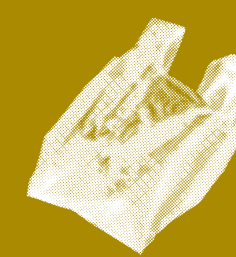# A SEA OF LITTER

Target audience
Primary and secondary school students
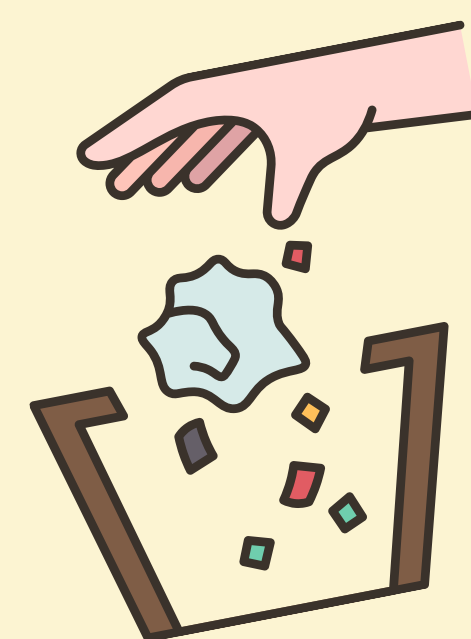
Duration
90 minutes

Objectives

This hands-on and engaging activity is intended to address the serious problem of marine pollution caused by the release of waste, especially plastic waste, into the seas and oceans, reflecting on its origin and dispersal and how it affects natural balances.

Materials

- Sppt presentation on types, origins and impacts of marine litter
- For macros: waste collection bags, reusable gloves, scales with plates or containers, and tarps
- For micros: folding meters, set of 5, 4, 3, 2, 1 mm sieves, petri plates, tweezers, scoop, tray and magnifying glasses
- Macro and micro waste sampling cards

Description

The first part of the activity includes a presentation on the topic of marine litter: types, origins, impacts on the ecosystem, with a specific focus on plastic waste, macro and micro. Then, students are divided into groups and provided with bags for collecting macro-waste and gloves. At the end of the collection, the waste is placed on some sheets and divided according to the categories and types indicated in the sampling sheets, on which the data that emerged from counting and weighing the objects and fragments are then reported.

The analysis of micros is carried out on a 1m x 1m transect (using two folding meters), possibly in non-wet sand to avoid clogging the sieves. Using a scoop, the surface layer of sand is collected and poured into the battery of sieves stacked in ascending mesh order. Once the sample has been sieved until the sand has completely fallen out, students use tweezers to take the microplastics from each sieve and place them on a petri dish for quantitative and qualitative analysis of the microwaste found and completion of the sampling form. At the end of the activity, students are involved in a reflection on the most common types of waste, their origin and how each of us can have an impact in reducing them.