

Biology | Geography | History | Mother Language | Foreign Language | | Computer Science |





WASTE AND POLLUTION

PEDAGOGIC CONTENT:

- Marine pollution by plastics.
- Origin and types of plastics in the Mediterranean Sea.
- Environmental impact of plastics on marine organisms and humans.
- Solutions to the environmental problem of plastics.
- Environmental sustainability.

PRE-REQUISITES:

■ Basic computer skills (PowerPoint, Genially, Prezi, Canva, Glogster, etc.).

NEW COMPETENCIES TARGETED/LEARNING OUTCOMES:

STUDENTS WILL BE ABLE TO:

- Observe and investigate marine pollution by plastics in the Mediterranean.
- Identify the different types of plastics and their origin.
- Learn how plastic pollution affects marine species, environment and humans.
- Find information about this problem on the internet, sort it, relate it and draw conclusions.
- Use IT to draft presentations and design a poster.
- Perform an oral presentation.











DESCRIPTION:

PREPARATION

#1: Previous to the implementation of this activity, the teacher will identify a beach close to the educational center and will gather information related to plastic pollution in the Mediterranean Sea. It will be necessary to buy gloves and garbage bags.

#2: Requesting parental authorization to go for a study visit to the beach.

IMPLEMENTATION

#1: The students will go for a study visit to a beach near the educational center to observe its state. Once there, they will observe the dirt and the presence of plastics. The teacher will distribute gloves and garbage bags.

The teacher will choose four areas of the beach where the students will make groups and collect plastics from the area assigned. They will take pictures, classify the plastics and register both the amount and type.

(!) #2: Once in the classroom, the groups will be assigned the following tasks:

- Group number one will look for information on the types of plastic that pollute the Mediterranean.
- Group number two will look for information on the impact of plastics pollution on marine organisms.
- Group number three will look for information on the impact of plastics pollution on humans.
- Group number four will look for solutions to prevent plastics from reaching the coast.
- #3: Each group will make an oral presentation on the researched topic using digital formats as PowerPoint, Prezi, Genially, Canva, etc. After the presentations, a debate on the problem of plastics in the Mediterranean will take place to make students aware of how this problem affects the marine ecosystem, marine life and human beings.
- #4: Finally, using the information displayed in the presentations, the students will design a common poster using specific software like Glogster, which will show problems and solutions for plastics in the Mediterranean.





Target audience (From 12 years old.

Place 🕲 Beach, classroom.

Material needed (2) Camera or mobile phone, gloves, garbage bags, internet access, tablet or computer, screen, projector or electronic board.

Duration of activity **(b)** Preparation:

To buy materials (gloves and garbage bags).

Implementation:

- Study visit to the beach: 4 hours.
- Searching for Information and drafting a presentation: 3 hours.
- Oral presentation and debate: 2 hours.
- Design of poster: 2 hours.

Total: 11 hours.

Total including preparation and implementation: 11 hours.

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Registration or authorization of use is not required.

Links https://www.greenpeace.org/international/story/11871/the-ocean-plastic-crisis/https://www.greenpeace.to/greenpeace/wp-content/uploads/2016/07/plastics-in-

seafood-technical-review.pdf





















Notes by author () To take advantage of the activity, students must be aware of the serious problem caused by plastics pollution in the Mediterranean Sea; as for what it means in terms of degradation of the environment, as well as for the impact and consequences that it generates in marine organisms which also affects human beings.

> The methodology of the observation in the field will make the students aware of the problem that plastics generate. Teamworks will improve cooperation, investigate the problem, be aware of the consequences caused by plastic pollution and be able to find solutions.

> The presentation by each group on each one of the topics will permit the students to develop communication skills.

> The poster will reflect all the work of observation, research and look for solutions environmental the problems of plastics in the Mediterranean.





