

**Year 7
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"> Understand the structure and function of the skeletal and muscular systems including the biomechanics Identify the importance of a healthy diet as well as the components and function of the digestive system State the structure and function of the gas exchange system and impact of exercise, smoking and asthma on the gas exchange system Explain the interdependence of organisms in an ecosystem including food webs and the accumulation of toxic materials
	Spring Term 2 Starts: Saturday 26 February 2022 Ends: Saturday 26 March 2022 Total: five sessions	Chemistry	<ul style="list-style-type: none"> Identify different separation techniques and explain how separating mixtures works in terms of the particle model Understand the principles of the periodic table including the different properties of metals and non-metals Explain the properties of different materials including ceramics, polymers and composites State the composition and structure of the Earth along with the formation of different rock types
Summer	Summer Term 1 Starts: Saturday 23 April 2022 Ends: Saturday 21 May 2022 Total: five sessions	Physics	<ul style="list-style-type: none"> Explain the energy transfers that occur through different mediums including convection, conduction and radiation State the different forces that interact and draw force diagrams to represent balanced and unbalanced forces Explain what simple machines are and that moments are turning forces Describe the organisation of the solar system and explain how gravity (a force) changes
	Summer Term 2 Starts: Saturday 11 June 2022 Ends: Saturday 9 July 2022 Total: five sessions	Science Skills	<ul style="list-style-type: none"> Plan and carry out the scientific enquiries to test predictions, including identifying independent, dependent variables and stating the control variables Use and apply a range of scientific investigative terminology such as accuracy, precision, repeatability, and reproducibility Explain data in relation to predictions and hypotheses Ask questions and generate predictions based on prior knowledge, scientific knowledge and understanding

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