

UNIT GRAPHIC ORGANIZER SUBJECT: SCIENCE UNIT: 2 COURSE: SEVENTH

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FECHA: APRIL 9th / 2025

TITLE:

Balancing Health

THROUGHLINES:

- 1. What are the different types of nutrients and why are they essential for our body?
- 2. How do the kidneys, bladder, and urinary tract work to maintain bodily function?
- 3. How do oxides, hydroxides, oxo-acids, hydracids, and salts fit into the broader classification of inorganic compounds?
- 4. What are intrinsic properties, and how do they help us identify substances?



UNDERSTANDING GOALS:

Students will identify different	Students will understand the	Students will e
nutrient groups through a starch	different types of inorganic	and extrinsic p
detection lab in various foods,	compounds, including oxides,	understanding
understanding their contribution to	hydroxides, acids, and salts, and	the classificati
maintaining health and	analyze their impact on human	through a skill
documenting their findings in a lab	health and the environment by	
report.	conducting a workshop on acid rain.	
	Students will identify different nutrient groups through a starch detection lab in various foods, understanding their contribution to maintaining health and documenting their findings in a lab report.	Students will identify different Students will understand the nutrient groups through a starch different types of inorganic detection lab in various foods, compounds, including oxides, understanding their contribution to hydroxides, acids, and salts, and maintaining health and analyze their impact on human documenting their findings in a lab health and the environment by report.

Students will explore the intrinsic and extrinsic properties of matter, understanding their importance in the classification of substances, through a skills workshop.

	UNDERSTANDING PERFORMANCES	TIME	ASSESSMENT	
	ACTIONS		WAYS	CRITERIA
Exploration Stage	 Identify different nutrient groups and their importance 	3 WEEKS	Design and build models of food groups, highlighting their nutritional properties and importance for a balanced diet.	Use specific vocabulary such as carbohydrates, proteins, fats, vitamins, and minerals - Explain the relationships between these compounds and their applications in health or biology.
	 Investigate how diseases and care practices impact biological systems. Categorize various 		Developing molecular models of oxides, hydroxides and acids, identifying their structure and relating them to their chemical properties. Synthesis project stage 1	
	inorganic compounds and their properties	Stage 1: Explain to the students how the project will be carried out. Initially, the Sustainable Development Goal #7 Affordable and clean energy will be discussed in detail. Additionally,		

	students will be organized in groups of 5 or 6 students and they are going to make a research about wind, solar and chemical energy.	

	Investigate the effect of			
	evercise and hydration	2		
		3 WEEKS	Planning a healthy diet to benefit one or	
	on numan nealth	MEERO	more body systems	
Guided Stage				
			Conducting simple experiments to	
			observe changes in the properties of	
			matter	
	Differentiate between			Record observations in
	intrinsic and extrinsic			data tables and graphs,
	nroperties			highlighting results in
				nhysical and mental health
				•
				Discuss observations and
				classify materials based on
				their intrinsic or extrinsic
				properties
			Synthesis project stage 2	
			Students are going to create the	
			questions, reasons, objectives and check	
			the notes on a field journal. Additionally.	
			students will create interviews taking	
			into account the topics seen in science	
			cocial studios, Spanish, English, Franch	
			moth physical advantian arts and	
			math, physical education, arts and	
			technology.	

Learning Evidence	Analyze how measure hydration levels or exercise impact on health	2 WEEKS	Writing a laboratory report or observation log detailing the findings. Explaining the function and structure of the system/model.	Accuracy of observatio ns, clarity of data presentati on, and understan ding of cause and effect in experimen ts. Accurate portrayal of compound s, their properties, and their role in human systems.
	Analyze the relevance on inorganic compounds' to health Synthesis Project Green energy, better life To create a prototype of clean energy using recyclable material and taking into account the social context of the country with respect to renewable energy		Presentation or poster on inorganic compounds' relevance to health. Students create and play games that test knowledge of topics. Synthesis project stage 3 Students will begin with the first part of the prototype. By the end of the term, they will present the sketch of their prototype giving an oral presentation with the completed field journal and fully complete interviews. The project presentation will be conducted collectively with all the students, where they will present their prototype to their classmates.	