using metric units through the appropriate manipulation of rules. * To organize the capacity units according to the different containers used. | **Weeks 3** | * Solving the exercises and problems from the book and guide. * Using flash cards, color numbers cards and place value blocks. * Solving different subtraction using manipulative material. * Solving exercises and the problem of the day in the digital tool. * Working on multiplication representations with drawings and numbers. * Analyse problem situations to identify the algorithm required to find a solution * Reporting the measure of length using standard tools.   **Synthesis Project Advance**  Students are going to create a circus considering the members of their family as characters and using measure units of length to measure them. | To interiorize cognitive skills those allow them to develop the logic math though.  To participate actively during the classes |
| **Learning**  **Evidence** | To develop the project “Measure Circus”, the students will design a circus where the typical characters of the circus are going to be measure considering metric units worked in class. | **Weeks 3** | * The teacher and students are going to make a list of the different characters seen in a circus (including animals and the cast in general). * The student will cut and paste different animals from the circus like elephant, tiger, lion, horse etc.). Then, they will analyse the best unit of length to measure each animal. Using the ruler, the students will measure each animal paste in their notebooks. * After that, students will give a character from the circus to each member of their family. There are going to paste a picture from each member, and they will give the character to each one (they must include themselves). Ex: mom- juggler, dad- trapeze artist, brother- contortionist. etc. * Finally, with a meter, students will measure each member of their family and they will present the project to their partners. | To demonstrate comprehension of the topics learnt the correct presentation of them. |