

Prior Learning:		Students have already covered 7H elements, atoms and compounds as well as 7G particles, so will have an understanding of how particles can interact and join up in chemical reactions, such as combustion.			
Lesson Number	Title	Lesson Objectives	Content	Key words	Assessment/Homework
1	Burning fuels	What forms when a fuel reacts with oxygen?	<ul style="list-style-type: none"> Describe the reactions of hydrogen and hydrocarbons with oxygen Use words equations to represent combustion reactions 	<ul style="list-style-type: none"> Reactants Products Fossil fuels Hydrocarbons Combustion 	
2	Oxidation	How do metals react with oxygen?	<ul style="list-style-type: none"> Describe oxidation reactions of metals and non-metals Explain what happens to the mass of something when it undergoes oxidation 	<ul style="list-style-type: none"> Metal-oxides Conservation of mass 	
3	Fire Safety	How do you stop a combustion reaction?	<ul style="list-style-type: none"> Use the fire triangle to explain how to control a fire Identify hazard symbols for substances likely to cause fires 	<ul style="list-style-type: none"> Exothermic Thermometer Hazard symbol Fire triangle Fire extinguisher 	20-mark multiple choice quiz
4	Air pollution	How can burning fuels cause pollution?	<ul style="list-style-type: none"> Describe pollutants that are formed by burning fuels Explain how pollutants can cause environmental problem Make suggestions of what can be done to reduce pollutants 	<ul style="list-style-type: none"> Complete combustion Incomplete combustion Soot Filter Impurities Pollutants 	

5	Global warming	Is pollution causing global warming?	<ul style="list-style-type: none"> • Describe global warming and how it is caused • Explain how human activity may be causing global warming 	<ul style="list-style-type: none"> • Global warming • Climate change 	
Revision and Test					
Where we will use these ideas again		B8: Ecology: carbon cycle, global warming C7: Hydrocarbons: complete and incomplete combustion C9: The atmosphere: global warming and atmospheric pollution from fuels			