

Make a model of a polluted river

Pollutants added along the river

Bucket filled with water

Plastic bottle for bottling polluted water

Pile of sand

Spade

Basin for collecting water

Plastic guttering

You will need:

- A bucket to provide water
- A small spade
- Guttering or halved swimming pool hose for the river
- A basin for the "dam"
- 2 plastic bottles
- 1 teaspoon of washing powder to represent the washing of clothes in rivers (pollutant)
- 3 tablespoons of lentils to represent heavy metals (pollutant)
- 1 tablespoon of food colouring to represent dangerous chemicals (pollutant)
- 2 tablespoons of coffee to represent sewage (pollutant)
- 1 tablespoon of cooking oil to represent oil and petrol (pollutant)
- 1 handful of sweet papers to represent litter (pollutant)



- Design and build a short river in the school ground – **see the illustration** for how to do this.
- Pour some **water** into the model.
- When the water reaches the **basin (dam)**, collect a sample of the water in a plastic bottle.
- Pour **more water** into the model.
- As the water **flows down the river**, add the pollutants to the water.
- Once all the water and pollutants have ended up in the basin (dam), collect a sample of the **polluted water in a bottle**.
- Record and **compare the physical characteristics** of the water before and after adding pollutants (colour, odour, clarity, etc.)

