

Henlow Academy Science Curriculum Information Key Stage 3

Intent	Implementation	Impact
<p>The aim of the Key Stage 3 (KS3) curriculum is for students to master the key skills and apply their knowledge to challenging and unfamiliar contexts.</p> <p>We have planned and implemented a rigorous curriculum, which builds on the prior learning and skills acquired at KS2. The content studied and skills acquired during Year 7, are revisited and extended in Year 8 and 9.</p> <p>We have the same high ambitions for all of our learners, including those with SEND or EAL. The KS3 Curriculum provides a solid foundation for the rigour of the content at GCSE. The KS3 curriculum is delivered across two years and two terms with the GCSE courses commencing in the summer term of year 9.</p> <p>The Henlow Academy KS3 Science curriculum focuses around practical learning opportunities. It is broad and provides our students access to the full National Curriculum for Science. We also incorporate many opportunities for cross-curricular learning, links to CEIAG and support the Core British Values.</p>	<p>The KS3 Science curriculum is taught across 6 lessons per fortnight in mixed ability form groups in years 7 and 8. Pupils may be set during year 9 as they prepare for GCSE. In KS3, the curriculum is broken down into topics from each of the three specialisms; Biology, Chemistry and Physics. All three specialisms are taught across KS3, a topic at a time. This enables students to link the learning from one specialism to another and build up a solid understanding of how the three interweave. We use the Exploring Science schemes of learning and associated resources provide a solid foundation for the KS4 curriculum. The sequencing of our curriculum has been carefully considered and based on research to enable pupils to build on prior learning as they progress.</p> <p>Practical work underpins every unit of work in order to build students' working scientifically skills in preparation for GCSE and beyond.</p> <p>Pupils are assessed at the end of each unit and complete an end of year assessment based on all units studied.</p>	<p>Practical activities help to instil in our students a passion for Science that is built on in KS4.</p> <p>Students have a good understanding of the foundations of Biology, Chemistry and Physics, to be revisited, built and extended on at GCSE.</p> <p>Students cover the full content of the National Curriculum for Science at KS3. They also begin to develop their mathematical and working scientifically skills.</p> <p>Students have a good understanding of how Science applies to their everyday lives.</p>

Year 7 Curriculum Plan

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Units of Study	Transition unit 7A Cells, tissues, organs and organ systems 7E Mixtures and separation	7I Energy 7K Forces	7B Sexual Reproduction in animals 7F Acids and Alkalis	7G The particle Model 7J Current Electricity	7C Muscles and Bones 7H Atoms, Elements and Molecules	7L Sound 7D Ecosystems End of year assessments
Key Concepts	Transition baseline assessment followed by Scientific skills and working safely in the science labs. 7A Living, dead and never been alive, Cells and cell structures , Cell shape and size, Diffusion and the cell membrane, Working together – cells, tissues and organ systems, Cycling of materials through ecosystems 7E Substances and separating mixtures of solids, Solutions, Separating solutions, Comparing solubility	7I Temperature, Heating and cooling , Thermal conduction , Thermal store of energy 7K What forces do, Describing forces, Balanced and unbalanced forces Friction	7B Growth , Life cycles, Sexual reproduction in humans , Contraception 7F pH scale, Indicators, Reactions in solution, Neutralisation	7G Particle model for the solid, liquid and gas states , Particles in solutions 7J Making circuits , Electric current , Voltage , Static electricity	7C Supplying cells – the human circulatory, digestive and gas exchange systems , The human skeleton and muscles 7H Atoms and molecules, Symbols and formulae, Rearrangement of atoms	7L Production and transmission of sound 7D Differences within species ,Heredity and genetic information ,The structure and function of the genome, Food chains and food webs , Interdependence within ecosystems, Ecosystem components and dynamics
SMSC and British Values	Mutual respect and tolerance: discussion of organ transplants Individual liberty: opportunities for students to work independently and make choices in a safe environment when carrying out investigations Careers link: Medicine and transplants	Individual liberty: opportunities for students to work independently and make choices in a safe environment when carrying out investigations Careers link: careers in sustainable energy	The rule of law and democracy: IVF legislation Individual liberty: opportunities for students to work independently and make choices in a safe environment when carrying out investigations Careers links: The role of medical professionals during pregnancy, zoos and animal conservation	Students learn about the continual evolution of scientific ideas which occurs through the acceptance that different people have different ideas about a concept. Careers ;ink: The work of materials scientists	Individual liberty: opportunities for students to work independently and make choices in a safe environment when carrying out investigations Careers link: link to the fitness industry and sports therapy	The rule of law: awareness of sound level legislation and why it is needed. Careers link: How our environment is managed
Parental Support	Provide a quiet space for your child to work Help your child to access online Science resources through www.pearsonactivelearn.com and their personalised login. Encourage the completion of homework tasks and additional reading to recap class learning an prepare for future lessons. Provide a revision guide (these can be purchased through school for a small cost)				Encourage revision of the year 7 Science curriculum in preparation for the End of year exams covering year 7 Biology, Physics and Chemistry units of study	

