



# KS3 Science

	Content
<b>Year 7 HT1</b>	This half term students will study the skills needed to become good scientific investigators. They will carry out activities to become competent in working in a laboratory safely. In terms of content, they will study the main organs in the human body, an introduction to acids and alkalis, and introduction to forces and heat transfer.
<b>Year 7 HT2</b>	This half term students will study the process of reproduction, food and digestion, recap acids and alkalis, particle theory and solutions.
<b>Year 7 HT3</b>	This half term students will study the topic of sustainability looking at climate change, energy resources and interdependence of species.
<b>Year 7 HT4</b>	This half term students will study the topic of forensics in which they will recap particle theory and acids and alkalis in a real world context, study separating mixtures and reactions of metals.
<b>Year 7 HT5</b>	In this half term, students will complete the topic 'survival' in which they will study magnetism and electric circuits, and apply their prior knowledge of particle theory, heat transfer and separating mixtures in a new context.
<b>Year 7 HT6</b>	This half term, students will complete extended investigations to develop their investigative and data handling skills in consort with the application of their scientific knowledge.
<b>Year 8 HT1</b>	This half term students will study Climate, Heating and Cooling, Magnets, Elements, Energy Transfers, Respiration. Students will also further develop modelling and graphing skills.
<b>Year 8 HT2</b>	This half term, the topics studied are Types of reaction, Breathing, Chemical energy, Digestion, Current. Contact forces. Students will also work on developing graphing and investigative skills.,
<b>Year 8 HT3</b>	Students will study: Inheritance, Earth resources, Periodic table, Electromagnets, Wave properties.
<b>Year 8 HT4</b>	Students will study: Metals and non metals, Pressure, Work and complete summative assessments.
<b>Year 8 HT5</b>	This half term students learn about the Theory of Evolution, the process of photosynthesis and plant reproduction. They will also carry out a summative assessment.
<b>Year 8 HT6</b>	Students begin the half term by addressing any weaknesses identified by the summative assessments, using BEST resources to do this. Following this, students carry out an extended investigation using the knowledge and skills they have learned and applying them to a real world problem.
<b>Year 9 HT1</b>	This half term students will study chemical energy, electric current in circuits, Earth resources, the periodic table, plant reproduction.
<b>Year 9 HT2</b>	This half term students study a combined science unit to develop skills and knowledge in the following areas: forces and energy, the Earth's atmosphere, cells and the nervous system.
<b>Year 9 HT3</b>	Students carry out an assessment to identify weaknesses and misconceptions from the key stage 3 course so far. They then follow a bespoke course based on the identified weaknesses utilising resources from 'BEST' - best evidence science teaching.
<b>Year 9 HT4</b>	Students will complete the topics: Forces and Motion, Cells and microscopy, enzymes, particle theory and separating techniques.,
<b>Year 9 HT5</b>	Students will complete a further summative assessment then study the topics of : cell division and growth, components and function of the nervous system (adding detail to the previous study), Atomic structure and the periodic table, Forces - Newtons laws, momentum, stopping distances and car safety.
<b>Year 9 HT6</b>	Students will complete the topics : cell division and growth, components and function of the nervous system (adding detail to the previous study), Atomic structure and the periodic table, Forces - Newtons laws, momentum, stopping distances and car safety.