

Year 7 Science Half term 4 (27th February – 31st March)

Unit title	Lesson Title	Objectives	Keywords
Combustion	The fire triangle	Draw the fire triangle. Describe what happens if you remove one part of the fire triangle.	Oxygen, heat, fuel, reaction, combustion
	Products of burning	Write a general equation for burning.	carbon dioxide, water, oxygen, fuel,
	Fuels	Describe some different fuels and give advantages and disadvantages of using them.	coal, oil, gas, wood, fossil fuels, paper,
	Combustion - Required practical Heinemann demo Year 9 H1a core and class practical Year 7 Heinemann F6 Core.	Recall a synonym of combustion. Carry out the tests for the products of combustion. Identify and explain the type of reaction taking place during combustion.	burning, synonym, oxygen, carbon dioxide, hydrogen, splint, limewater, squeaky pop, boiling tube, oxidation, irreversible, chemical
	Incomplete combustion	Identify the difference between carbon dioxide and carbon monoxide. Describe how and why incomplete combustion occurs. Explain why inhalation of excessive carbon monoxide can be fatal.	complete, incomplete, combustion, dioxide, monoxide, diatomic, inhalation, suffocation
	Revision of combustion	Revise for assessment.	

Metals and non metals	The periodic table of elements	Identify common elements in the periodic table. Describe how and why the elements are arranged as they are.	Element, periodic table, Mendeleev
	Properties of metals	Identify metals from a selection of objects. Recall properties of metals and link them to the function of various items.	Metallic properties, function
	Properties of non- metals	Identify non-metals from a selection of objects. Recall properties of non- metals and link them to the function of various items.	Carbon, sulphur, wood, paper, chalk

Properties of metals and non- metals required practical Heinemann Year 7 E1 a and b	Test materials for electrical conductivity and magnetism. Classify materials as metals or non-metals. Explain what metalloids are and why they are called this.	Conductor, insulator, magnetic, metalloids
Reactions of carbonates	Record observations of carbonates with acid. Write word and/or symbol equations for these reactions.	Reactants, products, chemical reaction, equation
Reactivity Series	Use observations to put metals in order of reactivity.	Reactivity, observation
Displacement reactions investigation - Required practical Heinemann Year 8 F4a Core	Identify when a reaction has taken place. Explain why reactivity is significant in displacement reactions. Explain ways of speeding up reactions using collision theory.	observation, displacement reactions, collision theory
Revision of Reactions	Revise for assessment.	