

**Year 10
Science Learning Programme***

TERM	TERM DATES	AREA OF SCIENCE	TOPICS
Spring	Spring Term 1 Starts: Saturday 15 January 2022 Ends: Saturday 12 February 2022 Total: five sessions	Biology	<ul style="list-style-type: none"> Describe the structure and function of the circulatory system Outline the steps involved in the process of discovering and developing new medicines including lessons learned from the past Explain what factors affect the rate of photosynthesis and how these factors can be minimised State the abiotic and biotic factors which affect communities and the importance of interactions between organisms in a community
	Spring Term 2 Starts: Saturday 26 February 2022 Ends: Saturday 26 March 2022 Total: five sessions	Chemistry	<ul style="list-style-type: none"> Explain how the position of elements in the periodic table affects their chemical reactivity Compare and contrast the different types of chemical bonding: ionic, covalent and metallic Recall the relative strength of chemical bonds and intermolecular forces and how these relate to particle kinetics Understand the energy changes that take place in chemical reactions in terms of bond breaking, bond making and activation energy
Summer	Summer Term 1 Starts: Saturday 23 April 2022 Ends: Saturday 21 May 2022 Total: five sessions	Physics	<ul style="list-style-type: none"> Explore current, resistance, voltage, charge and resistance in electric circuits Explain how electricity reaches our homes and the features of a three-pin plug Explain how magnets work including magnetic fields, permanent and induced magnets and electromagnets Explain the difference between longitudinal and transverse waves including frequency, amplitude and wavelength
	Summer Term 2 Starts: Saturday 11 June 2022 Ends: Saturday 9 July 2022 Total: five sessions	Examination practice	<ul style="list-style-type: none"> Practice calculation and data-based questions Practice long answer questions across a range of topics Understand what can be learned from examiner's reports and how this feedback can improve exam answers

***Topics, dates, and locations are subject to change without prior notice. Topics are intended for guidance only.**