Year 8 Curriculum Plan

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Units of Study	8B Plants and their Reproduction 8E Combustion	8A Food and Nutrition 8L Earth and Space 8I Fluids	8C Breathing and Respiration 8J Light	8F The Periodic Table 8G Metals and Their Uses	8K Energy Transfers 8D Unicellular Organisms	8H Rocks End of year assessments
Key Concepts	8B Plant nutrition and photosynthesis ,Sexual and asexual reproduction in flowering plants, Biodiversity, conservation and sustainability, 8E Rearrangement of atoms, Formation of new substance , Combustion, Air quality, Representing reactions, Conservation of mass	8A Good and ill health , Disease Diet and exercise , Promoting good health: interacting factors and risk 8L Planets and the solar system , Gravity , The night sky, stars and galaxies, Days and seasons 8I PFM1.3 Balanced and unbalanced forces ,Drag	8C Cellular respiration, Good and ill health , Disease, Supplying cells – the human circulatory, digestive and gas exchange systems 8J Characteristics of light , The 'passive eye' model of vision , Seeing in colour , The ray model of light to explain images, Refraction and lenses	8F Trends in physical properties, Atomic model, Periodic patterns 8G Distinguish a chemical from a physical property. Use observations to identify substances with similar chemical properties.	8K Trophic levels and biomass transfer, sustainability , Electrical power, Calculating power and efficiency and associated energy costs 8D Identifying and classifying organisms, Pathogens, Recognise that all living organisms depend upon decomposers that can break down dead organic matter.	8H Air quality, Water cycle processes, Acid rain, Chemical weathering, Physical weathering and erosion, Making rocks by pressure and cementing , Making fossil fuels
SMSC and British Values	The rule of law: the need for air quality laws and links to effects on health Careers link: How sampling is used in convservation	Individual liberty: opportunity to share opinions on healthcare The rule of law relating to food advertising Link to the work of dieticians Careers link: Link to recent developments in space technologies	Careers links: Links to sports Science and using measurements to assess fitness and health, use of lighting in theatre	Mutual respect and tolerance: learning about discoveries made by a diverse range of people from different cultures. Careers link: how scientists work to make predictions from knowledge of periodic trends	The rule of law: sustainable farming Careers link: Links to medicine and related careers in diagnosing communicable diseases	Individual liberty: discussing climate change and sustainability Careers link: Links to careers in materials science
Parental Support	Provide a quiet space for your child to work Help your child to access online Science resources through www.pearsonactivelearn.com and their personalised login. Encourage the completion of homework tasks and additional reading to recap class learning an prepare for future lessons. Provide a revision guide (these can be purchased through school for a small cost)				Encourage revision of the Key Stage 3 Science curriculum in preparation for the End of year exams covering year 8 Biology, Physics and Chemistry units of study	

