



# Lowton

Church of England High School

## 'YOU ARE THE LIGHTS OF THE WORLD'

### YEAR 9 HALF TERM 1 PARENT GUIDE

# Lowton Church of England High School

## Parents' Guide to Year 9 - Autumn Half Term 1

Core Subjects	What will your child learn?	What will my child <b>know</b> , and <b>what</b> will they be <b>able</b> to do by the end of the half term?
<b>English</b>	Students will begin their English Literature GCSE course this half term. They will learn to analyse poetry, including the importance of social and historical context, covering 'Ozymandias' by Shelley, 'Hawk Roosting' by Hughes, 'Living Space' by Dharker and 'London' by Blake. They will begin their study of Dickens' 'A Christmas Carol', with specific focus on social/historical context.	<p>Students will know about:</p> <ul style="list-style-type: none"> <li>• The importance of the social and historical context of the literature covered</li> <li>• The techniques writers use and their effect on the reader</li> <li>• How to use some subject specific terminology</li> </ul> <p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Write about the importance of social and historical context of their texts they have studied.</li> <li>• Use subject specific terminology to analyse poetry and prose</li> <li>• Be able to analyse and write about a poem / section of text formally and in detail</li> </ul>
<b>Maths</b>	<p>Foundation Course: Students will study elements from the Number strands (Fractions, Decimals, Percentages) and Algebra (Expression and Formulae).</p> <p>Higher Course: Students will study elements from the Number strands (HCF/LCM, Standard Form, Surds, Laws of Indices) and Algebra (Expressions, Equations, Formulae and Sequences).</p>	<p>In the Number unit, students on the foundation course will know about and be able to;</p> <ul style="list-style-type: none"> <li>• Use operations involving decimal numbers</li> <li>• Work with positive and negative numbers to find squares and square roots.</li> <li>• Work out calculations that involve brackets, squares, cubes, and square roots.</li> </ul> <p>In the Algebra unit, students on the foundation course will know about and be able to;</p> <ul style="list-style-type: none"> <li>• Use correct algebraic notation and recognising the difference between a formula and an expression.</li> <li>• Substitute numbers into expressions involving brackets and powers.</li> <li>• Write expressions and simple formulae to solve problems.</li> </ul> <p>In the Number unit, students on the higher course will know about and be able to;</p> <ul style="list-style-type: none"> <li>• Calculate with numbers in standard form.</li> <li>• Understand the difference between rational and irrational numbers.</li> <li>• Simplify surds and rationalise denominators.</li> </ul> <p>In the Algebra unit, students on the foundation course will know about and be able to;</p> <ul style="list-style-type: none"> <li>• Use correct algebraic notation and recognising the difference between a formula and an expression.</li> <li>• Solve problems using geometric sequences.</li> <li>• Find the nth term of quadratic sequences.</li> <li>• Factorise quadratics of the form <math>x^2 + bx + c</math></li> </ul>

## Science Trilogy & Triple Science

Students will be completing a 'prep for GCSE' course which summarises and consolidates all the skills and knowledge they should have picked up over the past 2 years in KS3 to give them a good foundation to build on in their GCSEs

### Students will know about:

- Fundamental ideas in Biology
- Fundamental ideas in Chemistry
- Fundamental ideas in Physics

### Students will be able to:

- Label a plant and animal cell
- Describe the functions of the organelles in plant and animal cells
- Give examples of specialised cells and describe their adaptations
- Name the main body systems and describe their basic function
- State the 3 types of microbe
- Describe how the body defends itself against microbes
- state the main food groups and describe what they are used for
- understand why we look similar but not identical to our parents
- recall how many chromosomes there are in human cells
- know the difference between an element, atom, compound, molecule and mixture.
- represent elements as symbols
- use the periodic table to identify metals and non-metals
- can name groups 1, 7 and 8
- represent the following simple molecules as formula; Water, Calcium carbonate, Carbon dioxide and hydrochloric acid.
- name the salts produced by the 3 main acids we use in Science.
- write simple word equations and know the difference between a reactant and a product
- balance simple symbol equations
- can work out how many protons, neutrons and electrons any atom has on the periodic table
- can draw the basic structure of an atom and give the electron configuration
- can name the 3 types of bond and what they are between
- can describe how global warming and acid rain are caused and the negative effects of these
- select an appropriate equation from an equation sheet
- Use the equation  $\text{Speed} = \text{distance}/\text{time}$  and rearrange
- put any 3 item equation into a formula triangle
- Describe the different types of renewable and non-renewable fuels
- state the units of the following things; energy, potential difference, current and resistance
- convert simple units including minutes into seconds or hours and Kilo and milli into standard units and back
- Draw what particles in a solid, liquid and gas look like and give the names for the main state changes.

