

## MICROBIAL OBSERVATORY PROJECT OF THE CABO ROJO SALINAS



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### HELP LILLIAM RESEARCH THE MICROBIAL TAPETS OF THE CABO ROJO SALINAS.

The **Microbial Observatory of Las Salinas of Cabo Rojo** studies the microbial mats of Cabo Rojo salt flats, which have communities of salt-loving microorganisms.



The Salinas of Cabo Rojo are in the southwest of the island of Puerto Rico.

What are **microbial mats**?

Microbial mats are ecosystems where different communities of microorganisms abound. These microorganisms help soil formation by forming carpet-like structures.

*REMEMBER THAT MICROORGANISMS ARE VERY SMALL ORGANISMS, DIFFICULT TO SEE WITH THE NAKED EYE.*

We present a photo of a microbial mat. If you look closely this mat is made up of several layers.

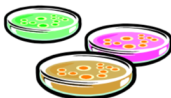
How many layers can you count? \_\_\_\_.

Can you name them? \_\_\_\_\_, \_\_\_\_\_,  
\_\_\_\_\_

In each of the layers you find different types of microorganisms. In the soil microorganisms find food and a place to reproduce and grow.



**Geomicrobiologists** study microorganisms and how they affect the formation of our planet. To study microorganisms they use specialized instruments and techniques such as:



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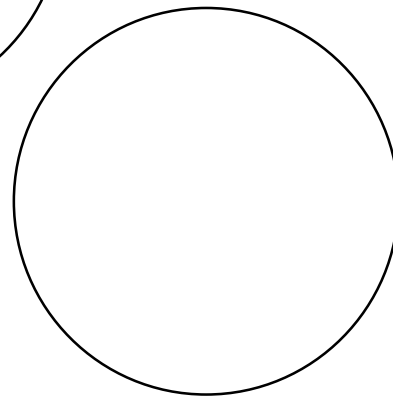
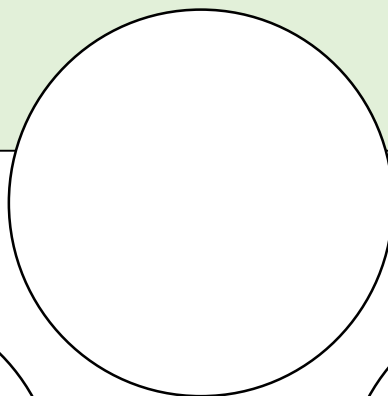
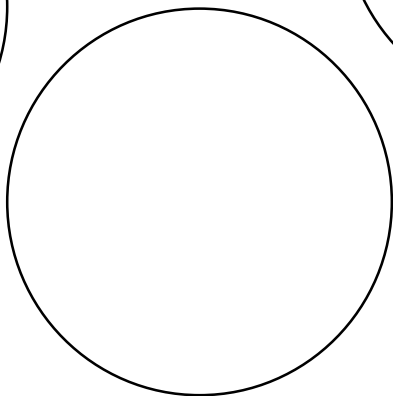
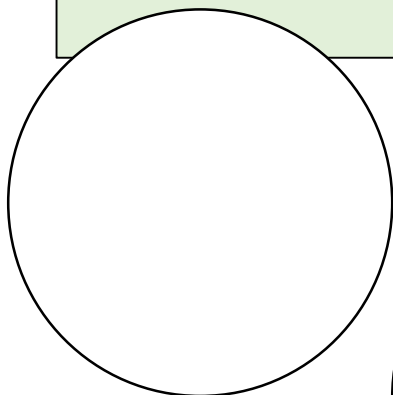
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**DISCOVER . . .**

Cyanobacteria are found in the green layer of microbial mats. These are bacteria that tend to gather together forming filaments. Some have chlorophyll, similar to plants, which gives them a green color. This bacterium exists in an environment with light and rich in oxygen. That's why we usually see it on the top of the microbial mat.

The filaments of these bacteria function as a network that traps sediments, particles and minerals. Look with a magnifying glass at a sample of the green cape, what do you see? Draw the different things you see in the green layer in the circles.



## ALPHABET SOUP

Find the following words in the word search.

1. microscope
2. archea
3. chlorophyll
4. bacteria
5. oxygen
6. salinas
7. seaweed
8. fungus

M	I	C	R	O	S	C	O	P	E	A	R
X	L	B	A	X	D	A	I	O	I	Y	S
A	P	O	I	Y	T	O	L	R	J	A	A
R	A	R	Q	G	U	I	E	I	O	F	L
C	D	O	E	E	N	T	C	A	N	Z	G
H	M	F	J	N	C	T	V	N	B	A	E
E	P	S	E	A	W	E	E	D	E	R	S
A	T	L	B	U	V	F	U	N	G	U	S
Z	C	H	L	O	R	O	P	H	Y	L	L

