**ACTIVITY: Water pollutants on trial**

**Activity idea**

In this activity, students research the effect of common pollutants on our waterways and hold a mock trial to determine the worst pollutant in the country.

By the end of this activity, students should be able to:

* understand what is polluting our waterways
* understand that how detrimental a pollutant is to the environment depends on how harmful it is, how often and how much it contaminates and how easy it is to clean up
* realise that the best way to control pollution can mean stopping it from happening in the first place
* research an issue to understand different ‘sides’, then argue for and against it with others.

[Introduction/background notes](#Introduction)

[What you need](#need)

[What to do](#Do)

Student handout: [The worst pollutant](#handout)

**Introduction/background**

The Science Ideas and Concepts article [Water quality](https://www.sciencelearn.org.nz/resources/1541-water-quality) provides a background to water quality in New Zealand. It contains links to educational material provided by some local councils, but also check the websites of your own local and regional councils.

The New Zealand Water and Wastes Association provides the pamphlet [Keep it clean: Preventing stormwater pollution](http://www.goredc.govt.nz/assets/documents/misc/Stormwater-Booklet.pdf)

**What you need**

* Access to the internet
* Copies of the student handout [The worst pollutant](#handout)

**What to do**

1. Divide the class into six groups. Each group will collect information about the effects of a common pollutant. Give out copies of the student handout [The worst pollutant](#handout), and tick the box next to the pollutant that each group is to study.
2. After they have completed their research, stage a ‘trial’ in which each group justifies why their pollutant is the worst pollutant in the country.
* Each group takes a turn to act as the prosecution and states why their pollutant is the worst.
* The rest of the class acts as the defence and asks questions to defend the use of this pollutant in the environment.
* A recorder can take brief notes on each pollutant.
1. Once each group has had a turn, the class votes on which is the worst pollutant in the country.
2. As a class, discuss the importance of pollution prevention.

**Student handout: The worst pollutant**

Your class is going to take some common pollutants to court and judge which is the worst.

Research the pollutant marked with a tick below and answer the questions so that you can present your evidence in court and claim that your pollutant is the worst in the country.

***Pollutant to find out about***

* Cleaning agents
* Corrosives and cement
* Fuels solvents and oil
* Food and nutrients
* Paint dyes
* Sediments and heavy metals

### *Questions to answer*

* How is the pollutant harmful?
* Where does the pollutant come from?
* How common is this pollutant?
* How can we clean it up?
* What can we do to prevent pollution in the first place?

***Places to find information***

The Science Ideas and Concepts article [Water quality](https://www.sciencelearn.org.nz/resources/1541-water-quality) provides a background to water quality in New Zealand. It contains links to educational material provided by some local councils, but also check the websites of your own local and regional councils.

The New Zealand Water and Wastes Association provides the pamphlet [Keep it clean: Preventing stormwater pollution](http://www.goredc.govt.nz/assets/documents/misc/Stormwater-Booklet.pdf)