Year 9 Curriculum Plan			
	Autumn	Spring	Summer
Units of Study	9A Genetics and Evolution 9E Making Materials 9I Forces and motion	9B Plant growth 9F Reactivity 9J Forcefields and electromagnets	Unit B1 Cells Unit C1 Atomic Structure Unit P1 Energy
Key Concepts	<p>9A Differences within species , Changes in species over time – fossil evidence, Explaining evolution</p> <p>9I Polymer properties, Exothermic and endothermic reactions</p> <p>9I Forces and Motion Forces make things change. Understanding forces helps us to predict and control physical change.</p>	<p>9B Plant nutrition and photosynthesis</p> <p>9F Rearrangement of atoms Representing reactions, Explain the appearance of a different metal during a displacement reaction.</p> <p>9J Forcefields and Electromagnets The everyday world is largely a consequence of electrical charge. Understanding electricity and magnetism helps us develop technology to improve lives</p>	<p>B1 Eukaryotic and prokaryotic cells, Diffusion, osmosis and active transport ,Supplying cells – exchange surfaces and transport systems in humans</p> <p>C1 Distinguish the nucleus of an atom from the nucleus of a cell. Identify the force of attraction between electrons and the nucleus as being due to electric charge. Compare the particle and atomic models.</p> <p>P1 Energy conservation and Transfer Energy of moving particles Transfer of energy by conduction, Specific heat capacity</p>
SMSC and British Values	<p>Respect and tolerance Opportunity to consider different views by discussing controversy surrounding the work of Darwin and evolution.</p>	<p>The rule of law: Students follow the lab rules for the safety of themselves and others</p>	<p>Students learn about the continual evolution of scientific ideas which occurs through the acceptance that different people have different ideas about a concept.</p>
Parental Support	<p>Provide a quiet space for your child to work Help your child to access online Science resources through www.pearsonactivelearn.com and their personalised login. Encourage the completion of homework tasks and additional reading to recap class learning an prepare for future lessons. Provide a revision guide (these can be purchased through school for a small cost)</p>		<p>Encourage revision of the Key Stage 3 Science curriculum in preparation for the End of year exams, which form a baseline assessment for GCSE.</p>

Henlow Academy Science Curriculum Information Key Stage 4

Intent	Implementation	Impact
<p>Pupils build on their foundational knowledge from key stage 3 Science and extend their learning of key concepts throughout the GCSE course.</p> <p>We follow the AQA Trilogy Science courses and students choose either combined or triple Science. All students follow the triple Science specification in the final term of year 9 and from year 10 additional lessons are timetabled for those selecting the option of triple Science .</p>	<p>At Henlow we help our pupils learn through quality first teaching and adhering to an established scheme of work encouraging the pursuit of knowledge and facts and applying these to unfamiliar contexts. We teach content from basics through to advanced concepts spiralling back and building on previous taught work. In lessons teachers actively seek to make links to previous learning.</p> <p>We believe that knowledge underpins and enables the application of skills in Science; both are entwined through our curriculum, with clear links made between disciplinary and substantive knowledge.</p> <p>As a department we define the knowledge our students need and help them recall it by the use of unit checklists and regular retrieval practice. Their folders are checked to encourage good organisation. Students are provided with exam papers and practice questions throughout their courses and assessments are also based on exam style questions. Students use additional websites to enhance their revision and all are encouraged to use revision guides alongside kayscience resources subscribed to by the Science department. We build the Cultural Capital of our students by relating what is taught in lessons to real life situations and current developments in Scientific understanding. We consider historical developments in Science and explore those scientists responsible for furthering our understanding.</p>	<p>Assessment</p> <p>The purpose of assessment is to identify the strengths and omissions in an individual pupil's own learning, and to establish whether there are any misconceptions amongst groups of pupils that may need to be retaught, taught differently or otherwise reinforced. Pupils are enthusiastic in their participation within lessons and their interest in going deeper also demonstrates this. They enjoy practical work and will explain why they are doing a particular experiment.</p> <p>Pupils are able to make connections and explain for themselves. They are keen to talk about their learning.</p> <p>Pupils' progress is monitored throughout the course and they are supported to make good progress. Formal assessment takes the form of end of unit tests and mock exam series'. By the end of the course pupils are familiar with the style of exam questions and sitting an exam.</p> <p>As more extra curricular opportunities become possible in our growing school, pupil uptake is increasing. Pupils enjoy sessions by visiting STEM speakers and attend trips e.g. the Science Museum.</p>

