

Topics in this cycle: Electricity, Electromagnetism and the Periodic Table	Taught: Autumn 2	Year Group: 9
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 is a charge? • Identify positive, negative and neutral charges. • Describe how charged caused objects to attract or repel. • What is a circuit? • Identify some common circuit symbols. • Draw and label circuit? • Differentiate between series and parallel circuits. • Calculate resistance. • • What is an electromagnet? • Describe how electricity make a magnet. • Describe how we can vary the strength of an electromagnet. • • What are elements? • Define an element. • Draw and correctly label the structure of an atom. • Write out the electronic configuration of the first 20 elements of the periodic table. • Draw the electronic structure of the first 20 elements on the periodic table. • • What is a compound? • Define a compound. • Describe the structure of a compound. • Describe how we represent compounds. 	<p>Electric Charge Electric Charge - YouTube</p> <p>Electromagnets GCSE Physics - Electromagnetism #78 - YouTube</p> <p>Atomic Structure GCSE Physics - Atomic Structure, Isotopes & Electrons Shells #32 - YouTube</p> <p>Periodic Table The Periodic Table Song (2018 Update!) SCIENCE SONGS - YouTube</p>	

Key Vocabulary and Definitions To Be Learnt		What Will The Assessment Look Like?
Atoms	Smallest unit of elements.	Extended writing – Describe how electromagnets work. End of Unit test: 25 marks <ul style="list-style-type: none"> • Short answer questions • Multiple choice • Extended writing
Elements	Same type of atoms.	
Compounds	Elements or atoms chemically bonded together.	
Series Circuit	Circuit with components connected end to end providing one path for current to flow.	Electric Charge https://youtu.be/F28hOSiJDX8 Circuits Electricity & Circuits Video For Kids 6th, 7th & 8th Grade Science (generationgenius.com) Build the Atomic Structure 37 Rigorous Periodic Table Activities For Kids - Teaching Expertise Show and Tell: Build the periodic table The Pinay Homeschooler
Parallel Circuit	Circuit with more than one path for current to flow.	
Resistance	Limits current flow.	
Electromagnet	A coil of wire with a soft iron core.	
Solenoid	Coil of wire	
Potential Difference or Voltage	Energy per charge in a circuit.	
Current	Flow of charge	