

Clearing the air: atmospheric pollution and fake news

This resource accompanies the infographic poster **How to teach atmospheric pollution** in *Education in Chemistry* which can be viewed at: rsc.li/3QsKdb/

Learning objectives

- 1 Identify atmospheric pollutants and how they are produced.
- 2 Describe the impact that these pollutants have on society and the environment.
- 3 Create a news article to summarise your findings.
- 4 Evaluate sources for reliability.

Introduction

Use this resource to develop your learners' scientific literacy skills within the context of atmospheric pollution.

How to use this resource

Show learners the PowerPoint slides to introduce them to fake news and misinformation and provide guidance on how they can critically evaluate the reliability of their information sources. Get learners to use the infographic, accompanying fact sheet (available at the link above) and find their own internet sources to collate information about atmospheric pollution. Ask learners to present their findings as a news article, scientific poster or even a social media post.

Scaffolding

Instruct learners to work independently on this task or as supportive pairs according to how much support they require. Provide additional support by giving learners sentence starters to the questions posed in the student sheet and in the PowerPoint presentation on slide 9.

- This is an article about atmospheric pollution. The first pollutant I have researched is ...
- The chemical formula for this pollutant is...
- This pollutant is formed when...
- This pollutant affects society because...
- This pollutant affects the environment because...
- This impact can be described using my knowledge of chemistry/science because...

- This impact on society/the environment can be minimised by...

The sentence starters are included on the PowerPoint presentation on slide 10.

The templates and checklist in the student sheet are also available to use as support, where needed. The second template, on page 3 of the student sheet, has space for more writing than the first template. Learners can have free choice about which template to use or be guided by the teacher. Some learners may not need the support of the template or checklist and will be able to complete the task by following the instructions in the PowerPoint or on page 1 of the student sheet.

Optional challenge

Make the activity more challenging by encouraging learners to take their research and write their own fake news story using one of the types of fake news on slide 5 to theme their article. Get them to share their 'fake news stories' with the rest of the class who can work out which type of fake news each article is written in the theme of.

Important note: Use your discretion to decide if this task is suitable for your learners. There is a danger that 'fake news' that has been written and shared could be used out of context during revision or seen by learners in other classrooms without understanding that it is deliberately fake, which will create misconceptions. Instruct your learners to clearly highlight and correct any incorrect information in their fake news stories before the end of the lesson.