

Understanding Sustainability

Sustainable transport – getting to school

What are the more sustainable methods of getting to school?

Sustainable transport – getting to school

The activity (30mins) introduces the idea of looking at more sustainable transport by using the journey to school as a context.

Levels: KS3, 4 or 5.

Aim is for students to be able to critically look at the different methods of getting to school. Students discuss the options and rate them, working in small groups of 3-4.

Activity Students use the information cards to discuss the different methods of getting to school.

Following their discussion, students rate each of the methods by looking at social, environmental and economic aspects.

Complete graphs to visualise each of the methods and give an overall 'sustainability rating.'

Plenary discussion to see what transport students feel is the most sustainable. Look for issues that will influence individual's decisions on getting to school:

- Convenience and social interaction.
- Journey time / distance from school.
- Availability of local transport.
- Effects on congestion around school.
- Safety to passengers and pedestrians.
- Effects on environment - local (air quality) and global (climate change).
- Use of natural resources
- Costs and economic impacts.

Take a class poll to see the different choices. Comment on sustainability. How could they change their method of transport to become more sustainable? Will they change?

Resources One copy of instructions and graphs sheet per student (*Getting to school 1*)
One set of information cards per group (*Getting to school 2 and 3*)

Getting to school sustainably

1. Look at the information cards.
2. Give a score for each type of transport.
Think of the three parts to sustainability.

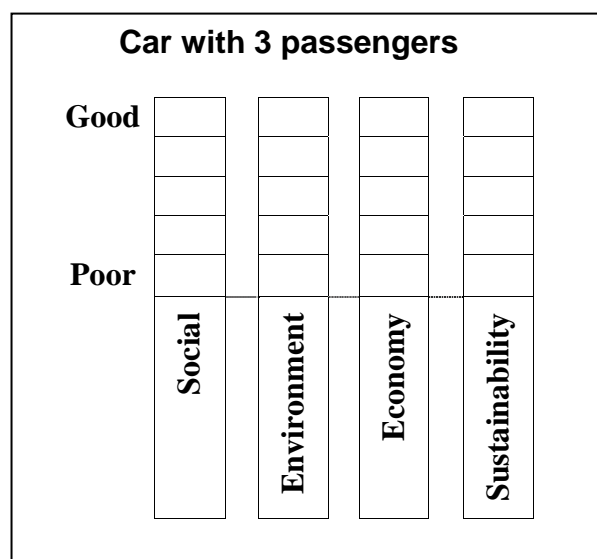
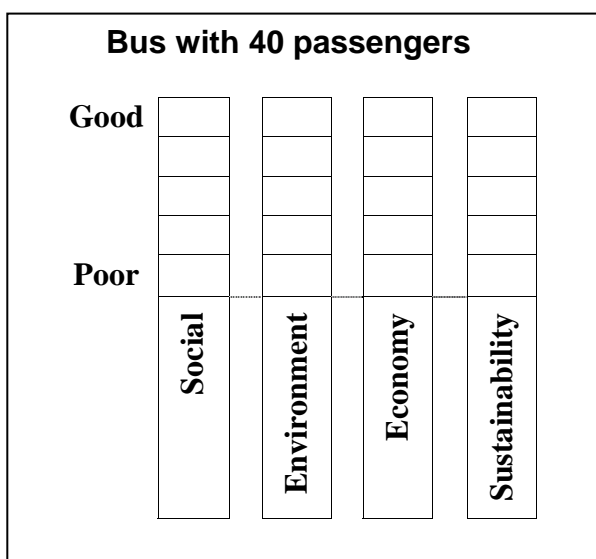
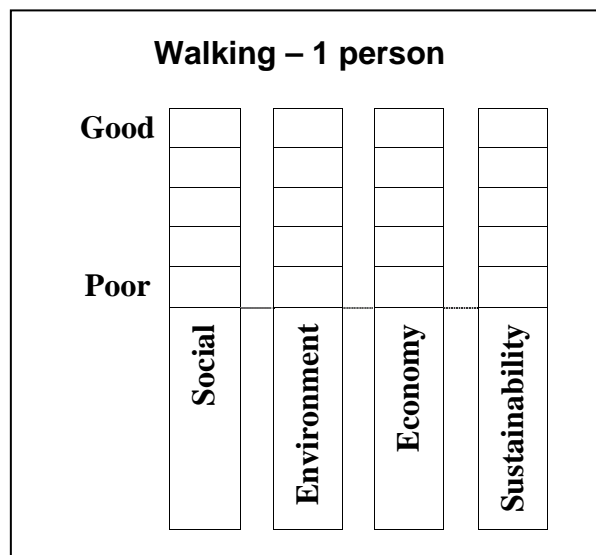
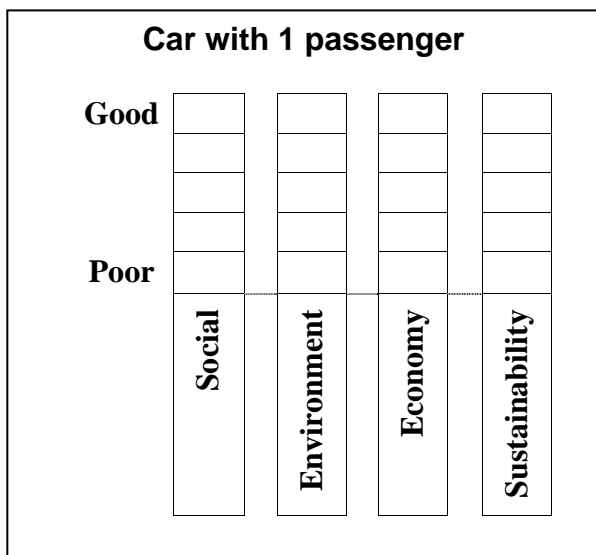
Social How well does the transport help people to get to school?
What impact does the transport have on the local community?

Environmental What impact does the transport have on the environment?

Economic How expensive is the transport?
Does the transport contribute to people's wealth.

3. Complete the bar charts to show how you score each type of transport.

Which method do you think is the most sustainable?



Car – driver and one passenger

CO₂ emissions	262g per passenger (1.5km total)
Congestion	Causes congestion
Journey time	6 minutes
Convenience	Door-to-school with little effort
Cost	50p per passenger plus cost of car
Jobs created	Employment in car production
Resources used	Oil (petrol). Materials for car production.
People transported	1

**Car – driver and three passengers
(shared between three families)**

CO₂ emissions	115g per passenger (3km total)
Congestion	Causes congestion
Journey time	18 minutes
Convenience	Three houses to pick up passengers, then to school.
Cost	£1.00 per journey plus cost of car
Jobs created	Employment in car production
Resources used	Oil (petrol). Materials for car production.
People transported	3

Walking

CO₂ emissions	Zero
Congestion	Reduces congestion
Journey time	20 minutes
Convenience	Effort required to walk – helps fitness
Cost	Zero
Jobs created	Zero
Resources used	Zero
People transported	1

Bus – driver and 40 passengers

CO₂ emissions	75g per passenger (1.2km total)
Congestion	Reduces congestion but still uses road
Journey time	12 minutes
Convenience	Walk to bus stop. Bus drops off outside school.
Cost	65p per passenger
Jobs created	Bus company employs people. Also industry to make bus.
Resources used	Oil (petrol). Materials for bus production.
People transported	40