



# Clean air superheroes

**5-7 year olds**



# Introduction

## Overview

This activity explores why clean air is important, the sources of air pollution and the actions we can all take to protect ourselves from the health harms of air pollution. Students will design their own clean air superheroes and find out how their superheroes can help them take positive actions towards a cleaner air future.



## Time required

60 minutes



## Materials required

- Clean air superheroes - presentation slides
- Card sort activity: air pollution problems and solutions
- My clean air promise - template
- My clean air superhero – template
- My clean air superhero at my school - template

## Learning outcomes

By completing this lesson, students will be able to:

- Understand some of the air pollution problems (sources & ways we contribute to air pollution), how these impact our health and possible solutions.
- Identify actions they could take independently or collectively, to reduce exposure and/or contribution to air pollution in and around their school and local area.
- Understand how they can become agents of change to improve air quality or protect themselves from polluted air; by taking action independently and/or getting support from peers, adults and others in their community.

## Curriculum Links – Primary

- Science / PSHE – understanding how air pollution can adversely impact human health and actions individuals can take to protect themselves from these harms.
- Geography – understanding how air pollution affects the natural environment.
- Citizenship - exploring air quality issues critically, debating and making reasoned arguments; preparing students to take their place in society as responsible citizens.
- Language and Literacy – conveying ideas confidently and clearly, using different forms of communication.

# Activity steps

**01** Start by asking students what pollution is and use the images on the slides to help prompt them. Explain that there are different types of pollution which cause damage to the land, air or water – and that pollution is any chemical or substance that can harm our health or the natural environment. Explain that they may have heard about some of these types of pollution, but in this session, they are going to focus on air pollution. Tell the group that they will find out why clean air is important, the sources of air pollution and the actions we can all take to protect ourselves from the health harms of air pollution. They will use this information to help them design their own clean air superhero and think about how their superhero could help them and others within their school community, have a cleaner air future.

**02** Use the visuals on the slides as prompts. Ask students what they already know about air pollution and ask volunteers to share any ideas they have with the class. Explain that air pollution is the release of pollutants into the air around us, both indoors and outdoors, for example dust, bacteria, mould, smoke and gases.

Ask the students to place both hands on their chest and take a deep breath in. Using the questions on the slides as prompts, explain that when we breathe in, air goes into our bodies and into our lungs. It then carries oxygen around our bodies through our blood. If we breathe in polluted air, the tiny pollution particles can travel into our lungs and get into our bodies, which is harmful to our health.



10 minutes



Individual task

Clean air superhero slides



10 minutes



Groupwork

Clean air superhero slides



# Activity steps

**02** Explain that this can make us unwell because the pollution travels to different organs in our bodies, especially the lungs, heart and brain. Highlight that air pollution is particularly harmful to children and adults with existing health conditions. Explain that now we know how harmful air pollution is, we're going to find out what we can do to protect ourselves and others so that we can all have a cleaner air future!

**03** **Advance preparation:** print and cut the card sort activity cards, so each pair or small group has one set. Students work in pairs or small groups, to match up the air pollution problem cards with air pollution solution cards.

**04** As a class, students discuss the possible superpowers they could give clean air superheroes, using the superpowers on the slides as prompts. Then, working independently, in pairs or small groups, students use the templates to design their own clean air superhero, identifying what super powers their hero would have to help protect people from air pollution. They then choose one clean air action their superhero could take at their school; and draw their school in the future, imagining their superhero had completed the action they have selected.

**Optional extension activity:** students consider who their superhero might need to speak to, in order to make the changes happen (e.g. permission from the headteacher) and how they could raise awareness about the issue they want to change (e.g. speaking to other students, parents, school staff etc.)



10 minutes



Groupwork

- Clean air superhero slides
- Card sort activity: air pollution problems and solutions



25 minutes



Groupwork

- Clean air superhero slides
- My clean air superhero - template
- My clean air superhero at my school - template



# Activity steps

05

Students identify 1-2 actions they could take on an individual scale and complete their clean air promise, using the template.

Finish by asking the class to share some of their clean air promises and explain what actions their superheroes took at their school. Finish by asking the class how they could use their ideas to all work together for a cleaner air future.

