

# Activity: Degradation experiment

Litter in the ocean takes longer to degrade than litter on land, but will eventually start to break down due to wave action, currents, saltwater and sunlight. This investigation takes at least a month to show results but gives pupils an understanding of the time it takes for litter to breakdown and the impact on the ocean.

## You will need:

- Bottles or jars with lids filled with salt water
- Apple core, piece of paper, piece of plastic bag, piece of wood, crisp packet
- [Investigation sheet](#)

## What to do

1. In small groups, pupils should discuss ideas for an experiment to test how long the selected items might last in the ocean, and how the properties of these materials might change over time.
2. Encourage pupils to think about the conditions that might contribute to degradation, like salt water, waves, and sunlight. They should consider how to make their experiment a fair test.
3. As a class, discuss ideas and use concepts from group suggestions to create a class experiment. Devise a hypothesis.
4. As these items will decompose relatively slowly, you will need to run your experiment for a month at least. Pupils should take weekly observations and record their findings. Encourage pupils to ask questions to consolidate their understanding.
5. At the end of the experiment, pupils should present their data in a variety of ways, e.g. tables, graphs, charts, labelled diagrams. They can practice plotting data on a graph by hand and use ICT to present results. Support them to draw conclusions from their investigation and write a written explanation of their findings.



Every year  
between  
9 and 14  
million tons  
of plastic  
enters our  
ocean

# Our Investigation

Name:

---

---

*We are finding out about...*

---

---

---

*This is what we will do....*

---

---

---

---

---

*This is a picture of what we will need*





*We will make it a fair test by...*

---

---

---

*What I think will happen...*

---

---

---

*This picture shows our results*



*We found out that...*

---

---

---