



Junior Cycle Geography Lesson Plan

Greener commuting

Curriculum link

SECTION A: Human habitat – processes and change

Key idea

We need to dramatically reduce our car usage and encourage and facilitate walking, cycling and the use of public transport in the workplace and schools.

Learning outcomes

Students should be able to:

- Identify the traffic and transport problems in their own community.
- Identify ways of reducing car usage in their own community and school.
- Evaluate the traffic management strategies in their local area.

Eco Eye Clip – Clean air

Greener commuting to school and work

Air pollution from particulate emissions from road traffic is the biggest threat to our air quality. There are lots of reasons to get out of the car: congestion, safety, health and climate change. In this clip Duncan looks at what schools, companies and a hospital are doing to reduce their travel-related environmental impact.

Watch the clip and complete the comprehension exercise.





Comprehension

Greener commuting to school and work

1. Transport accounts for about _____ of our CO₂ emissions.

2. Why do you think that Duncan said it was good to have four in a car?

3. What is the “One Small Step” campaign? You can log on to the site below to find out more information (the campaign is now known as Smarter Travel Workplaces).

4. <http://www.smartertravelworkplaces.ie/> Use the travel cost calculator to work out the cost of your journey to school or any journey that you make on a regular basis.

Cost _____

5. By what percentage has the Mater Hospital reduced car usage? _____





6. Describe four ways that the Mater Hospital has encouraged employees to reduce car usage:

1 _____

2 _____

3 _____

4 _____

7. "We need to retrain the next generation to rediscover commuting by cycling and walking to school like we used to do". Explain what Duncan means:

8. How is Scoil Maelruin encouraging pupils to cycle and walk?

9. You can park _____ bikes in the area it takes to park one car.

10. A one tonne car produces _____ tonnes of CO₂

each year.





11. How has An Taisce supported the schools efforts?

12. South Dublin County Council has also helped by:

13. Name four reasons why we need to get out of our cars:

1 _____

2 _____

3 _____

4 _____

14. In 1986 _____ % of all children going to school walked.

In 2006 _____ % of all children going to school walked.

15. Why is this a worrying trend?





Extension Activities

Individual work - Cross curricular links (Maths/IT)

Go to the Central Statistics Office website, see the link below. It will show Census data from 1986 to 2006. http://www.cso.ie/census/census2006results/volume_12/tables_1-17.pdf

Table 1 - shows information on how people over 15 travel to work:

- Foot
- Bike
- Bus,
- Train, Dart
- Motorcycle
- Car

Table 2 - shows the same information on how children aged 5 - 12 travel to school.

Table 3 - shows the same information for 13- 18 and how they travel to school or college.

- Use the above information to draw suitable graphs to display the changes from 1986 to 2006 in each category e.g. bar graphs, trend graphs, line graphs.
- What are the general trends shown in the graphs?
- Why are the trends a serious concern?

Group work – Solutions

Ask the class to brainstorm traffic and transport problems in their own community e.g. limited public transport, traffic congestion, lack of facilities for cyclists. Now working in small groups students list solutions to these problems with a view to reducing car usage in there own community and school. Solutions might include, park & ride, more bus lanes, cycle lanes, free





bike schemes, tolls, subsidised public transport, light rail, underground or subways, ban cars from the city centre, increase the price of petrol, etc.

Rainbow groups

After groups of four or five students have discussed the most effective ways to reduce car usage, each student in a group is given one of four or five colours. Students with the same colour come together into groups, which thus comprise representatives from each original group. In their new groups, students report back on their original (rainbow) group's work. Each group appoints a spokesperson on the solutions to reducing car usage. Repetition can be avoided if:

- One group gives full feedback and others offer additional points that have not been covered.
- Each group is asked in turn to offer one new point.

Groups summarise their findings on A3 sheets which are then displayed.

