

# Plastic Waste in the Ocean

**Objective:** To explore the effect of plastic waste on oceans

**Introduction:** Plastics may end up in the oceans through a variety of means – direct dumping, wind, water or animal transport. These plastics may have significant implications for ocean health, through direct consumption and/or leaching of chemicals. This lesson allows students to evaluate media **resources** to think about these implications.

## Curriculum Connections:

Unit 3 -2 d, related to Units 2&4,

## Supplies / Materials:

- Picture of plastic filled seabird (resource 1)
- Copy of **resources** 1 and 2 or computer access

**Hook:** Show a picture of a seabird with plastic debris inside (see resource 1)

**Intro Activity:** Have students try to identify the products in the picture

## Main Activity:

- 1) Have students read the websites (the class may be divided in half). Have them ask critical questions about what they are reading and evaluate whether they believe the sources are viable.



## SCIENCE FOCUS

### Lesson Subject

Experiential Science 20

### Topic

Ocean contamination

### Location

Classroom

### Length

50 mins



- 2) Ask students to brainstorm in small groups how they think the plastic is ending up in the ocean. Ask them to think about their community in particular and how it could be connected to the ocean (what rivers flow into the ocean)? Which animals may carry stuff out to the ocean? Which means of transportation may result in wastes in the ocean? Where is the dump situated and how is waste secured from elements that may move them?)

**Independent Student Work:** Allow students some time to research their questions. Have them come up with an action plan to change the use of plastic in their own lives and/or other students.

**Conclusion / Review:** Have students share some ideas about plastic contamination.

**Homework:** Finish independent student work.

**Resources:**

- 1) Plastics and Ocean Health - includes picture of seabird full of plastic  
[http://serc.carleton.edu/NAGTWorkshops/health/case\\_studies/plastics.html](http://serc.carleton.edu/NAGTWorkshops/health/case_studies/plastics.html)
- 2) Article about plastic in arctic ice: <http://www.sciencemag.org/news/2014/05/trillions-plastic-pieces-may-be-trapped-arctic-ice>