



Science Department – Year 8 Chemistry Curriculum and Assessment Map

	Half Term 1	Half-Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Year 8	Types of Chemical Reaction Part 1		Acids and Alkalis		The Periodic Table	
Fundamental Knowledge	<ol style="list-style-type: none"> 1. Write word equations and interpret symbol equations for oxidation reactions. 2. Describe some common properties of metals. 3. Relate the uses of different metals to their physical properties. 4. Name the compounds formed by a reaction between a metal and a non-metal and write word equations for these reactions. 5. Explain what is meant by 'corrosion' and 'rusting'. 6. Explain how metals can be protected from corrosion. 7. Describe the reactions of different metals with water and write word and symbol equations for these reactions. 8. Describe the gas test for hydrogen. 9. Place metals in order of reactivity based on their reactions with water and oxygen. 10. State what is produced when a metal reacts with an acid and write word equations for these reactions. 11. Name the salts produced by the reactions between metals and different acids. 12. Describe what a displacement reaction involves. 13. State what is meant by an 'alloy' and describe their properties. 14. Draw a diagram to model the arrangement of particles in pure metals and alloys and use this to explain the properties of alloys. 		<ol style="list-style-type: none"> 1. Recognise common hazard symbols, describe the hazard and how to minimise the risk of harm. 2. Key Practical Skill: Write a risk assessment, identifying hazards and describing how to minimise risk. 3. Describe the difference between substances that are corrosive or irritants. 4. Give examples of 'everyday' substances that are acids and alkalis. 5. State the colour that litmus indicator turns in acidic or alkaline substances and use litmus indicator to identify substances as acidic or alkaline. 6. State what is meant by a 'neutral' solution. 7. Use the pH scale to identify acids, alkalis and neutral substances and compare acidity and alkalinity. 8. Name the type reaction that takes place when an acid reacts with an alkali. 9. State what 'reactants' and 'products' are in a chemical reaction and interpret a word equation to identify the products and reactants in neutralisation reactions. 10. Write word equations for the reactions between named acids and alkalis. 11. State what is meant by a 'base' and describe the reaction between acids and bases. 12. Give some 'everyday' examples of neutralisation and explain how they are useful. 		<ol style="list-style-type: none"> 1. Describe Dalton's atomic theory. 2. Use Dalton's atomic model to describe an element. 3. Give examples of the physical properties of different elements. 4. Give examples of the chemical properties of different elements. 5. Write word equations for chemical reactions. 6. Write and interpret chemical formulae. 7. Write balanced symbol equations. 8. Identify alkali metals, halogens and noble gases in the periodic table and describe their typical properties. 9. State what elements in the same group of the periodic table share. 10. Describe how the periodic table is arranged and compare this to early periodic tables. 11. Key Practical Skill: Explain what anomalous results are, identify them in a set of data and suggest reasons for anomalous results occurring. 12. Describe how the sizes of atoms change in the groups and periods of the periodic table 13. Identify where metals and non-metals are found in the periodic table. 14. Describe and identify trends in physical properties within the periodic table. 	

			15. Describe the reactions of metals with water and oxygen and write word and symbol equations for these reactions.
Learning Checkpoint Tasks	LC1 – Properties of Metals LC2 – Reactivity of metals & Making salts	LC1 - Hazards and risks in the lab LC2 - Acids and Alkalis	LC1 – Dalton & Development of the periodic table LC2 – Chemical equations
Common Assessment Task	KS3 YEAR 7 TRUST ASSESSMENT TERM 3 – End of year test (The particle model, Atoms, elements & Compounds and mixtures & types of chemical reactions part 1	KS3 YEAR 8 TRUST ASSESSMENT TERM 2 – Acids and Alkalis	KS3 YEAR 8 TRUST ASSESSMENT TERM 3 – End of year test (Separation techniques and Acids and Alkalis and The periodic table)
Interleaved Knowledge	Links to KS2 Year 5 Materials - Demonstrate that dissolving, mixing and changes of state are reversible changes.	Links to KS2 Year 5 Materials - Demonstrate that dissolving, mixing and changes of state are reversible changes.	Links to KS2 Year 5 Materials - Recall that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.