



Geography | Biology | Mother language | Foreign language | Literature | History



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BIODIVERSITY



PEDAGOGIC CONTENT:

Ecosystem, Biodiversity, biotic factors, organisms, bacteria, habitat, abiotic factors, Mediterranean Sea

PRE-REQUISITES:

Knowledge of notions like:

Ecosystem, biodiversity, oxygen, nutrients, temperature, salinity, solar energy, substrate, aerial exposure, depth, tides, waves, currents.

Educator should introduce a vocabulary including items like:

ecosystems, abiotic factors, biotic factors, habitats, food chain, food web, for discussion with students.

NEW COMPETENCIES TARGETED/LEARNING OUTCOMES:

STUDENTS WILL BE ABLE TO :

- list abiotic and biotic factors of a marine ecosystems
- identify and describe abiotic factors and physical processes that impact marine ecosystems
- Investigate the importance of abiotic factors and physical processes within Mediterranean ecosystems.
- Describe and identify two examples of Mediterranean marine ecosystems
- Discover the effects of abiotic factors on aquatic/marine ecosystems
- list ways humans interact with and impact marine ecosystems
- Provide examples of abiotic and biotic factors of different marine Mediterranean habitats



EXPLORING A MEDITERRANEAN
MARINE ECOSYSTEM

ABIOTIC AND BIOTIC FACTORS
IN A MARINE ECOSYSTEM



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DESCRIPTION:

#1: Preparation phase (in classroom):

The educator should introduce to the students a vocabulary that includes elements such as: ecosystems, abiotic factors, biotic factors, habitats, food chain, food web.

#2: Students will divide in small groups and will search in internet or other resources (books, illustrations, guides, video galleries etc.) to provide examples of abiotic and biotic factors of different marine ecosystems in Mediterranean Sea.

(Students, could chose examples from different countries or from their native country at least 1-2 examples).

#3: Students, will create a poster or a ppt presentation to present their examples to the rest of the classroom and share with them the information.

#4: Students and educators discuss with an expert (e.g. marine researcher from HCMR, or from another institute-university through skype) about their conclusions for the effects of abiotic factors on marine ecosystems and the human's interaction and impact to marine ecosystems

#5: Students exhibit their posters, or present their ppt to the rest of the school community and their parents and inform them about the ways that humans interact with the marine habitats in Mediterranean Basin.

Target audience	👤	From 12 years old
Place	📖	Classroom, ICT laboratory
Material needed	🔗	Computer, access to internet, skype connection, printer, illustrations, guides.
Duration of activity	⌚	Preparation: 45 minutes Implementation: 3 hours
Authorship	✍️	HCMR (Education Unit) <i>No authorization required</i>
Links	🌐	https://www.ra-spa.org/sites/default/files/doc_cop/biodiversity.pdf



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