

# Every journey matters

## Lesson 3: Is London transport sustainable?

In previous lessons children have thought about and discussed the impact of transport on the environment as well as being introduced to the term 'sustainable transport'. In this lesson children will critically evaluate the sustainability of existing transport options in London. Children will be briefly introduced to the concepts of renewable energy before designing a form of sustainable transport for London.

### Resources

- 6 A4 images of different forms of London transport (print outs C1 – C6)
- 4 A4 images of forms of renewable energy (print outs C7 – C10)
- 1 A4 explanation of the 4 forms of renewable energy (print out C11)
- 4 A4 images of different forms of transport (print outs C12 – C15)

### Learning Objectives

- To comment on the sustainability of transport in London
- To design a sustainable form of transport for London

### Success Criteria

- Children should be able to give reasons for the sustainability of a form of transport
- Children should be able to design a sustainable form of transport with explanations

### Introduction (10 minutes)

Recap on the previous lesson and discuss what sorts of things can be done to make transport and travel more sustainable. Ask children to discuss in pairs why public transport is usually more sustainable than private transport. Collect responses. Show the children images of London transport (print outs C1 – C6). After each ask the children to show with thumbs up or down whether they have used that form of transport and explain what it is.

### Sustainable London (20 minutes)

Go through the photo cards again with thumbs up, or to the side to indicate whether or not children think the forms of transport are sustainable, not sustainable or not sure. Ask children to talk in pairs about what encourages people to use public transport in London (Oyster cards, congestion charge, parking fees). Recap that CO<sub>2</sub> emissions cause the damage and ask if the children know of any ways of producing energy without burning fuels. Brainstorm responses. Briefly discuss why energy produced from wind or solar power may not have been used so far for transport in London.

## **Design a Sustainable Form of Public Transport (20 minutes)**

Display 4 forms of sustainable energy: wind, solar, hydropower and biomass fuels (print outs C7 – C10) and clarify their meanings if necessary (print out C11). Then list 4 forms of public transport: bus, train, tube train, river boat (print outs C12 – C15). Explain that children must draw and label a design for a new public transport vehicle for London. They must choose one of the forms of transport using one of the forms of energy. They must explain how the energy will be produced and briefly explain the benefits. They may work in pairs or individually. You may want to allow children to give the vehicle a name or a logo as well. Before children begin the task give them a warning question to think about – Why might it be difficult to use solar power for a tube train?

## **Plenary (10 minutes)**

Children present their forms of transport to the class before discussing why such forms of transport may not have been introduced in London yet. Explain that in the next lesson children will be looking at how children in different cities travel and that it may well lead them to ask questions about what more London could do.

## **Links to National Curriculum**

Geography KS2: 1d, 2a, 3e, 4b, 5a, 5b, 6e

## **Possible Further Activities**

Art/ D & T: Children could extend and even construct the design of their vehicle

Science: Further exploration of renewable energy

