

Topics in this cycle: Metals and non-metals	Taught: Spring 2	Year Group: 7
Key knowledge/concepts to be learnt ('Tell me about....')		Websites/blogs/YouTube links and further reading to deepen and consolidate learning
<ul style="list-style-type: none"> • What are metals and non-metals? Explain how elements are classified as metals and non-metals. Use patterns to classify an element as a metal or non-metal. • What happens when acids and metals react? Compare the reactions of different metals with dilute hydrochloric acid. Explain the test for hydrogen gas. • What happens when metals react with oxygen? Compare the reactions of different metals with oxygen. Use state symbols in balanced formula equations. • What happens when metals react with water? Compare the reactions of metals with water. Use the reactivity series to predict reactions. • What are metals displacement reactions? Predict pairs of substances that react in displacement reactions. Use the reactivity series to explain displacement reactions. 		<p>Notes:</p> <p>Metals and non-metal resources</p> <p>What are metals and non-metals on the periodic table? - BBC Bitesize</p> <p>Metals and Non-metals - KS3 science revision quiz (educationquizzes.com)</p> <p>What is an acid and metal reaction? - BBC Bitesize</p> <p>Videos:</p> <p>Metal and non-metal video resources:</p> <p>Metals and Non-metals - YouTube</p> <p>Metal and Oxygen Reactions (youtube.com)</p> <p>Metal and Water Reactions (youtube.com)</p> <p>Metal and Acid Reactions - YouTube</p>

Key Vocabulary and Definitions To Be Learnt		What Will The Assessment Look Like?
Acid	A substance with particular chemical properties including turning litmus red, neutralising alkalis, and dissolving some metals.	Extended writing –Compare the properties of metals and non-metals. End of Unit test: 25 minutes/25 marks <ul style="list-style-type: none"> • Short answer questions • Extended writing • 3 marks for SPAG
Metals	Elements on the left of the stepped line of the Periodic Table. Most elements are metals. They are good conductors of energy and electricity.	
State symbols	A state symbol gives the state of a substance in a chemical equation. (s) means solid, (l) means liquid, (g) means gas, and (aq) means dissolved in water.	
Reactive	A substance is reactive if it reacts vigorously with substances such as dilute acids and water.	
Reactivity series	A list of metals in order of how vigorously they react.	
Displaces	A more reactive metal displaces – or pushes out – a less reactive metal from its compound.	Family Learning Opportunities Metals - Reactions and Reactivity - BBC Bitesize What is an acid and metal reaction? - BBC Bitesize Making a reactivity series - The reactivity series - KS3 Chemistry - BBC Bitesize - BBC Bitesize
Displacement	In a displacement reaction, a more reactive metal displaces or pushes out – a less reactive metal from its compound.	
Non-metals	Elements on the right-hand side of the stepped line of the periodic table. They are poor conductors of energy and electricity.	
Metalloids	Metals near the stepped line of the Periodic Table are metalloids.	
Properties	The behaviours of a material.	
Physical properties	A property of a material that you can observe or measure.	
Chemical properties	How a substance behaves in its chemical reactions.	
Conductor	A material that conducts charge or energy well, such as metal or graphite.	
Insulator	A material that does not conduct electricity or transfer energy well.	