



Olympics 2012: Paralympic Road Cycling by Richard Jenkins

<https://www.tes.co.uk/teaching-resource/olympics-2012-paralympic-road-cycling-6256523>

Source: TES, updated 14/8/12, created 14/6/12

A lesson looking at energy transfers focusing on the transfer of **gravitational potential energy to kinetic energy**. The lesson is themed to the Paralympic Road Cycling event at Brands Hatch.

Sustainability, carbon footprint, research, discussion & debate

se-ed.co.uk/edu/wp-content/uploads/2012/10/Schools-and-Sustainability.pdf

Source: Schools and sustainability: A climate for change? Ofsted, 2008

'The issue of travel can provide a relevant and realistic learning context for developing pupils' understanding and result in high levels of discussion and debate.

Year 9 pupils were discussing the question: '**Does the car have a future?**' This was in preparation for a case study which formed part of the GCSE in 21st century science, which they had just started. The discussion focused on the environmental impact as well as social issues associated with individual car use. They calculated the **carbon emissions** of different vehicles and different forms of travel, linking their findings to the counter arguments about the flexibility of individual car use and the problems associated with public transport. They developed hypotheses about the impact that different scenarios would have on the environment and quality of life. As the lesson progressed, the complexity of the issues became more evident to them, stimulating their curiosity and interest.

Please refer to "Cross curriculum resources" for additional ideas incorporating science.