

EASTBURY SUBJECT CURRICULUM

Subject	Science Year 10
Overview	<p>Pupils in Y10 will continue with the GCSE course and complete Unit 2 which is 'Additional Science'.</p> <p>Pupils will study Biology, Chemistry and Physics and will also complete two controlled assessments. They will build on the prior knowledge gained in Y9 and as a result the expectations of the course become greater. They will be required to justify answers using Scientific reasoning using correct English and scientific terminology. Pupils will also need to demonstrate their ability in problem solving, using mathematics to solve Scientific problems and the application of concepts to unfamiliar contexts.</p> <p>Pupils will have two teachers and the course will be split between them. During Y10 pupils will complete a controlled assessment which will count for 25% of the GCSE grade.</p>
Term by term	
Autumn	<p>BIOLOGY Pupils will cover Cells, tissues and organs – cell adaptations and movement between cell; Organisms in the environment – photosynthesis, plants and distribution of organisms; Enzymes – use of enzymes in digestion and technology; Energy from respiration – aerobic, anaerobic and the effects on the body</p> <p>PHYSICS Motion – Distance, time, velocity and acceleration; Forces – resultant force, affects the have on motion and vehicle applications; Work, energy and momentum – kinetic and gravitational potential energy, explosions, collisions and car safety; Current Electricity – charge, circuits, current - potential difference graphs and resistance.</p>
Spring	<p>BIOLOGY Pupils will cover Inheritance in animals and plants – cell division, stem cells, DNA and the ethics of these applications; Old and new species – origin of life, fossils and evolution of species</p> <p>PHYSICS Mains electricity – alternating current, cable plugs and fuses, electrical energy power and charge; Radioactivity – properties of alpha, beta and gamma radiation, discovery of the nucleus and nuclear reactions; Energy from the nucleus – fission, fusion, the universe and stars.</p> <p>CHEMISTRY Structure, bonding and properties – ionic, covalent and metallic bonding, structure polymers and nanoscience;</p>
Summer	<p>CHEMISTRY How much? – mass, yield and formula calculations, reversible reactions and chemical analysis; Rates and energy – factors affecting rate of reaction, exothermic and endothermic reactions; Salts and electrolysis – acids bases and making salts, electrolysis for extraction and electroplating.</p> <p>Revision and Y10 exams which will be GCSE standard exams</p>

	Pupils will also do a controlled assessment which will be completed in Y10 for both Core and Additional Science.
Homework	Students will have two teachers and will be given homework every week on a rotation. Homework tasks will consist of exam questions, research and or short projects. Homework will be on www.showmyhomework.com .
Additional information	Students will follow the AQA GCSE SCIENCE A Course Unit 2 Biology, Chemistry and Physics.
Useful resources	Here are some helpful resources including course information www.aqa.org.uk –Search for GCSE SCIENCE A. Here you can access exam papers and mark schemes http://www.bbc.co.uk/schools/gcsebitesize/ - Click on Science AQA topics www.samlearning.com http://www.my-gcse-science.com/ -Click on Core Science Videos