*For further free practical tools to help schools take action on air pollution; with educational resources as well as information on how air pollution affects children's health, visit <https://www.actionforcleanair.org.uk/schools>*

*For further information about what air pollution is, how it affects your health, what you can do to protect yourself from it and the action you can take to tackle it – please visit:*

- <https://uk-air.defra.gov.uk/>
- <https://www.who.int/health-topics/air-pollution>
- [https://www.unicef.org/media/123156/file/Childhood\\_Air\\_Pollution\\_Key\\_Messages\\_2022.pdf](https://www.unicef.org/media/123156/file/Childhood_Air_Pollution_Key_Messages_2022.pdf)

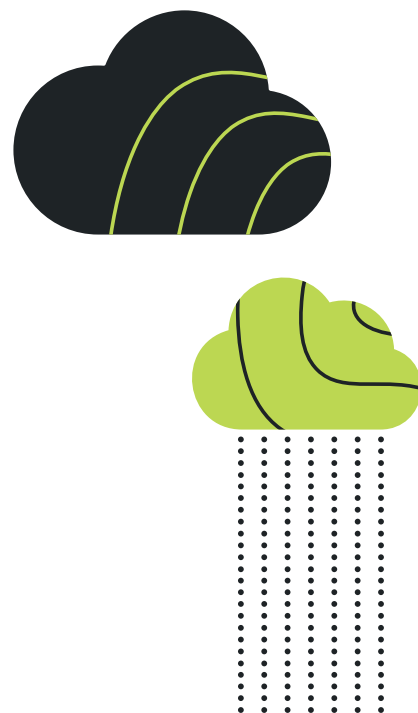


5 minutes



Individual task

- Clean air superhero slides
- My clean air promise template



## Card Sort Activity: Air pollution problems and solutions

### Learning objective:

- To understand some of the air pollution problems (sources & ways we contribute to air pollution) and possible solutions.

### Advance preparation:

- Print and cut the cards.
- Students can work in pairs or small groups. They will need one set of cards per pair/group.

### Activity:

- In pairs or small groups, students find the pairs of cards that show an air pollution problem and a solution.
- Students place their pairs of cards, under the 😊 and 😞 cards:
  - 😞 air pollution problem - when there is a lot of air pollution around us
  - 😊 air pollution solution - what we can do to protect ourselves from air pollution

### Answers:

Air pollution problems	Air pollution solutions
Go to school by car	Walk, cycle or scoot to school
Go to school by car	Get the bus, tram or train to school
Walk, cycle or scoot on high pollution roads	Walk, cycle or scoot in low pollution places
Car engine is on when the car is not moving (idling)	Car engine is off when the car is not moving
Windows are closed when cooking	Windows are open when cooking
Windows are closed when cleaning	Windows are open when cleaning
Things with strong smells (e.g. paint or shower gel)	Things with no strong smells (e.g. paint or shower gel)



Air pollution solution



Air pollution problem



Go to school by car



Walk, cycle, or scoot on high pollution roads



Walk, cycle or scoot in low pollution places



Walk, cycle or scoot to school



Get the bus, train or tram to school



Go to school by car



Car engine is on when the car is not moving



Car engine is off when the car is not moving



Cooking with windows closed



Cooking with windows open



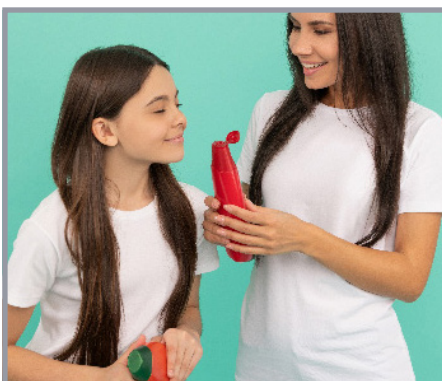
Cleaning with windows open



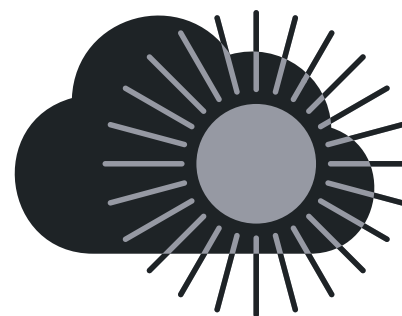
Cleaning with windows closed



Things with strong smells (e.g. paint or shower gel)



Things with no strong smells (e.g. paint or shower gel)





My name is: \_\_\_\_\_

Class: \_\_\_\_\_

# My clean air superhero!



My superhero's name is:

Superpowers:

How my superhero protects people from air pollution:

Draw your superhero:

My name is: \_\_\_\_\_

Class: \_\_\_\_\_

My clean air superhero will help at my school by:

(choose 1 action)

- Helping children walk, cycle or scoot to school
- Helping children find less polluted ways to get to school
- Helping children and adults learn about air pollution
- Reminding adults to turn the engine off if they are waiting in the car
- I have a different idea:*

Draw your superhero taking action at your school:

# My clean air promise

I promise to:

- Walk, cycle or scoot to school
- Get a bus, train or tram to school
- Use quiet side roads that have less air pollution
- Remind adults to turn the engine off when the car is not moving
- Remind adults to open windows when they are cooking
- Remind adults to open windows when they are cleaning
- Ask adults to choose things with no strong smells (e.g. paints, shampoo, cleaning products)
- Help other children at my school find out about air pollution
- Ask adults at my school or at home to help me have cleaner air
- I have a different idea:*

Draw your clean air promise here: