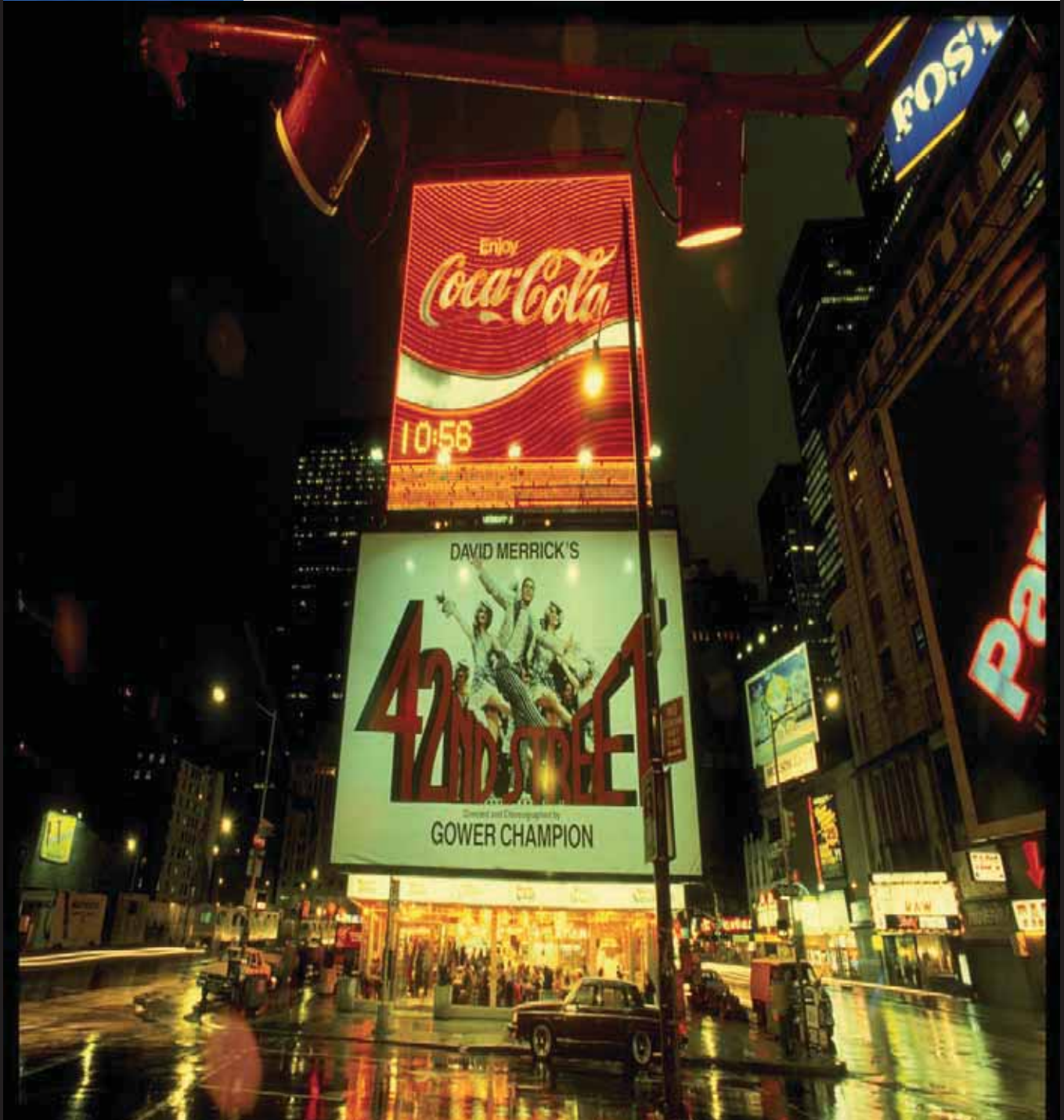


**ECO
TALK**

REDUCING YOUR CARBON FOOTPRINT

**ECO
PUBLISHING
INTERNATIONAL**



**Discussion Cards To Build Language Skills
And Environmental Awareness**



REDUCING YOUR CARBON FOOTPRINT



ECOTalk cards contain images, information and activities to increase awareness of global and environmental issues for students working in a cross-curricular context.

The focus is on discussion at small group work as well as whole class level, using the CD-ROM supplied in this pack to facilitate projection onto a whiteboard.

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Acknowledgements

© Les Ray Published by ECO Publishing International Ltd., 2010

ISBN 978-1-907049-18-7

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REDUCING YOUR CARBON FOOTPRINT

Greenhouse Gas

What's the issue?

- Carbon dioxide is one of the 'greenhouse gases' that make up about 1% of the Earth's atmosphere.
- These gases play an important part in keeping the Earth warm.
- If the proportion of greenhouse gases in the atmosphere increases it will become warmer. It could become too warm to support life as we know it.

What you need to know ...

The Earth's atmosphere is made up of nitrogen (about 78%) and oxygen (about 21%).

These gases are important for plants and animals. They have very little effect on the climate.

Other gases, e.g. carbon dioxide, methane, nitrous oxide, ozone and water vapour have an effect on our climate.

Let's talk about it ...

- What is carbon dioxide?
- What are 'greenhouse gases'?
- How do these gases play an important part in keeping the Earth warm?
- What will happen to the ice in the Arctic if the proportion of greenhouse gases in the atmosphere increases?
- What will happen to the seas and the climate?
- How will the Earth in the picture change?

Now try this ...

1. Investigate words connected with heat and build up a word-bank for descriptive poems: for example, baking, blistering, boiling, fiery, roasting, red-hot, scalding, scorching, searing, sizzling, steaming, stifling, sultry, sweltering, torrid.
2. Paint pictures of a scene using colour to show it as hot or cold.
3. Find out about surface temperatures of other planets and the Moon at the hottest and coldest times of the day.



REDUCING YOUR CARBON FOOTPRINT

Carbon Footprint

What's the issue?

- Carbon dioxide is the main greenhouse gas.
- A carbon footprint is calculated to include all the greenhouse gases released into the atmosphere.
- If the proportion of greenhouse gases in the atmosphere increases it will become warmer. It could become too warm to support life as we know it.

What you need to know ...

Measuring the carbon footprint of something includes collecting data from everyone involved in making something or doing something.

This will include a list of the materials used, where they came from, where they are going, the processes that use energy (fuel, such as electricity) that could cause direct emissions.

Let's talk about it ...

- What is carbon dioxide?
- Why is it the main greenhouse gas?
- How do we create these gases by what we do, so increasing our carbon footprint?
- What is 'a carbon footprint'?
- How is it calculated?
- How is what is happening in the picture going to increase our carbon footprint?
- What are you doing at home and at school to reduce your carbon footprint?

Now try this ...

1. Talk about how plants produce their food through photosynthesis. Use internet sources to calculate how much carbon dioxide is converted to oxygen during this process by plants (including trees) of different sizes. Present your findings to the group.
2. Compare plant and animal nutrition and respiration, and their by-products, and discuss the implications for a carbon footprint: for example, farming animals for meat creates a greater carbon footprint than growing food crops.