



Lesson 4: How Do We Combat Air Pollution?

This lesson is designed to last 1 hour and will explore how air pollution can be combatted.

As a result of participating in this session, students will be able to:

- **IDENTIFY** activities that contribute to air pollution.
- **EXPLAIN** steps they think people may feel able to take to reduce air pollution.
- **SUGGEST** how they think pollution levels may change.

Curriculum Links

Key-Stage 3: Geography Programme of Study

- Understand how human and physical processes interact to influence, and change landscapes, environments and the climate; and how human activity relies on effective functioning of natural systems.

Key-Stage 3: Science Programme of Study

- How organisms affect, and are affected by, their environment, including the accumulation of toxic materials.
- The production of carbon dioxide by human activity and the impact on climate.

Lesson Resources:

- Pictures on board or table.
- Access to [Sustrans article](#)



Thank you for incorporating our resources into your teaching. Your feedback is valuable to us as we strive to improve and enhance our materials. We kindly ask that you take a few moments to complete the online feedback questionnaire. Your insights and suggestions will help us better support you and your students in the future.

<i>5 mins</i>	Introduction/Do Now Task: Ask students to discuss in groups why they think there are issues about air pollution in their locality.
<i>15 mins</i>	Starter Task: Think-pair-share task: either provide students with a set of pictures or display them on the board. These will show: <ul style="list-style-type: none">• Cars in traffic with exhaust fumes• Electric car• People walking• Solar panels• Coal fired power station• People cycling• Buses with hybrid power system• Trains with electric power lines• Open fire• Volcano Ask students to work individually to sort these pictures into three groups: <ol style="list-style-type: none">a. Major sources of air pollution.b. Minor sources of air pollution.c. Zero or negligible source of air pollution. Then ask students to work in pairs to compare their ideas, identify any differences and resolve them.

Finally, for each picture, ask a group to suggest and justify which group they have placed that picture in and ask other groups to indicate whether or not they agree.

Suggested responses:

Source	Category	Notes
Cars in traffic with exhaust fumes	Major source	
Electric car	Minor source	Depends how electricity is being generated – zero if from solar panels though car production is a source of air pollution
People walking	Zero	
Solar panels	Minimal	Production process can be a source of pollution
Coal fired power station	Major source	Can be reduced by carbon capture
People cycling	Minimal	Production process can be a source of pollution
Buses with hybrid power system	Minor	Hybrid systems still cause pollution but avoid doing so in areas of population density.
Trains with electric power lines	Minor	Depends on how electricity is being generated.
Open fire	Major	
Volcano	Major	

30 mins

Main Task:

One of the organisations that provides information about transport and pollution is Sustrans. Ask students to look at the ten suggestions they make about how changing the way that people use transport can cut pollution.

[10 things you can do to help reduce air pollution today – Sustrans.org.uk](https://www.sustrans.org.uk/10-things-you-can-do-to-help-reduce-air-pollution-today)

With a learning partner, they should select three that they think:

- a. People in their area might be persuaded to do.
- b. Will make a difference to air pollution levels.

Students should be encouraged to reflect upon the tension here – it may be that the ones that are the most palatable are the ones that may not make the greatest difference.

They should then draft a social media posting of around 100 words encouraging people to adopt those three strategies.

10 mins

Plenary:

Ask students to suggest:

- One reason they think that air pollution levels could be higher in five years' time compared with now.
- One reason they think that air pollution could be lower in five years' time compared with now.

