

## What is Coal Used For?

Most people think of coal as being used only as a fuel for burning, either to heat buildings directly, or to make electricity. But coal has many other uses.

Coal is one of a number of things dug from the ground and known as fossil fuels, formed from the remains of dead plants, or from the bodies of tiny animals which lived in the sea many millions of years ago. Other fossil fuels include natural gas (the gas used for cooking in homes), petrol, oil and peat.

The heat from burning coal, gas and oil are used today to make cement, glass and pottery. Coal is also mixed with certain rocks that are also mined, and when the mixture is burned steel is produced.

Burning fossil fuels is not their only use. Today, much oil and coal instead of being burned are turned into other things. Some of the oldest uses made of coal have been to make waterproofing for roofs, the surfaces of roads, paints for walls and woodwork.

Coal is used to make the medicines to cure diseases – from aspirin to help a headache to very special drugs to treat things like cancers.

Did you know that washing up liquid comes from coal, as is the washing powder that goes in the washing machine. The shampoo you use to wash your hair, and the conditioner you may use to make it shiny and smooth are all made from coal or oil, as is the ink computer printers

use, and in the pens you write with. Pencil 'lead' is not really lead but a very pure form of coal called graphite. The fertilizer used on the fields which helps grow the food you eat is made from coal or oil, as are the sprays that farmers use to get rid of pests and weeds. All these are made from 'fossil fuels' such as coal.

Perhaps less well known is that oil can be made from coal by baking it (using coal as the fuel to bake itself !) And from the oil made from coal, petrol for cars can be made. Much of what is around you is actually manufactured from coal or oil.

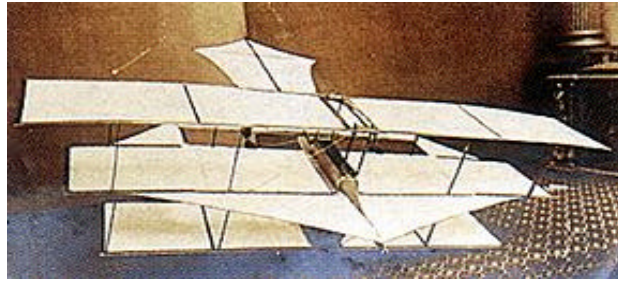
From oil is made much of what is around you at the moment. All 'man-made' cloth is made from fossil fuels (oil or coal) – that is anything clothing made from nylon, polyester, lycra, and so on. Nearly all plastics are made from coal or oil. Look around you. How much of what you use everyday is made of some sort of plastic? How much of your classroom or your home is made of plastics of some sort. With few exceptions, these are made from fossil fuels such as coal.

Most of the dyes which produce the colours around you, whether they are the colours of your clothing, or of photographs, or printed or painted, are made from fossil fuels (oil or coal).

Most cosmetics and perfumes today are made from coal or oil.

Not so well known is that the first ever powered aeroplane was fuelled by a steam engine! It flew from 1848 until about 1870 and was demonstrated to people in London every

Friday. It was quite small – too small to carry a person.



When countries go to war they use explosives – to power bullets and shells, in bombs and so on. Explosives are made from fossil fuels such as coal and oil. Less nasty, when miners

John Stringfellow built this first powered aeroplane over a hundred and fifty years ago, run by a steam engine. It can be seen in the Science Museum in London. This picture, and more information can be found at [www.flyingmachines.org](http://www.flyingmachines.org)

get the coal from underground they also use explosives to break up the coal and rocks – and the explosives they use are made from the coal that they have mined previously!

When you go in a car the fuel you use is made from fossil fuels. In Britain petrol and diesel oil are mostly made from oil, but in other countries, South Africa for example, much of the fuel for their road vehicles is made from coal. However, driving in a car would be very dangerous if one could not slow down or start up the car. Car breaks are made from coal.

Many, many more things are made from coal. See how many you can find out about which I have missed out of this list. Why not prepare your own list of things made from coal or from oil. Look around your classroom and your home and try to find anything that does not have oil or coal involved in its making...