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Plastic soup

Abstract

Plastic pollution of sea and land is a worldwide problem that is key to the 21st century. The consequences give rise to wide variety of biological, social and political issues. Therefor possible solutions ask for a multidisciplinary, multicultural and multifaceted approach.

Keywords

- Quantity calculation
- Data representation
- Prediction by data
- Taxes

The use, recycling and litter of plastic is very prominent in students' daily lives and therefor relevant and easy to relate to. Furthermore, the global scale of the issue of plastic soup offers many possibilities to promote students' multicultural thinking.



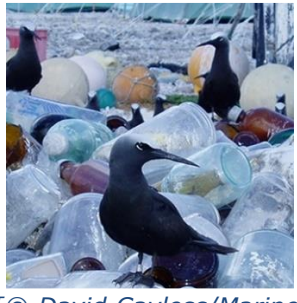

Figure 1: Beach littered by plastic, Figure 2:Bird, dead by plastic ring. [© David Cayless/Marine Photobank] Figure 3: Seabird, surrounded by plastic bottles. [© Claire Fackler, Marine Photobank]

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Lesson implementation

Introduction: Texts or videos about plastic pollution. Relevant numbers for the below described activities can either be provided by the teacher or looked up by the students.

Activities for students:

- Try to reason how much garbage your class can reduce by forgoing for example soda-bottles or to-go mugs.
- Using numbers on the amount of plastic pollution in the past and present, try to make a prediction about the future amount of plastic pollution.
- Unpacked stores sell produce without packaging. Try to reason how much garbage you can save by buying in such a store. How do their prices relate to those of normal stores?
- Plastic pollution can be reduced by introducing taxes on plastic packaging. How high would you set such a tax? Found these numbers.
- Role-play debate: Take on a role of the local governing body. Issues up for debate are for example taxes on plastic, governmental waste management of plastic, supermarket policies with respect for plastic, etc.

Figure 4: Unpacked goods in an unpacked store