Year 10 Curriculum Plan - Biology						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Units of Study	Cell division	Enzymes and Digestion	The circulatory system Non-communicable disease		Health and communicable diseases	Ecology
Key Concepts	Cell division, Stem cells and differentiation <i>Cell cycle and mitosis, Identify DNA, genes, chromosomes on a diagram, Describe the main stages of the cell cycle, understand that cancer is an example of where cell division goes wrong, Stem cells and their uses</i>	The digestive system, biological molecules and enzymes <i>Food tests, digestion, digestive enzymes, investigating factors that affect enzymes, absorption</i>	Supplying cells – exchange surfaces and transport systems in animals Promoting good health: interacting factors and risk <i>The lungs, blood and blood vessels, the heart, heart rate, heart disease and treatments, other non-communicable diseases</i>		Defences against disease in plants and humans Promoting good health: reducing the spread of infections Use and development of medicines <i>Causes, prevention and treatment of different types of disease in plants and humans, the immune response, vaccination and medicines.</i>	Interdependence of organisms; Trophic levels and biomass transfer. Organisms in their environments; Cycling of materials through ecosystems. Biodiversity and human impacts ;Measuring biodiversity. Human interactions with ecosystems: negative and positive
SMSC and British Values	Individual liberty Cloning debate Opportunity to discuss the law as it applies to use of embryo technology.		Balancing views on treatments for heart disease and other non-communicable diseases		Respect and tolerance Considering different views on animal testing in testing medicines	Social development; Impact of human interactions with their environment
Parental Support	Help your child to access online resources such as their textbook from home devices. Provide a study space. Encourage completion of homework and additional reading from the text. Support students in their preparation for the mock exam period. Encourage uptake of extracurricular opportunities eg catch up classes					

Year 10 Curriculum Plan - Chemistry						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Units of Study	Periodic table	Chemical bonding	Quantitative chemistry	Redox reactions	Acids, bases and ions	Electrolysis
Key Concepts	Trends in physical properties in the periodic table, relating these to the atomic model Development of atom, size and mass of atoms, relative atomic mass, electronic structure, Development of the periodic table, Metals and non-metals, Group 0,1,7.	Metallic structure model , Ionic lattice ,Covalent structures, graphene & fullerenes Chemistry Chemical bonds, Ionic bonding & properties, simple covalent bonding & properties, giant covalent bonding & properties, graphene & fullerenes	Amount of substance Stoichiometry Moles (HT), reacting masses (HT) Relative formula mass, estimate uncertainty,	Oxidation and reduction Reactivity of metals, metal oxides, Reactivity series, Extraction of metals & reduction, oxidation and reduction (HT), alternative methods of extraction of metals (HT)	Acid and base models Concentration, strength, pH, Neutralisation process HT Reactions of metals and acids, neutralisation & salts, pH scale, strong & weak acids (HT),electrolysis, half equations (HT)	Oxidation and reduction Electrolysis of molten compounds, Electrolysis of solutions Oxidation & reduction (HT), electrolysis & half equations, energy transfer in reactions, reaction profiles, cells & batteries
SMSC and British Values	Mutual respect and tolerance: students learn about the the evolution of scientific ideas	Social development is developed in looking at how nanotechnology impacts on new technologies	Careers link to industrial chemistry and scaling up	Social and moral development is shown by their understanding of how resources are obtained	The Rule of Law: Students follow lab rules for the safety of all	Application to development of fuel cells and future job opportunities
Parental Support	Help your child to access online resources such as their textbook from home devices. Provide a study space. Encourage completion of homework and additional reading from the text. Support students in their preparation for the mock exam period. Encourage uptake of extracurricular opportunities eg catch up classes					

Year 10 Curriculum Plan - **Physics**

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Units of Study	P3 Energy Resources	P4 Particles At Work	P6 Molecules and Matter	P7 Radioactivity	P8 Forces in Balance	P9-10 Forces and Motion
Key Concepts	<p>Objects are made of particles with mass. Understanding particles helps us to design our world.</p> <p>Transfer of energy by conduction, Specific heat capacity , Specific latent heat</p>	<p>The everyday world is largely a consequence of electrical charge. Understanding electricity and magnetism helps us develop technology to improve lives.</p> <p>Moving charge, Circuit calculations, Analysing series circuits ,Analysing parallel circuits Circuit components Components with changing resistance , Sensing circuits</p>	<p>Objects are made of particles with mass. Understanding particles helps us to design our world.</p> <p>Particle explanations , Density , Pressure</p>	<p>Topic:Nuclear physics Atomic nuclei Radioactive decay Ionising radiation Radioactive half-life</p> <p>Nuclear physics Atomic nuclei , Radioactive decay , Ionising radiation , Radioactive half-life</p>	<p>Forces make things change. Understanding forces helps us to predict and control physical change.</p> <p>Resultant force in two dimensions, Force, mass and acceleration</p>	<p>Forces make things change. Understanding forces helps us to predict and control physical change.</p> <p>Measuring and calculating motion , Velocity , Acceleration, Velocity – time graphs</p> <p>Doing work, Energy of objects with mass and height or speed, Energy of springs</p>
SMSC and British Values		Balancing views on renewable energy		Respect and tolerance Considering different views.Experiencing awe and wonder; The use of particle accelerators in Physics		
Parental Support	<p>Help your child to access online resources such as their textbook from home devices. Provide a study space.</p> <p>Encourage completion of homework and additional reading from the text.</p> <p>Support students in their preparation for the mock exam period.</p> <p>Encourage uptake of extracurricular opportunities eg catch up classes</p>					

