



UNIT GRAPHIC ORGANIZER
SUBJECT: SCIENCE **UNIT:** 4 **COURSE:** SEVENTH

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**BODY'S SYSTEMS AND
 FEEDBACK MECHANISMS**

THROUGHLINES:

Why do we sweat?
 Why does our body suffer so many changes in puberty?
 What happens if a child does too much exercising weights daily?
 How are the bones repair when they break?

GENERATIVE TOPIC



UNDERSTANDING GOALS:

<p>The student will understand the characteristics and functions of the muscular and skeletal systems of the human body and their relation with biophysics throughout schemes in order to analyze why a sporty life is important for our health.</p>	<p>The student will comprehend the feedback mechanisms and homeostasis processes that occur in the human body through drawings and charts to analyze why having healthy habits is important for our health.</p>	<p>The student will analyze the kinetic energy and gravity force involved in the movement of the human body by analyzing different body positions in sports in order to understand the mechanics of our body.</p>
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	UNDERSTANDING PERFORMANCES	TIME	ASSESSMENT	
	ACTIONS		WAYS	CRITERIA
Exploration Stage	<p>To recognize the levels of organization that exist in the human body.</p> <p>To identify the main structures that compose the skeletal and muscular systems.</p> <p>To comprehend the main functions of skeletal and muscular systems</p>		<p>Extracting information from a video about the levels of organization that exist in the human body and create a mind map in the notebook.</p> <p>Identifying information from some images about the structures that make up the skeletal and muscular systems using scientific language.</p> <p>Modeling the skeletal and muscular system with its main parts and functions using different materials in class.</p> <p>Analyzing some graphs on calcium levels at different ages and its incidence in diseases such as osteoporosis.</p> <p>Synthesis Project: stage one</p> <p>Planning the logistics of the product elaboration. Taking into account the inventory control by identifying existing and required recycling materials for the product elaboration.</p> <p>The groups will determine the functions of the logistics area and the product elaboration plan. Besides, they will have ready all the requirements to begin a product process</p>	<p>Searches for information in different sources choosing correctly.</p> <p>Identifies the language of science in a proper way.</p>

<p>Guided Stage</p>	<p>To understand and represent the feedback mechanisms and homeostasis processes that take place inside of the human body.</p>	<p>3 W E E K S</p>	<p>Watching a video in order to identify the main feedback mechanisms and homeostasis processes that take place inside the human body and create a comparative chart in class.</p> <p>Analyzing the feedback mechanisms that regulate the levels of carbohydrates and other important compounds in the human body using a virtual simulator "Body Control Center by PBS media online".</p> <p>Arguing through contextualization activity of problem situations, related to different homeostasis processes in the human body.</p> <p>Synthesis Project: stage two</p> <p>Each entrepreneurship will define the roles and stages of the product process and the operation plan, to be already to begin the elaboration of the product</p>	<p>Identifies variables that are related to the results of their experiments.</p> <p>Communicates its observations and conclusions throughout a science report</p>
<p>Learning Evidence</p>	<p>To analyze and argue the influence of gravity and energy in the movement of muscles and bones in sports</p>		<p>Analyzing the relationship of muscles, bones, ligaments, cartilage and joints, from the group relay exercise routine.</p> <p>Synthesis project: stage three</p> <p>A review of the functions and duties of the commercial area will be carried out. Preparation of the business stand and preparation of the project support. Revision and presentation of the entrepreneurship and product, support and revision of the complete manual for each member.</p>	<p>Proposes and argues answers to its own questions and compares them with its partners and scientific theories</p> <p>Communicates the results of their experiments using draws, schemes, charts, etc.</p>

