

Learning for sustainability: Second Level

Lesson Length: 1h 30m



Environmental
Protection
Scotland

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Interdisciplinary learning objective: To encourage us to understand the key sources of air pollution at school, what we can do to protect people from it and how we can keep our air clean. I am developing informed social, moral and ethical views of scientific, economic and environmental issues (*CfE Science Principles and Practice*)

Curriculum for Excellence Links:

- Social Studies: I can discuss the environmental impact of human activity and suggest ways in which we can live in a more environmentally-responsible way (*SOC 2-08a*)
- Numeracy and Maths: I have carried out investigations and surveys, devising and using a variety of methods to gather information and have worked with others to collate, organise and communicate the results in an appropriate way (*MNU 2-20b*). I can display data in a clear way using a suitable scale, by choosing appropriately from an extended range of tables, charts, diagrams and graphs making effective use of technology (*MTH 2-21a / MTH 3-21a*)
- Literacy and English: I enjoy creating texts of my choice and I regularly select subject, purpose, format and resources to suit the needs of my audience (*LIT 2-20a*)

Time	Activity	Notes & Resources
10 mins	<p>Using the discussion questions slideshow (slides 1 – 4) introduce students to the subject of clean air.</p> <p>Discussion questions:</p> <p style="text-align: center;">Why is clean air important? What stops our air being clean?</p> <p>Explain that during this lesson, we will look at what can stop the air at school from being clean and how we can protect ourselves from air pollution.</p>	<p>Resource: Discussion questions slideshow</p>
60 mins	<p>In this part of the lesson, students will explore and collect data on the sources of pollution in and around the school.</p> <p>Use the sources of pollution information sheet to discuss with students the types of pollution sources you might see around your school and how each of the sources emit pollution, e.g. vehicles from exhaust pipes, building sites creating dust digging and drilling, etc.</p> <p>Share the data collection sheet with the group. Discuss which area of the school they would like to survey (suggest looking at the busiest entrance or a part of the school that is next to a main road). Explain that they will be collecting data at two different times of day, encourage students to predict what they might observe at the different times.</p>	<p>Resources: Sources of pollution and data collection sheet, discussion questions slideshow</p> <p>Optional: Observe the impact of air pollution in nature with the lichen observation activity</p>



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60 mins	<p>When all of the data has been collected, students could present their results in a pictogram or a bar chart. Discuss the predictions they made. Did students see the differences they expected?</p> <p>Look at the discussion slideshow again, focussing on the questions:</p> <p style="text-align: center;">What can we do to avoid air pollution? What can we do to reduce the amount of pollution we produce? What could we do to reduce air pollution at school?</p>	
20 mins	<p>Challenge the students to design their own Clean Air Superhero. As a group, discuss what the superhero could do for your school, city and country, and even for the world.</p> <p>In pairs or groups, students will create either a short drama or a comic strip featuring their superhero in action. Encourage them to include their superhero helping people and showing them how to protect themselves. Make sure they share their dramas and comic strips with a wide audience to help raise awareness in the school community.</p>	<p>Resource: Comic strip template</p> <p>Optional: Encourage everyone in the group to make a pledge using one of our pledge cards</p>
Ongoing	<p>Explain that on 17 June, schools across the UK will be taking part in Clean Air Day. Students, teachers, parents and the local community will be taking action to reduce and avoid air pollution.</p> <p>Encourage students to think of creative and interesting ways to get students, teachers, parents and members of the local community to make a pledge for Clean Air Day.</p>	<p>Pledges</p> <p>Optional: Use all of the resources from our campaign to prepare for 17 June</p>