Year 11 Curriculum Plan - Biology					
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1
Units of Study	Bioenergetics	Homeostasis	Inheritance, Variation and Evolution	Revision	Revision and Exams
Key Concepts	Respiration Cellular respiration and ATP <i>Aerobic and anaerobic respiration and metabolism</i> Photosynthesis Exchange surfaces and transport systems in plants, , <i>plant adaptations and responses</i> , Biological molecules and enzymes Photosynthesis and limiting factors Plant hormones	Cells in the body can only survive within narrow physical and chemical limits. In this section we will explore the structure and function of the nervous system and how it can bring about fast responses. We will also explore the hormonal system which usually brings about much slower changes. Hormonal coordination is particularly important in reproduction since it controls the menstrual cycle. An understanding of the role of hormones in reproduction has allowed scientists to develop not only contraceptive drugs but also drugs which can increase fertility.	In this section we will study meiosis and consider genetic variation as a result of fertilisation. We will go to consider gene mutations and their implications. We then explore how variation generated by mutations and sexual reproduction is the basis for natural selection; this is how species evolve. An understanding of these processes has allowed scientists to intervene through selective breeding to produce livestock with favoured characteristics. We will consider how genetic engineering is being developed and will discuss the controversy arising from this technology.	Students will follow a revision programme to review their knowledge, have the opportunity to practise the areas of the curriculum they most need further help with and prepare for their exams.	
SMSC and British Values	Horticulture and agriculture links Links to brewing and bread making industry		Mutual respect and tolerance; exploring different viewpoints on evolution. Social and moral development is shown by their understanding of what is morally acceptable in t he field of gene technology		
Parental Support	Help your child to access online resources such as their textbook from home devices. Provide a study space. Encourage completion of homework and additional reading from the text. Support students in their preparation for the exam period. Encourage uptake of extracurricular opportunities eg catch up classes				

Year 11 Curriculum Plan - Chemistry

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1
Units of Study	The rate and extent of chemical change Organic Chemistry	Chemical Analysis Chemistry of the atmosphere	Using resources	Revision	Exams
Key Concepts	<p>Students will investigate the many variables that can be manipulated in order to speed up or slow down reactions. They will go on to consider reversible reactions and make links to identifying how to maximise the yield of desired product (in the most viable way in industry)</p> <p>The chemistry of carbon compounds is so important that it forms a separate branch of chemistry. Chemists are able to take organic molecules and modify them in many ways to make new and useful materials such as polymers, pharmaceuticals, perfumes and flavourings, dyes and detergents.</p>	<p>Analysts have developed a range of qualitative tests to detect specific chemicals. The tests are based on reactions that produce a gas with distinctive properties, or a colour change or an insoluble solid that appears as a precipitate. Students will learn about these different methods and how they can be used.</p> <p>The Earth's atmosphere is dynamic and forever changing. The causes of these changes are sometimes man-made and sometimes part of many natural cycles. The problems caused by increased levels of air pollutants require scientists and engineers to develop solutions that help to reduce the impact of human activity.</p>	<p>Industries use the Earth's natural resources to manufacture useful products. Students will explore how chemists seek to operate sustainably; minimise the use of limited resources, use of energy, waste and environmental impact in the manufacture of these products. Chemists also aim to develop ways of disposing of products at the end of their useful life in ways that ensure that materials and stored energy are utilised. Pollution, disposal of waste products and changing land use has a significant effect on the environment, and</p>	<p>Students will follow a revision programme to review their knowledge, have the opportunity to practise the areas of the curriculum they most need further help with and prepare for their exams.</p>	
SMSC and British Values	<p>In industry, chemists and chemical engineers determine the effect of different variables on reaction rate and yield of product.</p>	<p>The role of Scientists using very complex software to predict weather and climate change as there are many variables that can influence this.</p>	<p>Environmental chemists study how human activity has affected the Earth's natural cycles, and how damaging effects can be minimised.</p>		
Parental Support	<p>Help your child to access online resources such as their textbook from home devices. Provide a study space.</p> <p>Encourage completion of homework and additional reading from the text.</p> <p>Support students in their preparation for the exam period.</p> <p>Encourage uptake of extracurricular opportunities eg catch up classes</p>				

Year 11 Curriculum Plan - Physics						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Units of Study	Wave Properties	Electromagnetic Waves	Electromagnetism	Earth in Space	Revision	Exams
Key Concepts	Waves radiate information. Understanding waves helps us to communicate. Measuring waves Key concepts: PSL5.1 Visualising waves PSL5.2 Speed of waves Topic PSL6 Wave model of light Key concepts: PSL6.1 Refraction and dispersion	Waves radiate information. Understanding waves helps us to communicate. Topic PSL7 Electromagnetic waves Key concepts: PSL7.1 More than colours PSL7.2 Interacting with EM waves	The everyday world is largely a consequence of electrical charge. Understanding electricity and magnetism helps us develop technology to improve live Topic PEM7 Electromagnetism Key concepts: PEM7.1 Motor effect PEM7.2 Generator effect	Understanding the uniqueness of the Earth and the vastness of space gives us perspective and awe. Topic PES3 Gravity in space Key concepts: PES3.1 Stellar evolution PES3.2 Orbital motion	Students will follow a revision programme to review their knowledge, have the opportunity to practise the areas of the curriculum they most need further help with and prepare for their exams.	
SMSC and British Values	The impact of waves (Tsunamis and Earthquakes) in Physics			The Big Bang Theory in Physics		
Parental Support	Help your child to access online resources such as their textbook from home devices. Provide a study space. Encourage completion of homework and additional reading from the text. Support students in their preparation for the exam period. Encourage uptake of extracurricular opportunities eg catch up classes					

Assessment Overview						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	Baseline KS3 Science assessments in Biology, Chemistry and physics End of unit tests: 7A Cells 7D Separating mixtures	End of unit tests 7I Energy 7K Forces	End of unit tests 7B Sexual Reproduction in animals 7F Acids and Alkalis	End of unit tests 7G The particle Model 7J Current Electricity	End of unit tests 7C Muscles and Bones 7H Atoms, Elements and Molecules	End of unit tests 7L Sound 7D Ecosystems End of year exams in Biology, Chemistry, Physics
Year 8	End of unit tests 8B Plants and their Reproduction 8E Combustion	End of unit tests 8A Food and Nutrition 8L Earth and Space 8I Fluids	End of unit tests 8C Breathing and Respiration 8J Light	End of unit tests 8F The Periodic Table 8G Metals and Their Uses	End of unit tests 8K Energy Transfers 8D Unicellular Organisms	End of unit tests 8H Rocks End of year exams in Biology, Chemistry, Physics
Year 9	End of Unit tests 9A Genetics and Evolution 9E Making Materials 9I Forces and motion		9B Plant growth 9F Reactivity 9J Forcefields and electromagnets		End of unit tests B1 Cells C1 Atoms P1 Energy Each unit contains relevant practical skills assessment opportunities in Required Practicals as specified by AQA End of year exams in Biology, Chemistry, Physics form the Baseline assessment of Science for GCSE	
Year 10	B2 Cell division C2 Periodic table P3 Energy resources	B3 Organisation and the digestive system C3 Structure and Bonding P4 Particles at work	B4The circulatory system B7Non-communicable disease C4 Quantitative chemistry P6 Molecules and Matter	MOCK EXAMS AQA Paper 1	B15 Adaptation, Interdependence and Competition C5 Acids and bases P8 Forces in balance	B16-18 Ecology C6 Electrolysis C7 Endothermic and exothermic reactions P9-10 Forces and motion
Year 11	B8 Plant science B9 Bioenergetics respiration and Photosynthesis B10 Homeostasis- Nervous system C8 Rates and equilibria C9 Organic Chemistry P11 Wave Properties	B11 Homeostasis- hormonal control C10 Chemical Analysis C11 Chemistry of the atmosphere P12 Electromagnetic Waves	December Mock Paper 1 (full)	Revision and exam practice Mock paper 2 (in lessons)	GCSE EXAMS	