

Every journey matters

Lesson 2: What is sustainable transport?

This lesson will build on the previous one by providing children with a working definition of transport that is better for the environment. Children will be introduced to the science of the damage that vehicle emissions are causing to the planet. They will be challenged to think about what can be done to lessen the damage through making transport more sustainable.

Resources

- 1 A4 image of a car exhaust (print out B1)
- 1 A4 diagram of the greenhouse effect (print out B2 – also to be found in book)
- 1 A4 example of a diamond (print out B3 – for teachers to use)
- 1 A4 template of transport stories to be photocopied for diamond ranking activity (print out B4)
- 1 A4 statement to explain sustainable transport (print out B5)

Learning Objectives

- To begin to understand the term sustainable, related to transport.
- To understand that some forms of transport are polluting and have a negative impact on the environment

Success Criteria

- Children should be able to make suggestions to make a journey more sustainable
- Children should be able to rank the most and least sustainable transport stories

Introduction (20 minutes)

Recap on the previous lesson and ask the questions from the plenary (what transport did we agree was most / least damaging?) Assess existing knowledge by asking the children to talk in pairs and see if they can explain what makes a form of transport damaging for the environment (give an example of a car if it is helpful for some pairs). Share responses. Display diagram of the greenhouse effect (print out B2) and explain that to make most engines work fuel (petrol / diesel) is burned. Gases are made when this happens and that you can see these if you look at the exhaust at the back of the car (display print out B1). Explain that these gases contain carbon dioxide (CO₂) and that large amounts of CO₂ can damage, and are damaging the environment. Explain the basics of the greenhouse effect (using print out B2) and check that the children are aware of why some transport can damage the environment.

Sustainability (20 minutes)

Display the question: We need to travel so how can we help protect the environment? Tell the children that this is one of the biggest challenges facing the world and that the answer is far from easy. Discuss the problem and collect responses. Discuss with the children the idea that each person in the world can make a difference and alter how they travel. Give an example of a mum/dad who commutes on his/her own by car to work everyday. Explain that if everybody decided to travel in this way the environment couldn't cope forever (it couldn't be sustained). Ask how the man could alter his travel. Collect responses. Explain that children have made his travel more sustainable – that the ideas they have come up could reduce the impact for longer without damaging the environment.

Sustainable Diamond (15 minutes)

Explain that sustainable transport is a form of transport that does less or no damage to the environment and that therefore it can be used for the future. (Display this statement - print out B5) Ask children to comment on what the most sustainable form of transport is and why (walking, bikes). In pairs the children will then be given 10 transport story cards (print out B4) and will position them in order of sustainability. Children will place the most sustainable transport stories at the top and the least at the bottom. Children are allowed to place cards side by side if they think they are of equal sustainability. The final diagram may look like a diamond or a xmas tree (see example on print out B3). Once again children should understand that there is not one perfect way of completing the diagram.

Plenary (5 minutes)

Share pairs' ideas about what stories were most and least sustainable and attempt to create a diagram as a class. Discuss the contentious stories in the middle of the diagram.

Links to National Curriculum

Geography KS2: 1d, 2a, 4b, 5a, 5b

Possible Further Activities

Science: Further exploration of Co2 emissions

History: Issues before modern transportation

PHSE: Is your journey to school sustainable?

