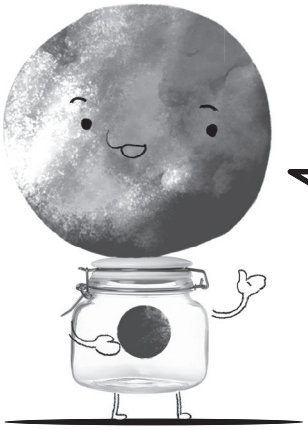
Sustainable Transport



There are lots of ways to travel from A to B, but how we choose to get there is important, because it can affect the air we breathe.

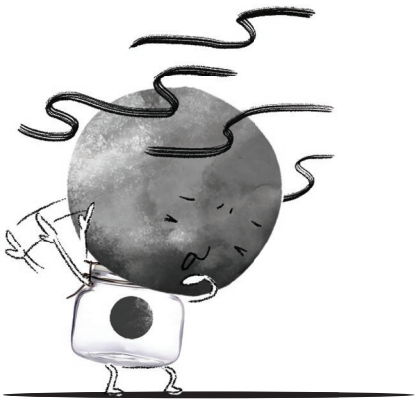
Road transport, especially cars, is one of the biggest sources of air pollution in the UK. As cars have become more popular and more people own them air pollution has been getting worse.

Of the 38.4 million vehicles on our roads, 31.7 million are cars — that's a massive 82.6%

Why is travelling by car bad for the air?

It all comes down to what kind of fuel the vehicle uses. Most cars use petrol or diesel. Diesel is especially bad for the air. But petrol is also bad.

This is due to the gases and particles that come out of the batteries and engines of cars that are powered by diesel or petrol. They cause a lot of air pollution.



Reducing air pollution

There are lots of ways to prevent causing air pollution when you travel, two of the best ways are:

- Walking, cycling or catching public transport instead of driving.
- Switching to a cleaner fuelled car — petrol and diesel aren't the only ways to power a car. Some buses now use eco-fuels making them an even better alternative!

Alternatives to petrol and diesel

Though you may be too young to drive now, it is worth thinking about protecting your future and thinking about how you would like to travel when you grow up! You know that petrol and diesel fuelled cars are popular in the present day, but cause a lot of air pollution. Thinking about a cleaner car is the next step for everyone.

Cleaner fuels are becoming more widely available and they may save people money and reduce pollution.

Electric
Electric cars are powered by a motor with energy supplied by batteries. Electric Vehicles are cheap to run and have virtually no emissions when used, although charging batteries creates emissions at power stations.

Hybrid
Hybrid vehicles use a conventional petrol engine with an electric motor and a battery. The extra power of the electric motor allows a smaller petrol engine to be used and for it to be loaded more efficiently. This can reduce carbon dioxide and local pollutant emissions. Some hybrids operate on their electric motor alone for short periods of time at low speeds.

Sustainable Transport

Sheet 2

Biofuels

Biofuels are produced from the oil of crops such as oilseed rape, sunflowers and soybeans, and from waste cooking oils. Although they are not completely carbon neutral (because of the energy used to grow and process them), they offer significant carbon savings over petrol and diesel and work with most vehicles.

Hydrogen

Hydrogen is a gas which reacts with water and oxygen to create energy. It can be used instead of fossil fuels in combustion engines to power cars. Hydrogen cars give out no emissions, only water. Hydrogen can also be used to power a fuel cell and produce electricity.

Common Car Mistakes

Speeding

Speeding is illegal as roads are given legally safe speed zones e.g. 30mph. Speeding is not only dangerous for increasing the risk of accidents, it is also bad for the environment. Speeding takes more fuel consumption and therefore releases bad exhaust emissions causing air pollution.

Idling

What is idling?

Idling is when a vehicle's engine is on but the vehicle is not moving. This often happens when drivers are stopped at a red light or while waiting outside a school for example. You will often see vehicles idling outside a school as parents wait to drop off or pick-up children. Idling is a problem all-year round but is worst in the winter, as people try to 'warm up' or defrost a frozen car.

Why is idling bad for our air?

Have you ever seen smoke coming from the exhaust of a car? That smoke contains substances which make our air dirty. Sometimes you can't see the smoke but it is there. An idling engine can produce up to twice as many exhaust emissions as an engine in motion so is much worse for our air.

Activity

Why not conduct your own anti-idling survey and design an anti-idling poster for use near your school.

Learn more about how to travel sustainably at: **kids.letscleartheairlcr.co.uk/how-can-i-help/travelling-about/**