UNIT GRAPHIC ORGANIZER

SUBJECT: Mathematics **UNIT**: 4 **COURSE**: 5th Grade

TEACHER: Ibeth Becerra – Juanita Ramirez- Raúl Cubides **DATE**: September 9th / 2019

Volume of Solids, Integers and Statistics

THROUGHLINES:

1. How can you use integers to solve real-world problems?
2. How do you identify positive and negative numbers?
3. How can you interpret and analyze quantitative data from statistical graphs?
4. How do you find the volume of a rectangular prism?
5. How can you get the surface area and volume of several kinds of solids?

GENERATIVE TOPIC

The importance of being Positive, Negative or Neutral Number!

UNDERSTANDING GOALS:

The student will understand the concept of integers and Identify their opposites by using a number line or manipulatives.	The student will comprehend how to organize integers and compare them through the position on the number line.	The student will comprehend how to get the mean, median, and mode of a set of data by analysing, and summarizing information.	The student will understand how to interpret numeric data by using histograms, and box plots.	The student will understand the concept of volume and surface area of composite solids by using nets and the appropriate formulas.

	UNDERSTANDING PERFORMANCES	TIME	ASSESSMENT	
	ACTIONS		**WAYS**	**CRITERIA**
Exploration Stage	-To show a video to introduce the integers numbers and their application in real-world situations. https://www.youtube.com/watch?v=x0E4vxLydNY -To discuss about how integers can be represented in real situations like climate, temperature, and elevations. - To play with manipulatives to represent integers.	**Weeks 1**	Discussing about how integers represent quantities in different contexts. ***Synthesis project progress*** ** The teacher is going to explain what the project is about and divide the students into groups.*	Oral interaction.
Guided Stage	-To provide situations which students can represent real-world quantities such as temperatures, elevations, and gains and losses of money with positive and negative integers. To find the opposite of an integer. - To draw a number line to compare and order integers and getting their absolute value. -To use graphical representations of numeric data to describe the center, spread, and shape of a data distribution. -To represent numeric data graphically including histograms and some kinds of bar diagrams. - To identify the volume of rectangular prisms by using the appropriate formula.	**Weeks 6**	Working on the number line to stablish the difference between whole numbers and their opposites. Stablishing the mean, median, and mode of a set of data by using graphs and tables. Understanding the concept of volume by building boxes to fill them with cubes. ***Synthesis project progress.*** ** The teacher is going to provide students of nets so that they can build different kind of prisms.*	Proposing and solving problems with specific process. Arguing the resolution of math problems. Drawing accurate representations by using appropriate measures and materials.
Learning Evidence	**SYNTHESIS PROJECT** The students are going to apply the concept of volume by making square, rectangular and hexagonal prims with the purpose of building spaceships.	**Weeks 1**	***Synthesis project*** ** The student will bring the solids that they have done in order to join them and building a spacecraft.*	Synthesizing the main topics as a product