



UNIT GRAPHIC ORGANIZER

SUBJECT: Science

UNIT: 4

COURSE: Fourth

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The matter is inside and outside of me.

THROUGHLINES:

Does my body have atoms?
 Do I have mixtures in my body?
 Why do some things float?
 How can I be a scientist?

GENERATIVE TOPIC

“Journal of my experiments”

UNDERSTANDING GOALS:

The students will recognize the importance of the atom and relate it with properties, changes of matter through experiments.	The students will comprehend the characteristics of mixtures and their methods of separation to identify mixtures from their daily life.	The students will analyze different experiments using the steps of scientific method and writing lab reports to make a journal.
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	UNDERSTANDING PERFORMANCES	TIME	ASSESSMENT	
	ACTIONS		WAYS	CRITERIA
Exploration Stage	<ul style="list-style-type: none"> - To identify the general and specific characteristics of an atom. - To relate the properties, states, and changes of matter through experiments 	Weeks 2	<p>Brainstorming Listening different ideas about the atom and then Watching videos the students will make a map with the information. https://www.youtube.com/watch?v=BvYiMnRN_A https://www.youtube.com/watch?v=R1RMV5qhwyE</p> <p>Vocabulary practice Characterizing different objects made of several materials using a chart with the intensive and extensive properties of matter.</p> <p>Synthesis project (1st sketch)</p> <p style="text-align: center;">“Journal of my experiments”</p> <p>Practicing the steps of the scientific method, using daily and everyday situations about properties of matter, mixtures, separation of mixtures and density.</p>	<p>-To know the relation between atoms, matter, and properties.</p>

<p>Guided Stage</p>	<ul style="list-style-type: none"> - To analyse the characteristic of the different types of mixtures. - To describe the different types of mixtures and their separation methods. 	<p>Weeks 3</p>	<p>Mixtures scientific laboratory Will make different objects to observe the differences between the homogeneous and heterogeneous mixtures. They will have to evaluate and analyze the procedure, observation to perform a laboratory report based on the scientific method.</p> <p>Methods of separation scientific laboratory With diverse methods they will have to separate objects like metal fillings with salt, water and oil, flour, among others.</p> <p>Synthesis project (2nd sketch)</p> <p style="text-align: center;">“Journal of my experiments”</p> <p>Students are going to report all experimental laboratories in the guide of science. Teacher is going to explain the progress and preliminary results of the experiments. It includes in detail, materials, the observations, data, and obstacles in the development of the experiments.</p>	<p>To answer questions with different valid arguments about types of mixtures.</p> <p>To establish differences, description, explanation, and benefits of separation of mixtures</p>
<p>The Learning Evidence</p>	<ul style="list-style-type: none"> - To understand the concepts of mass and volume as well as relating them in everyday situations. - To analyse the property of density and its characteristics. 	<p>Weeks 3</p>	<p>Volume, capacity, mass, and weight Identifying different objects to measure mass, weight, volume, and capacity as well as making bar graphs that represent these measures.</p> <p>Density scientific laboratory Making a laboratory using different objects and liquids to understand how the density affects the matter. The students will have to apply the scientific method to understand the concept of DENSITY.</p> <p>Animated Videos: Watching videos about density answering why do some things float? and doing mathematical and experimental determination of density of several objects</p> <p>SYNTHESIS PROJECT</p> <p style="text-align: center;">“Journal of my experiments”</p> <p>Making an oral presentation about different experiments, explaining what they learned about how to get answers following the steps of scientific method and why is important to research?</p>	<p>To establish differences between volume, capacity, mass, and weight using graphs</p> <p>To answer questions with different valid arguments about density.</p>