

## UNIT GRAPHIC ORGANIZER

SUBJECT: Science UNIT: 3 COURSE: 3° TEACHER: Ingry Cárdenas Parra- Paola Amarenco DATE: July 7th-2025

# Intraspecific and interspecific relationships, adaptation mechanisms and sound

- 1. How do living things relate to each other?
- 2. What would happen if a camel live in the ocean? Can survive?
- 3. How is the sound produced in musical instruments?

#### **GENERATIVE TOPIC:**

### UNDERSTANDING GOALS:

## LIFE IS COLORFUL

The students will represent different types of interspecific relationships (commensalism, amensalism, mutualism, parasitism and depredation) of organisms through emoji and the description of interactions in tables to explain how species evolve its relationships with others to survive.

The students will represent different types of intraspecific relationships (competence, territorially and gregariousness) of organisms through emoji and the description of interactions in tables to explain how species evolve its relationships with others to survive.

The students will explain the sound properties, through the creation of different noises and do a lab report using the scientific method to understand how the waves propagate.

	UNDERSTANDING PERFORMANCES T		ASSESSMENT	
	ACTIONS		WAYS	CRITERIA
Exploration Stage	<ul> <li>To describe how sound is produced.</li> <li>To recognize the differences and similarities between intraspecific and interspecific relationships.</li> </ul>	2 weeks	<ul> <li>Recognizing the main aspects of the environment by watching a video about the environment in Colombia.</li> <li>Playing with some activities like "hot potatoe" in order to recognize intraspecific and interspecific relationships.</li> <li>Reading a text about sound in order to identify the high frequency words.</li> <li>Watching a video to recognize animal's sounds and how propagate.</li> </ul> SYNTHESIS PROJECT STAGE 1: *Bearing in mind the big question: How can I use art to improve my mental and physical health in my social context? *Giving ideas and designing possible solution of how we can care the mental and physical health. *The groups will be organized in groups of 5 students with the roles proposed by the teachers.	<ul> <li>Knows and applies previous knowledge with the topic.</li> <li>Selects information to give answers.</li> <li>Identifies and uses scientific language.</li> </ul>
GuidedStage	<ul> <li>To describe how we perceive the colors.</li> <li>To classify volume, pitch and frequency in a sound.</li> <li>To understand what is the function of echolocation.</li> <li>To identify how organism are associated in an ecosystem.</li> </ul>	3 weeks	<ul> <li>Developing exercises from the guide.</li> <li>Classifying animals depends on the relationships in tables (guide).</li> <li>Choosing a biome to explain how intraspecific and interspecific relationships are related according to the environmental conditions and make a presentation.</li> <li>Making and analyzing bar graphs about growth and decreases of populations.</li> <li>Comparing symbiotic relationships in class based on daily situations using emoticons.</li> <li>Doing an experiment about how the sound travels using string.</li> </ul> SYNTHESIS PROJECT STAGE 2: The students will write down observation by asking how they feel (happy, angry, anxious and scared) each day in order to create graphs and comparative charts (collect data) to analyze its data at the end of the term.	<ul> <li>Establishes differences among description, explanation and evidence.</li> <li>Registers the information in order.</li> <li>Communicates their observations using scientific language.</li> </ul>
Learning Evidence	<ul> <li>To determinate and identify all the relations that can appear in an ecosystem in a funny and popular way.</li> <li>To argue their hypothesis, observations and conclusions about sound.</li> </ul>	3 weeks	SYNTHESIS PROJECT STAGE 3: The student will improve mental and physical health through art therapy activities integrated with STEAM (Science, Technology, art and Math), elements. Through creative workshops and experimental activities, emotional expression, self-awareness, fine motor skills, problem solving and collaboration will be encouraged. The student will analysis the previous data (how they feel (happy, angry, anxious and scared) each day) in order to make a comparison between graphs. They will identify the importance of the care our mental and physical health and keep in a "time capsule" to compare at the end of the term.	<ul> <li>Explains the results and conclusions.</li> <li>Proposes, designs and does experiences in order to prove the scientific knowledge.</li> </ul>