

Money to Burn – Teacher's Instructions



For Demonstration Only

Make sure you have...

£1 note

Filter paper

Ethanol/sodium chloride solution

1:1 Ethanol:Water/sodium chloride solution

Tongs

Matches

What to Do...

1. Soak a piece of filter paper in the Ethanol/sodium chloride solution
2. Light the filter paper while holding it with the tongs and allow it to burn away (this is to demonstrate that most things burn away in Ethanol)
3. Soak the £1 note in the 1:1 Ethanol:water/sodium chloride solution
4. Light the £1 note while holding it with the tongs.

The money should burn and then extinguish itself.

What's Happening?

Ethanol (alcohol) is an excellent fuel. Chemists are constantly researching renewable alternatives to oil and gas – ethanol is a great option as it is produced from sugar.



Ethanol powered cars are already in existence

In this experiment you show why ethanol is such a great fuel – it burns so easily! However, to avoid actually burning the money some water has been added to the second solution. The water uses the heat from the flame to evaporate and stops the money burning away to nothing. The sodium chloride is added so the flame can be seen (yellow) as a normal ethanol flame is transparent blue.



Money is most useful when it looks like this rather than a pile of ash!