- The larger an alkane's molecules:
- the higher its boiling point
- the lower down the fractionating column its vapours condense
- the less easily it ignites or flows.

4.3

Coal is mostly carbon.

• Natural gas and fuels from crude oil contain carbon and hydrogen. They may also contain some sulfur.

- When these fuels burn completely:
- the carbon is oxidised to carbon dioxide
- the hydrogen is oxidised to water vapour.

 Carbon monoxide, particulates, sulfur dioxide and oxides of nitrogen may be produced when fuels burn incompletely.

44

- Carbon dioxide is a greenhouse gas that contributes to global warming.
- Solid particles from burning fuels cause global dimming.
- Sulfur dioxide is a cause of acid rain.
- Sulfur can be removed from fuels before they are burnt.
- e co.uk Sulfur dioxide can be removed from the waste gases in the second se nte

4.5

· Fossil fuels may well run out.

• The development of better fuel Ouch as ethanol and hydrogen will help to reduce the rate at which the provint Is are used, and require pollution.

C1 Chapter 5 Key Points

- 5.1
- Shorter alkanes are more useful as fuels than longer alkanes, but are in short supply.
- Longer alkanes are cracked by being vaporised and passed over a hot catalyst.
- Cracking forms shorter alkanes, used as fuels, and alkenes, used to make plastics.
- Alkenes are unsaturated hydrocarbons.

5.2

 Polymers are long-chain molecules made by joining lots of short molecules, called monomers, together.

• Alkenes can react with each other to form polymers because of their C=C double bonds.

• Many different polymers with different properties are made by using different alkenes.

5.3.

• Many new polymers are being developed with different properties and uses.

Preview from Notesale.co.uk page 17 of 17