



UNIT GRAPHIC ORGANIZER

SUBJECT: Mathematics

UNIT: 4

COURSE: 4th Grade

TEACHER: Yenny Amaya, Cristina Contento

DATE: September 12th/ 2022

TITLE: LINE PLOTS – MASS AND CAPACITY UNITS – TRIANGLES CLASSIFICATION - PATTERNS AND RELATIONS – COORDINATE PLANE

THROUGHLINES:

1. When is the moment to use a line plot?
2. How can I differentiate the units of mass and capacity?
3. What are the different types of triangles?
4. How can I use patterns in a real-life situation?
4. How can I use the Cartesian plane?

GENERATIVE TOPIC:



UNDERSTANDING GOALS:

The student will plot different data to organize collected information from charts, surveys and other word problems, identifying and describing the step by step in an oral way.	The student will interpret and convert customary units of capacity and mass to solve different quotidian situations by solving algorithms, representing them in graphic sketches.	The student will classify triangles according to the measurements of their sides and their angles to express the way in which they are related to some elements of the environment, identifying them in artistic creations.	The student will observe and recognize the basic unit which generates the pattern, while making predictions and logical connections by using reasoning skills to solve them everywhere in the daily life, as well as representing them.	The student will design graph points on a Coordinate plane through coordinate pairs to identify the components of the coordinate plane, representing them in graphics sketches and basic examples.
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	UNDERSTANDING PERFORMANCES	TIME	ASSESSMENT	
	ACTIONS		WAYS	CRITERIA
Exploration Stage	<ul style="list-style-type: none"> • To develop a data collecting activity. • Introduce how line plots organize information. • To represent how to weight different elements. • To develop comparisons among the different units of capacity. • To compare and describe different triangle and represent them with angles. • To use patterns to explain to connect with predictions. • To graph ordered pairs on the Cartesian plane. 	2 weeks	<ul style="list-style-type: none"> • Using a special chart for the information collected in the survey. • Watching a video. • Use a weighting scale to compare the units of mass. • Using Plastic containers. • Watching a video to understand the units of capacity. • Doing the comparison of units of mass with weighing scales. • Using straws to practice the angles, as well as protractor. • Working on the book, guide, and notebook. • Using grid paper to represent ordered pairs on a plane. a video to understand the units of length. • To use grid paper to draw the complete coordinate plane. calculate the area with a cube made of cardboard. <p>-Synthesis project: socializing the name of the project, as well as its topic and steps. Making the cover with the most important information.</p>	<ul style="list-style-type: none"> • To understand and follow instructions using basic math concepts. • To relate quantities and numerical symbols through process such as classification, deduction and counting.
Guided Stage	<ul style="list-style-type: none"> • To collect data in a line plot. • To estimate weight of real objects and places' mass. • To solve problems involving measurement capacity conventions. • To represent triangles according to their features. • To practice patterns representation. • To explain what a coordinate plane is and describe its characteristics. • To model and design graphs on a Cartesian plane. 	3 weeks	<ul style="list-style-type: none"> • Using some collected data to place them on the graphic. • Using pictures to show objects and places. • Using straws and protractor to differentiate triangles features. • Using manipulative material to make a scalene triangle, equilateral triangle, and isosceles triangle. • Using some numerical information to be applied in problems. • Using pictures to locate in a Cartesian Plane. • Using graphics and numbers to stablish sequences. • Working on the Guide, book, and notebook. <p>-Synthesis project: the students are going to create a cartesian plane in a special grid paper and they are going to divide it in the four quadrants.</p>	<ul style="list-style-type: none"> • To interiorize cognitive skills those allow him/her to develop the logic math though. • To participate actively during the classes.
Learning Evidence	<ul style="list-style-type: none"> • To develop the project "Coordinate Park" to involve the topic of cartesian plane, as well as some mass and capacity exercises with the elements of the park. Likewise, they are going to use their creativity to decorate the park and explain each order pair. 	2 weeks	<ul style="list-style-type: none"> • Writing the mass of different elements in the park, as well as the capacity of containers used in the cafeteria. Additionally, they are going to decorate the park. • Verifying their activities and they are going to present their work to the class. 	<ul style="list-style-type: none"> • To demonstrate comprehension of the topics learnt through the correct presentation of them.