

	<i>Term 1: Sept –Dec Content</i>	<i>Term 2: Jan-April Content</i>	<i>Term 3: April - July Content</i>	<i>Desired end of year outcomes</i>
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<p>year 10</p>	<p><i>Pupils in the main school are streamed into 5 sets and learning objectives are set according to need. Sets W, X, Y and Z complete the topics below with the delivered content including KS1, 2, 3 and ELC and GCSE KS4 material depending on the needs of the pupils. The order of topics in the term will vary depending on the set.</i></p> <p><i>Pupils in Set V work towards AQA Unit Award Scheme.</i></p> <p>Babies (sets W, X, Y and Z) Students learn the roles of the different parts of the male and female reproductive system. They learn about ovulation and fertilisation and how the baby is nurtured and protected during pregnancy. Students learn about the hormones involved in the menstrual cycle and advantages and disadvantages of different methods of contraception.</p> <p>My Genes (sets W, X, Y and Z) Students learn about the human genome, the structure of DNA and the principals of inheritance. They learn about genetic disorders and inherited and environmental characteristics.</p> <p>Getting the message (sets W, X, Y and Z) Students learn about the science of communication. They learn about morse code and semaphore and how modern technologies including fibre optic broadband work.</p> <p>Hot Stuff (sets W, X, Y and Z) Students revisit the science of heat transfer and learn the physical principals of heat transfer by radiation, conduction and convection and applications for each.</p> <p>AQA Unit Award Scheme (Set V) 1) The Human Body 2) Mixtures and Separating mixtures</p> <p><i>Pupils in the provision also receive specialised science lessons designed to promote awe and wonder, foster skills and encourage a love of learning.</i></p>	<p><i>Pupils in the main school are streamed into 5 sets and learning objectives are set according to need. Sets W, X, Y and Z complete the topics below with the delivered content including KS1, 2, 3 and ELC and GCSE KS4 material depending on the needs of the pupils. The order of topics in the term will vary depending on the set.</i></p> <p><i>Pupils in Set V work towards AQA Unit Award Scheme.</i></p> <p>Are you Over-reacting? (sets W, X, Y and Z) Pupils learn about the reactivity series of metals and the relationship between reactivity and their position in the periodic table. They learn that Hydrogen is made when metals react with water or acid and learn the test for Hydrogen.</p> <p>How Fast How Slow (sets W, X, Y and Z) In this practical lab based topic, students perform a range of experiments to investigate the factors which can affect a rate of reaction. Students learn a number of ways to monitor a reaction and look at temperature, concentration, surface area and catalysts.</p> <p>Food Factory (sets W, X, Y and Z) Students learn how plants produce food by photosynthesis and the impact of limiting factors on this process. Students learn about the internal structure of plants and adaptations that plants have to allow water and nutrients to move throughout the plant.</p> <p>Full Spectrum (sets W, X, Y and Z) Students learn about the electromagnetic spectrum and the uses of microwaves, radiowaves, infrared etc in technology. Students learn about the visible spectrum and split light into its spectrum using a prism.</p> <p>Medical Rays (sets W, X, Y and Z) Students learn about the role of the electromagnetic spectrum in health. Students learn about the dangers to cells of high frequency radiation and the medical uses of UV light, X rays and Gamma rays.</p> <p>AQA Unit Award Scheme (Set V) 1) Magnets and Electromagnets</p>	<p><i>Pupils in the main school are streamed into 5 sets and learning objectives are set according to need. Sets W, X, Y and Z complete the topics below with the delivered content including KS1, 2, 3 and 4 material depending on the needs of the pupils. The order of topics in the term will vary depending on the set.</i></p> <p><i>Pupils in Set V work towards AQA Unit Award Scheme.</i></p> <p>Body Wars (sets W, X, Y and Z) Students learn about communicable and non communicable diseases and how communicable diseases spread. Pupils learn about the different pathogens behind disease and how they can be treated. Students learn about human defences against disease and the science and history of vaccinations.</p> <p>Control Systems (sets W, X, Y and Z) Students learn the way the body maintains a constant internal environment. Specifically students learn how the body keeps internal temperature, water levels and sugar levels constant. Students learn about the glands of the endocrine system and the hormones they produce and their effects.</p> <p>Our Electricity Supply (sets W, X, Y and Z) Students learn how electricity is generated and how voltage and current, resistance and potential difference are related. Pupils learn about parallel and series circuits and how to wire a plug.</p> <p>Alternative Energy (sets W, X, Y and Z) Pupils learn about fossil fuels as a finite resource that contribute to global warming through the release of greenhouse gases. Pupils learn alternative ways of producing energy including wind farms and solar panels and the advantages and disadvantages of each method.</p> <p>AQA Unit Award Scheme (Set V) Cells</p>	<p>The Science curriculum is designed to encourage independent thinking and to develop an enjoyment and passion for science. It is designed to give pupils confidence in their observation skills and questioning. Desired academic outcome is cohort specific but all students are expected to progress through the Glebe Stages as measured through their scientific enquiry skills. For pupils in sets W, X Y and Z knowledge is built to provide the foundation for the Entry Level Certificate in Science. For approximately 50% of pupils, content supports year 11 GCSE exams.</p>
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2) Investigating Reaction times

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Key Contact Name & Email

Assessment	Pupils in set w-z complete an end of unit test at the end of each topic. Pupils in Set Z complete coursework to fulfil the criteria for their AQA Unit Awards	Pupils in set w-z complete an end of unit test at the end of each topic. Pupils in Set Z complete coursework to fulfil the criteria for their AQA Unit Awards	Pupils in set w-z complete an end of unit test at the end of each topic. Pupils in Set Z complete coursework to fulfil the criteria for their AQA Unit Awards	Ms L Latchem llatchem@glebe.bromley.sch. uk
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