

1. Environmental Consequences

Could Plastic be the next Sediments?

AIRIcerca TEAM (ITALY)

Topic: Science

Description: This scenario is suitable for students aged between 11-13 years. The students have to reflect about the composition of nowadays rocks and fossils and think about what will happen in future due to the marine litter problem.

Aims: Learn about sedimentation and fossils creation process, learn how to classify a rock, improve awareness on marine litter.

Outcome: Recognize sedimentary rocks, Label rocks and fossils, Produce an ideal rock made by plastic.

Learning designer: <https://v.gd/FWyhyb>

Title	Procedure	Time
Discussion	Brainstorming “think about Hawaii islands and search a photo that represents this photo” 5 minutes to search the photo and 5 minutes for students to express their idea and photo (you can use a padlet in order to collect their photos).	10 minutes
Read	Show your students the photo of a Hawaiian beach with marine litter to underline that this is a global problem. Show your students the photo of the Plasticonglomerate , a rock made by plastic fragments, sands and volcanic rocks, that will be used as a starting point for Anthropocene, a Geological Era during which the anthropogenic impacts was recorded in rocks. Describe the characteristics of this new type of Rocks and compare it with the rocks that will be expected on a Hawaiian beaches. Teachers introduce to students the way possible to create a fossils and invite students to reflect about which will be the fossils of the future.	30 minutes
Discussion	In group students think about the differences between a conglomerate composed by organic clast and a plasticonglomerate and write down this information.	20 minutes



Workgroup	Using marine litter founded during the beach clean up in group students have to create a plasticonglomerate and a way to show this, with an explication that indicate the point included in the attached scheme . The rocks created by students should be compared with a real conglomerate found during the beach clean up. Students could also think about what will be the fossil of the future and create it with marine litter and fill in the scheme. This should be presented compared with a real fossil, included in a rock found during the beach clean up. In addition to the rocks and fossils students have to think about a slogan to presents their work.	60 minutes
Presentation	Students presents their work to classmates and together they decide which work will represent the class and would be showed in the main entrance of the school, including the slogan.	60 minutes



Photo: Plasticonglomerate image