

Name _____ Class _____ Date _____

Lesson	Aiming for 4		Aiming for 6		Aiming for 8	
C9.1 Hydrocarbons	I can describe the composition of a crude oil.	<input type="checkbox"/>	I can describe how to separate crude oil into fractions in a school laboratory.	<input type="checkbox"/>	I can explain why fractional distillation is used to separate crude oil into fractions.	<input type="checkbox"/>
	I can state a definition of a hydrocarbon.	<input type="checkbox"/>	I can classify a hydrocarbon as an alkane.	<input type="checkbox"/>	I can apply a general formula to generate a molecular formula and a displayed formula for a straight-chain alkane.	<input type="checkbox"/>
	I can state a definition of an alkane.	<input type="checkbox"/>	I can state the names and describe the first four alkanes.	<input type="checkbox"/>	I can classify and justify the classification of a chemical as an alkane.	<input type="checkbox"/>
C9.2 Fractional distillation of oil	I can name the different fractions from crude oil.	<input type="checkbox"/>	I can describe how the trend in colour, viscosity, flammability, and boiling point changes as the length of the hydrocarbon chain changes.	<input type="checkbox"/>	I can explain in detail how fractional distillation is used to separate crude oil into fractions.	<input type="checkbox"/>
	I can state a use for each fraction from crude oil.	<input type="checkbox"/>	I can describe how the properties of a fraction of crude oil make it appropriate for its use.	<input type="checkbox"/>	I can explain how chain length affects the properties of crude oil fractions.	<input type="checkbox"/>
					I can make predictions about the properties of crude oil fractions from the fraction's hydrocarbon chain length.	<input type="checkbox"/>

Name _____ Class _____ Date _____

Lesson	Aiming for 4		Aiming for 6		Aiming for 8	
C9.3 Burning hydrocarbon fuels	I can define complete and incomplete combustion.	<input type="checkbox"/>	I can explain the differences between complete and incomplete combustion.	<input type="checkbox"/>	I can justify the use of a given fuel over another.	<input type="checkbox"/>
	I can write a word equation to describe the complete combustion of a hydrocarbon.	<input type="checkbox"/>	I can write balanced symbol equations for the complete and incomplete combustion of hydrocarbons.	<input type="checkbox"/>	I can explain in detail how the production of carbon monoxide in incomplete combustion can be lethal.	<input type="checkbox"/>
	I can write a word equation to describe the incomplete combustion of a hydrocarbon.	<input type="checkbox"/>	I can explain how to test for the products of complete combustion.	<input type="checkbox"/>	I can use balanced symbol equations to calculate amounts of reactants or products in a combustion reaction.	<input type="checkbox"/>
C9.4 Cracking hydrocarbons	I can define the process of cracking.	<input type="checkbox"/>	I can describe the process of cracking, including conditions.	<input type="checkbox"/>	I can use examples to explain the process of cracking and why it is so important to the petrochemical industry.	<input type="checkbox"/>
	I can generate a word equation to describe cracking.	<input type="checkbox"/>	I can generate a balanced symbol equation to describe cracking.	<input type="checkbox"/>	I can explain the similarities and differences between alkanes and alkenes.	<input type="checkbox"/>
	I can recognise and give examples of alkenes.	<input type="checkbox"/>	I can describe a chemical test to show an alkene is present.	<input type="checkbox"/>	I can explain, using balanced symbol equations, the reaction between bromine water and an alkene.	<input type="checkbox"/>