Engage the children in thinking about how they travel to school, as well as other forms of transport that move people and goods from A to B.

Elicit children's understanding by asking them to select a toy, photo or draw an image of different transport types, e.g. cars, trams, lorries, planes, buses, trains, bikes, shoes (to represent walking), motorbikes, scooters etc.

Explore the transport types by sorting and classifying into groups. Initially encourage children to choose how they wish to sort the transport, e.g. 2 wheels or 4, size, colour etc. Use separate hoops for younger children.

Introduce the the categories of Air polluter or Air protector.

What do they notice? What decisions would they make based on their sort?

1. **Engage** the children in thinking about how they travel to school, as well as other forms of transport that move people and goods from A to B. **Elicit** children's understanding by asking them to select a toy, photo or draw an image of different transport types, e.g. cars, trams, lorries, planes, buses, trains, bikes, shoes (to represent walking), motorbikes, scooters etc.

2. **Explore** the transport types by sorting and classifying into groups.

3. Initially encourage children to choose how they wish to sort the transport, e.g. 2 wheels or 4, size, colour etc. Use separate hoops for younger children.

4. Introduce the the categories of **Air polluter** or **Air protector**.

5. What do they notice? What decisions would they make based on their sort?

   1. **Extend** Introduce a Venn Diagram, whereby children would and to find transport that may fall into both categories.

   E.g. A bus could be viewed as both, as it carries lots of people, so limiting the number of cars on the road, although it still does impact on pollution. A hybrid car (electric and petrol) which would depend on which mode it is in.

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**Curriculum Learning Outcomes:** Maths, as well as Literacy in the context of Science

**5 - 7 years:** interpret and construct simple pictograms, tally charts, block diagrams and simple tables

**7 - 9 years:** interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

**9 - 11 years:** interpret and construct pie charts and line graphs and use these to solve problems

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**Step by step guide 5 - 7 years**

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**Links**

- Greater Manchester Clean Air Framework
- Clean Air for Schools Framework

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**Share your learning!**

www.greatscienceshare.org
Clean Air Champions
Gasping for change!

Step by step guide 7-9 years
1. **Engage** the pupils by watching video by Russell Scott pupils - Walking to school
2. **Elicit** pupil’s thoughts. What were the children in the video encouraging them to think about? Why is this important?
3. **Explain** that the pupils will be investigating the question: *Are the forms of transport that pass our school the most air protecting or air polluting? So what?*
4. Group the pupils to conduct an observation over time to **explore** the different types of transport that pass the school or pupil's homes over time. You could select whatever time period suits you - e.g. 30 minutes, 1 hour etc.
5. Challenge them to design a chart to collect their data, e.g. Tally chart.
6. **Extend** their learning by asking them to create a poster to share their findings. They should include a bar graph to explain what they have found.
**So what?** You could develop this further to include 3 things that need to happen to make for cleaner air around the school.

Step by step guide 9-11 years
1. **Engage** the pupils by using the DEFRA air quality mapping tool. Here the pupils can find out about the air quality around their school.
2. **Elicit** their opinions on what they think about their results in comparison to the rest of the country.
3. Encourage them to **explore** ideas for how they can make a difference in their local area. Challenge them to design your a **Clean Air Champions Campaign** for the school, inspired by the pupils of Russell Scott Primary! **For more inspiration read this blog.**
4. Lobby your head teacher to complete the **Clean Air for Schools Framework** - a perfect way to take action for a cleaner school!
5. **Encourage** pupils to write to children at Russell Scott Primary school to say what you've done!

Questions to consider in your campaign:
- **How** could you persuade the school and local community to encourage people to think about the transport they use?
- **What** actions can your parents take when picking or dropping pupils off at school?
- **Are you sure** there is a clean air problem around your school? How bad is it?
- **Who** in your local community has the influence to make things change?
- **Where** are the best or worst places to experience the impact of air pollution in your school?
- **Are there** experts you can learn from, and who can support your campaign to improve air quality around your school?

**Share how you've become a Clean Air Champion**
www.greatscienceshare.org

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