

C1 Topic 4 crude oil and fuels revision

Crude oil and fractional distillation	
1. Is crude oil an element, mixture or compound?	Mixture
2. What is crude oil a mixture of?	Hydrocarbons/ alkanes
3. How do we separate crude oil?	Fractional distillation
4. In fractional distillation what happens before the crude oil is put into the column?	It is heated and vaporised
5. After the crude oil enters the column what happens to it?	The vapours rise and cool
6. What property of the compounds that make up crude oil makes them separate	The have different boiling points
Alkanes	
7. What happens to flammability (how easily it will burn) as alkanes get longer?	Decrease
8. What happens to the boiling point as alkanes get longer?	Increase
9. What happens to the viscosity (how runny it is) as alkanes get longer?	Increase
10. Are alkanes saturated or unsaturated?	Saturated
11. What is the general formula for an alkane?	C_nH_{2n+2}
Fuels and the environment	
12. What is the scientific word for burning?	Combustion
13. Name 2 products of burning most fuels	Carbon dioxide, water
14. If a fuel contains sulphur, which gas is made when it burns	Sulphur dioxide
15. Which gas causes global warming?	Carbon dioxide
16. Which gases cause acid rain?	Sulphur dioxide/ nitrogen oxides
17. Which gas is formed from incomplete combustion of a fuel?	Carbon monoxide
18. Which gas is formed at high temperatures from a gas in the air?	Nitrogen oxide
19. How can we remove sulphur dioxide from cars?	Catalytic converter
20. Name a biofuel	Ethanol, biodiesel
21. What does 'carbon neutral' mean?	Overall, no CO_2 released
22. What causes global dimming?	Solid particles (e.g. carbon)