

Investigate the Pollution Problem

Read this scenario:

Something strange has been happening in Riverside Town over the past few months. At first, nobody thought much of it: a few pupils at Riverside High complaining of tight chests during PE, a couple of parents mentioning headaches on the walk to school, a teacher coughing more than usual. But then, the school nurse noticed a pattern: a sudden rise in asthma flare-ups, especially on days when the air felt 'heavy'.

Around the same time, residents began reporting a sharp, chemical smell near the high street during the late afternoon. A group of Year 10 pupils also noticed a thin haze hanging over the bus station on their way home. Local shop owners have been keeping their doors shut because the air 'stings their nose'.

Last week, the council released a short statement saying they were 'monitoring the situation', but they didn't explain what was causing the problem. People in the community are worried, confused, and looking for answers.

That's where you come in.

You have been asked to act as environmental investigators. Your job is to analyse the clues, identify which pollutants are most likely responsible and explain how they are affecting people's health. You will use the **Air Pollution Information Sheet** and the **How Air Pollution Affects the Human Body Sheet** to help you solve the mystery.

➔ Identify the pollutants

Using the clues and the Air Pollution Information Sheet, decide which pollutants are most likely causing the symptoms in Riverside Town.

Explain your reasoning using evidence from the sheet.

➔ Explain the health effects

Using the How Air Pollution Affects the Human Body Sheet, describe how these pollutants affect:

- The lungs
- The brain
- The heart
- Vulnerable groups

➔ Recommend solutions

Write a short report for the local council explaining:

- What you think is happening
- How they are affecting the community
- Which pollutants are involved
- What actions the council should take next