

Materials and the Earth

Lesson 6: Crude Oil

Science

Chemistry - Key Stage 3

Miss Willett



What have you learnt already?

- 1. What is a fossil?**
- 2. Where is the inner core of the earth?**
- 3. What do you find in the middle of an atom?**



Crude oil

What am I?!

I transport crude oil across the world

I am where you find crude oil reserves

We are needed to change fossils into crude oil



Formation of crude oil

Answer the following questions:

1. Where do we find crude oil?
2. How did it form?
3. How do we get it out?
4. How is it transported?
5. What do we use crude oil for?



Formation of crude oil

Answer space:



Crude oil

Quick check!

Describe the composition of crude oil using the following words:

**Mixture, hydrocarbons, chains,
Lengths, compounds**



Alkanes

Answer the following:

- Explain what is meant by a hydrocarbon
- Write the general formula for alkanes
- Use the general formula to show the formula of a hydrocarbon with 22 carbon atoms



Alkanes

Answer space:



Alkanes

Complete the table:

Name	Formula	Drawing
methane	CH_4	
Eth...		$\begin{array}{c} \text{H} \quad \text{H} \\ \quad \\ \text{H}-\text{C}-\text{C}-\text{H} \\ \quad \\ \text{H} \quad \text{H} \end{array}$
P..	C_3H_8	
Butane		$\begin{array}{c} \text{H} \quad \text{H} \quad \text{H} \quad \text{H} \\ \quad \quad \quad \\ \text{H}-\text{C}-\text{C}-\text{C}-\text{C}-\text{H} \\ \quad \quad \quad \\ \text{H} \quad \text{H} \quad \text{H} \quad \text{H} \end{array}$



Pro vs Con of crude oil

Complete the table:

Advantages	Disadvantages



Bringing it all together..

Write a short article to inform about crude oil, and discuss whether it should be used for fuels.

Things to include:

- A summary of how crude oil is formed and extracted
- Explain what crude oil is made from
- Acknowledge negatives around using crude oil..
- ..but persuade with the positives!



Bringing it all together..

Answer space:

