



Lowton

Church of England High School

'YOU ARE THE LIGHTS OF THE WORLD'

YEAR 9 HALF TERM 2 PARENT GUIDE

Lowton Church of England High School

Parents' Guide to Year 9 - Autumn Half Term 2

Subjects	What will your child learn?	What will my child know , and what will they be able to do by the end of the half term?
English	<p>The focus for this half term is on 'A Christmas Carol'. Students will build on their knowledge of the importance of context to study why Dickens wrote the novel. Students will also study the language, structure and message of the novel.</p>	<p>Students will know about:</p> <ul style="list-style-type: none"> • Why Dickens wrote 'A Christmas Carol' • What life was like for different classes in society at the time the novel was written • The plot, structure, characters, language and themes in the novel. • Students will be expected to know and learn quotations from this text for use in the examinations. <p>Students will be able to:</p> <ul style="list-style-type: none"> • Understand, discuss and analyse plot, characters, relationships, themes and language - verbally and in written form. • Write in an appropriate style for a literature essay, including the use of quotations
Maths	<p>Foundation Course: Students will study elements from the statistics strands (graphs) and algebra (equations and inequalities).</p> <p>Higher Course: Students will study elements from the statistics strands (averages and correlation) and geometry (Pythagoras and trigonometry).</p>	<p>In the statistics unit, students on the foundation course will know about and be able to;</p> <ul style="list-style-type: none"> • Create stem and leaf diagrams • Interpret and design bar charts/histograms • Use two-way tables <p>In the algebra unit, students on the foundation course will know about and be able to;</p> <ul style="list-style-type: none"> • Solve equations including brackets and fractions • Change the subject of a formula • Express inequalities on a number line <p>In the statistics unit, students on the higher course will know about and be able to;</p> <ul style="list-style-type: none"> • Find averages from frequency tables (including grouped data) • Understand how correlation can be linked to everyday scenarios • Interpret scatter graphs <p>In the geometry unit, students on the foundation course will know about and be able to;</p> <ul style="list-style-type: none"> • Calculate unknown lengths using 3D Pythagoras • Calculate angles in 2D and 3D shapes • Use trigonometric ratios

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Science Trilogy	<p>Students will continue their journey through the AQA specification and will be focussing on the topics:</p> <ol style="list-style-type: none"> 1. Cell biology. 2. Atomic structure and the periodic table. 3. Energy. <p>This is only a brief summary and more detail about what your child should be able to do can be found at:</p> <p>https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464</p>	<p>Students will Know about:</p> <ul style="list-style-type: none"> • How cells in prokaryotes and eukaryotes are designed and adapted to their functions. • How the periodic table is arranged and the way in which this links to the structure and properties of atoms. • How energy is stored and transferred in a variety of different situations. <p>Students will be able to:</p> <ul style="list-style-type: none"> • Prepare and view slides under a microscope. • Investigate the effects of osmosis on a plant cell. • Interpret diagrams of atoms and link this to their position on the periodic table. • Calculate the specific heat capacity of an unknown material. • Apply their knowledge to exam practice questions to demonstrate the breadth of skills required for GCSE.
RS	<p>Students will begin the second half of the autumn by continuing with their study of the RS GCSE. Students will focus on the Christian practices unit, which examines topics such as Baptism, Eucharist, prayer & worship and Pilgrimage.</p>	<p>Students will know about:</p> <ul style="list-style-type: none"> • Christian beliefs and teachings regarding the meaning and purpose of sacraments • The impact of key Christian practices on the life of a believer. <p>Students will be able to:</p> <ul style="list-style-type: none"> • Describe and explain Christian practices including, baptism, Eucharist, prayer, worship, and pilgrimage. • Consider contrasting interpretations of the meaning and significance of Christian practices. • Evaluate the relevance of Christian practices on the lives of believers.
PE CORE	<p>PE will be taught on a carousel of sporting activities. During each carousel students will follow one or more of the following sports:</p> <p>Boys: Football, rugby, handball, volleyball, fitness, badminton, trampolining, athletics</p> <p>Girls: Football, Hockey, handball, netball, fitness, badminton, trampolining, athletics, gymnastics, dance</p>	<p>In the sports covered in this half term pupils will:</p> <ul style="list-style-type: none"> - Develop their ability to perform all core and some of the advanced skills - Perform consistently to a very good standard of accuracy, control and fluency - Display the physical fitness required to perform effectively - Regularly make the correct decisions required to perform in a range of situations

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History	Students will focus on the Renaissance, Industrial and Modern time periods focusing on causes, treatments and preventions used in medicine.	<p>Students will know about:</p> <ul style="list-style-type: none"> • Great Plague • Thomas Sydenham • William Harvey • Vesalius • Royal Society • Animalcules • Jenner and the smallpox vaccine • Chloroform • Carbolic acid and antiseptic surgery • 1875 Public Health Act • Lister, Snow, Nightingale and Simpson • Pasteur and Germ Theory • Robert Koch • X Rays and aseptic surgery • Magic bullets • Antibiotics • Fleming, Florey and Chain – penicillin • Watson and Crick – DNA • Creation and impact of the NHS • Healthy Lifestyle campaigns • Human Genome • Lung cancer <p>Students will be able to: Apply their knowledge to exam practice questions to demonstrate the breadth of skills required for GCSE</p>
Geography	Students will focus on studying larger biomes, such as hot deserts, focusing on adaptations, opportunities and challenges to development and causes, effects and solutions to desertification.	<p>Students will know about:</p> <ul style="list-style-type: none"> • How hot deserts ecosystems have a range of distinctive characteristics • How hot deserts has economic and environment impacts • How hot deserts need to be managed • The value of hot deserts to people and the environment <p>Students will be able to:</p> <ul style="list-style-type: none"> • Describe the distribution and characteristics of large scale natural global ecosystems such as hot deserts • Explain the interdependence of climate, water, soils, plants, animals and people and how plants and animals adapt to the physical conditions. • Produce a case study to illustrate the opportunities and challenges in a hot desert • Evaluate strategies used to manage desertification.
Option Subjects	What will your child learn?	What will my child know, and what will they be able to do by the end of the half term?

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Spanish	This half term students will continue their GCSE Spanish course. They will learn how to discuss their holidays and how to give and justify their opinions in much more detail. They will study a variety of past, present and future tenses.	<p>By the end of the term students will be able to:</p> <ul style="list-style-type: none"> • Make a reservation for a holiday. • Talk about problems on holidays and make a complaint if needed. • Use bigger numbers in Spanish. • Give opinions in the past tense. • Give an account of a holiday in the past. • Use the past and future tenses to talk about what they did last weekend and discuss plans for next year. <p>They will understand increasingly complicated pieces of written and spoken Spanish and will be able to produce longer pieces of written and spoken Spanish.</p>
French	This half term students will begin their GCSE French course. They will learn how to discuss their personal relationships with family and friends and how to give and justify their opinions in much more detail	<p>By the end of the term students will be able to:</p> <ul style="list-style-type: none"> • Describe the qualities of a good friend and talk about their close friends in a variety of tenses. • Use the past and future tenses to talk about what they did last weekend and their plans for next weekend. • Use the imperfect tense to describe what they used to be like when they were younger • Talk about their personal role models <p>They will understand increasingly complicated pieces of written and spoken French and will be able to produce longer pieces of written and spoken French</p>
Drama	Pupils will focus on physical theatre, particularly the work of Frantic Assemble theatre company. This will lead into script work on 'The Curious Incident of the Dog in the Night' before the pupils see the performance by the National Theatre in November.	<p>Pupils will know and be able to use:</p> <ul style="list-style-type: none"> • Round by through • Chair duets • Circle • A variety of lifts <p>Pupils will develop timing, co-ordination, teamwork, persistence and creativity.</p>
Music	Harmony and Tonality are the elements students will focus on this term. Theory of key signatures, scales and chords will be developed and put into practise through listening, composing and performing.	<p>Pupils will demonstrate the learning and development of the following skills:</p> <ul style="list-style-type: none"> • Understanding key signatures in major and minor keys and the scales within. • Ability to build harmonic triads from degrees of the scale. • Perform and compose chord progressions within a key.
Art	Students will build upon the research and development from the previous half term to produce a ceramic vessel based upon the theme of "Natural Forms".	<p>Students will be able to demonstrate:</p> <ul style="list-style-type: none"> • How to create a vessel using a pinch pot and coiling. • How to cut away sections of clay. • How to build up layers of clay using slip. • How to create texture within the clay surface. • How to use watercolour paints to apply layers of coloured tone.

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Photography	<p>Students will learn about the work of Karl Blossfeldt and Tony Howell. Using the DSLR cameras students will take photographs of natural forms such as seedpods, leaves and dried flowers.</p>	<p>Students will be able to demonstrate:</p> <ul style="list-style-type: none"> • How to use the manual focus. • How to zoom in on objects. • How light and background colour will affect the tonal values of a photograph. • How to edit images using “hue, saturation and lightness.” • How to change tonal values with “levels”.
Food Technology	<p>In Year 9 students are introduced to the EDQUAS GCSE Food Preparation and Nutrition course. Within each 6 week half term is included:</p> <ul style="list-style-type: none"> • 4 weeks of commodity-based theory and practical (Dairy this half term) • 1 week of NEA Assessment 1 (science investigation on food) focus and practise • 1 week of general nutrition and diet theory, and a linked practical (with associated written work in preparation for NEA Assessment 2). <p>(Based on 6 weeks in each half term.)</p>	<p>In this half term students will know:</p> <ul style="list-style-type: none"> • The concept of provenance, and how this commodity is grown/reared and processed • Focus on dairy as a commodity • How this commodity is grown, and also include primary and secondary processing (including pasteurisation) Include storage and food hygiene and safety • Nutritional values (include sources, functions, deficiencies, excess, daily requirements) and dietary considerations – specifically to milk, cheese and yoghurt <p>Students will be able to:</p> <ul style="list-style-type: none"> • Carry out food science lesson -make butter as a class • Continue the concept of NEA Assessment 1 (practical and written expectations. Introduce a written brief, conduct an experiment. • Complete exam style questions • Prepare and cook high skilled dishes that encourage students to gain maximum marks at year 11
Design Technology	<p>Students will continue their key stage 4 journey in year 9 by starting to look at more practical ways of communicating design ideas. This half term we will be focussed on prototyping in cardboard and prototype development in harder materials such as bendy ply, mdf, acrylic and HIPS.</p> <p>We will cover topics from area 3: Design and Make Principles and area 2: Core Technical principles.</p> <p>Their tasks in lesson should take a more practical approach for much of this half term but will still be interspersed with theoretical principles.</p>	<p>Students will know:</p> <ul style="list-style-type: none"> • How to form corrugated card into a number of different 3D forms • What type of modelling equipment to use and how to use it safely • The working properties of modelling materials: papers and boards • The working properties of harder materials and how they affect eventual production <p>Students will be able to:</p> <ul style="list-style-type: none"> • Create a prototype for a lamp in the style of Memphis, building on last terms research, and develop this in line with their sketching • Understand that different materials have different working properties • Demonstrate an understanding of core technical principles relating to process.

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Computer Science	Students will be introduced to Python programming which is an essential part of the Computer Science curriculum.	<p>Students will know how to:</p> <ul style="list-style-type: none"> • Define what variable is • Define the following different data types <ul style="list-style-type: none"> ○ String ○ Integer ○ Float ○ Character ○ Boolean • Understand different arithmetic operators • Understand different relational operators <p>Students will be able to:</p> <ul style="list-style-type: none"> • Use the print statement • Create a variable • Create code to take an input and produce an output • Correctly use different arithmetic operators • Correctly use different relational operators
Creative iMedia	Students continue with their exam preparation from the first half term, but will combine the knowledge already learnt with the new unit of Creating a Multi-Page website.	<p>Students will know:</p> <ul style="list-style-type: none"> • What the World Wide Web is • What HTML is • What CSS is and how it is used • The main principles of a good website design • The importance of consistent website design • Why websites need contact forms • What happens when a website form is submitted <p>Students will be able to:</p> <ul style="list-style-type: none"> • Edit HTML code • Write CSS code • Complete website designs • Create a HTML template • Create internet and external links in a website • Create a website form

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<p style="text-align: center;">PE GCSE</p>	<p>Practical PE will be taught on a carousel of sporting activities. During each carousel students will follow one or more of the following sports:</p> <p>Boys: Football, rugby, handball, volleyball, fitness, badminton, trampolining, athletics</p> <p>Girls: Football, Hockey, handball, netball, fitness, badminton, trampolining, athletics, gymnastics, dance</p> <p>Theory</p> <ul style="list-style-type: none"> - The ten components of fitness required to be able to play sport to a high standard. - How to test each of these components. - How different sports require different components in order to perform well. - Which components are more important to a range of sports. - The skills and rules used in a range of sports. 	<p>In the sports covered in this half term pupils will:</p> <ul style="list-style-type: none"> - Develop their ability to perform all core and some of the advanced skills - Perform consistently to a very good standard of accuracy, control and fluency - Display the physical fitness required to perform effectively - Regularly make the correct decisions required to perform in a range of situations <p>They will know:</p> <ul style="list-style-type: none"> - The ten components of fitness. - The definitions of each component. - How to test each component. - What components of fitness are used in a range of sports. - The skills and rules used in a range of sports <p>They will be able to:</p> <ul style="list-style-type: none"> - Apply these components to a range of sports. - Decide which components of fitness are most important to perform to a high standard in a sport. - Answer past exam questions on the components of fitness.
	<p>Students will study the AQA topic:</p> <p>Cell biology.</p> <p>This is only a brief summary and more detail about what your child should be able to do can be found at:</p> <p>https://www.aqa.org.uk/subjects/science/gcse/biology-8461</p> <p>Students will study the AQA topic:</p> <p>Bonding, structure and the properties of matter.</p> <p>This is only a brief summary and more detail about what your child should be able to do can be found at:</p> <p>https://www.aqa.org.uk/subjects/science/gcse/chemistry-8462</p>	<p>Students will know about:</p> <ul style="list-style-type: none"> • How cells in prokaryotes and eukaryotes are designed and adapted to their functions. <p>Students will be able to:</p> <ul style="list-style-type: none"> • Prepare and view slides under a microscope. • Investigate the effects of osmosis on a plant cell. • Use the aseptic technique to prepare a culture of bacteria. • Apply their knowledge to exam practice questions to demonstrate the breadth of skills required for GCSE. <p>Students will know about:</p> <ul style="list-style-type: none"> • How different types of particle are chemically bonded together and how this affects the properties of the material in question. <p>Students will be able to:</p> <ul style="list-style-type: none"> • Use data provided about the properties of an unknown substance to define the type of chemical bonds that hold its particles in place. • Apply their knowledge to exam practice questions to demonstrate the breadth of skills required for GCSE.

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	<p>Students will study the AQA topic:</p> <p>Energy</p> <p>This is only a brief summary and more detail about what your child should be able to do can be found at:</p> <p>https://www.aqa.org.uk/subjects/science/gcse/physics-8463</p>	<p>Students will know about:</p> <ul style="list-style-type: none"> • How energy is stored and transferred in a variety of different situations. <p>Students will be able to:</p> <ul style="list-style-type: none"> • Calculate the specific heat capacity of an unknown material. • Apply their knowledge to exam practice questions to demonstrate the breadth of skills required for GCSE.