

Lesson Plan: Transport and Mobility

Aims: Evaluating personal mobility habits and understanding the corresponding impact of global warming

Looking for ideas to reduce personal CO² emissions



Time needed: 45 minutes

Warm up activity 7 Minutes

Task: How do you get to school every day? How do you go to see friends, to do your hobbies? Why?

Talk to your partner about your personal mobility habits.

Exchange of the individual results in class

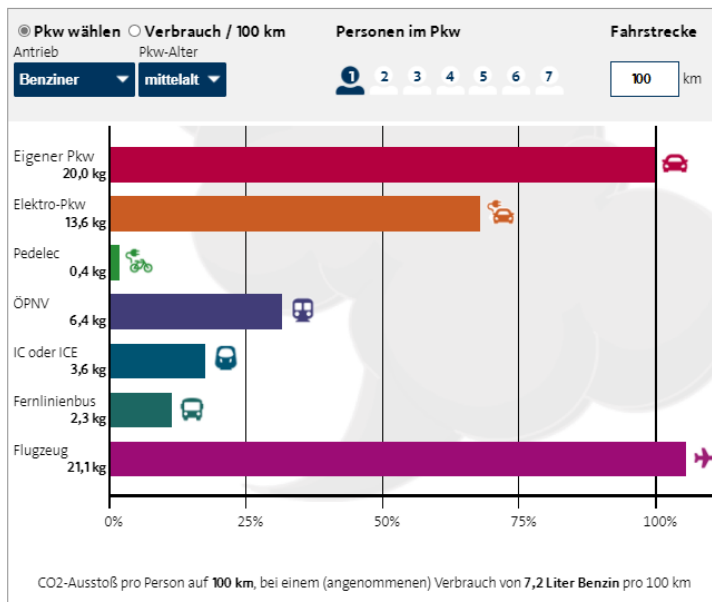
Identification of the lesson's central issue 5 Minutes

Think about the impact of your transport habits. What are pros and cons of each means of transport?

Today we want to understand and reflect on our personal CO² emission.

Research on individual carbon footprint 13 Minutes

Go to [CO2-Rechner für Auto, Flugzeug und Co. - quarks.de](https://www.quarks.de/co2-rechner-fuer-auto-flugzeug-und-co) and calculate your individual CO² emission.



English alternative site: [What is a carbon footprint? | Carbon Footprint Calculator \(nature.org\)](https://www.nature.org/learning/what-is-a-carbon-footprint/)

The screenshot shows the 'Travel' section of the Carbon Footprint Calculator. At the top, there are navigation icons for 'Get Started', 'Travel', 'Home', 'Food', 'Shopping', 'Your Footprint', and 'Take Action'. Below these is a 'Travel' icon and the heading 'HOW DO YOU GET AROUND?'. The main section is titled 'Your vehicles' and has a '+ add' button. It shows two sliders for 'Consumption unit: miles per gallon'. The first slider is set to 13800 miles/year and 22 miles per gallon. The second slider is set to 11300 miles/year and 22 miles per gallon. Below the sliders are sections for 'Public Transit' (307 miles/year) and 'Air Travel' (3300 miles/year).

Discussion of the results 10 Minutes

Describe your findings. What have you learnt about CO² emissions of different means of transport?

Documentation of results at the board/ smartboard:

- Most of our means of transport use fossil fuels. When burnt, these cause CO² emission.
- This is a problem for our global climate (remember what you have learnt about global warming, greenhouse effect)
- It makes a significant difference whether we go by car, bus or train.
- We cause least emissions of course when walking or riding the bike.
- When going by car, sharing the car reduces the negative impact at least by half

Action Plan 8 Minutes

Think of ideas to reduce your personal CO² emission by changing mobility habits! Look at your mobility pattern and try to find realistic ways to reduce your carbon footprint here. When you are finished, compare your ideas with a partner.

Ideas are shared with the class

Outlook, mobility diary 2 Minutes

For the next two weeks, keep a diary on your mobilities.

In a while, we will look at our personal mobility habits again. You will get the chance to compare your carbon footprint now and then.

We will discuss if it was possible to change something, what the problems are and if we can find solutions.