



# IT'S ALL ABOUT PLANKTON



## Target audience

Secondary school students

## Duration

90 minutes

## Objectives

This microscopy workshop is an opportunity for students to discover what is unseen in the sea and yet of fundamental importance to the entire ecosystem and life on Earth: planktonic micro-organisms, which will be observed under the microscope through fixed and in vivo samples. The activity also allows children to familiarise themselves with microscopy instruments and try their hand at preparing samples.

## Materials

- Presentation on plankton
- 1 Optical microscope and 2 Stereo microscope
- Sample of seawater collected with retinata
- Slides with fixed plankton samples
- Petri dishes, pipettes, glass slides, coverslips
- Plasticised photographs of organisms
- Dichotomous plankton keys and census sheet



## Description

After an initial presentation on planktonic organisms, the main systematic groups and the role of phytoplanktonic organisms in the production of oxygen and as the basis of the marine trophic network, the class is divided into 4 groups that alternate between 4 different stations during the activity. At the 1st station, the group observes the in vivo sample previously collected by the MPA staff by means of a special screen. After pouring the sample onto the petri dishes, the students observe the organisms and their particular structures under the light microscope and reproduce them on a special card. At the 2nd and 3rd stations, equipped with stereomicroscopes, the group observes alcohol-fixed zooplankton and phytoplankton samples and learn how to prepare new ones, using pipettes, glass slides and coverslips. Here too, students draw the organisms they observe in their microscope slides. At the 4th station, observation and classification of the organisms represented in 16 plastic cards is carried out. At all stations, students use the dichotomous card to identify the class or phylum of the organisms observed.

*fact sheet realized by*

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