Core Subjects	What will your child learn?	What will my child <b>know</b> , and what will they be <b>able</b> to do by the end of the half term?
		<ul style="list-style-type: none"> <li>state 7 different forms of energy and be able to draw Sankey diagrams showing energy transfer</li> <li>recall the EM spectrum in order and give a use for each wave in the spectrum.</li> </ul>
RS	<p>Students will begin their RS GCSE this half term.</p> <p>The first topic is Christian Beliefs, focusing on the nature of God and Jesus Christ &amp; Salvation.</p>	<p><b>Students will know about:</b></p> <ul style="list-style-type: none"> <li>Christian beliefs regarding the nature of God and Jesus and Salvation.</li> </ul> <p><b>Students will be able to:</b></p> <ul style="list-style-type: none"> <li>Describe key events from the life of Jesus</li> <li>Describe the nature of God &amp; the Trinity</li> <li>Explain the problem of evil &amp; Christian responses to it.</li> <li>Compare and contrast the Genesis account of creation with scientific theories of creation.</li> <li>Suggest the impact different Christian beliefs about God and Jesus impact upon the life of a believer.</li> <li>Evaluate Christians beliefs and attitudes on controversial issues relating to the aforementioned topics.</li> </ul>
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><b>Boys:</b> Football, rugby, handball, volleyball, fitness, badminton, trampolining, athletics</p> <p><b>Girls:</b> 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"> <li>develop their ability to perform all core and some of the advanced skills</li> <li>skills will be performed consistently to a very good standard of accuracy, control and fluency</li> <li>display the physical fitness required to perform effectively</li> <li>regularly make the correct decisions required to perform in a range of situations</li> </ul>
History	<p>Students will start the GCSE by studying the Medieval and Renaissance time periods focusing on causes, treatments and preventions used in medicine.</p>	<p><b>Students will know about:</b></p> <ul style="list-style-type: none"> <li>Hippocrates / Galen – Theory of the Four Humours</li> <li>Miasma</li> <li>Astrology and superstition</li> <li>Power of the Catholic Church</li> <li>Physicians</li> <li>Barber Surgeons</li> <li>Wise women – herbal remedies</li> <li>Black Death</li> <li>Great Plague</li> <li>Thomas Sydenham</li> <li>William Harvey</li> <li>Vesalius</li> <li>Royal Society</li> <li>Animalcules</li> </ul> <p><b>Students will be able to:</b></p> <p>Apply their knowledge to exam practice questions to demonstrate the breadth of skills required for GCSE</p>

Core Subjects	What will your child learn?	What will my child <b>know</b> , and what will they be <b>able</b> to do by the end of the half term?
<b>Geography</b>	Students will begin their Geography GCSE course this half term (Paper 1 Section B Living World) by studying different ecosystems around the world including local micro ecosystems, meso ecosystems and larger biomes such as Tropical Rainforests focusing on adaptations, causes, effects and solutions to deforestation.	<p>Students will know about:</p> <ul style="list-style-type: none"> <li>• How ecosystems exist at a range of scales and involve the interaction between biotic and abiotic components</li> <li>• How tropical rainforest ecosystems have a range of distinctive characteristics</li> <li>• How deforestation has economic and environmental impacts</li> <li>• How tropical rainforests need to be managed to be sustained.</li> <li>• The value of tropical rainforests to people and the environment</li> </ul> <p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Describe the distribution and characteristics of large scale natural global ecosystems such as tropical rainforests.</li> <li>• Explain the interdependence of climate, water, soils, plants, animals and people and how plants and animals adapt to the physical conditions.</li> <li>• Produce a case study to illustrate the causes and impacts of deforestation and the value of tropical rainforests to people and the environment.</li> <li>• Evaluate strategies used to manage the rainforest sustainably</li> </ul>
Option Subjects	What will your child learn?	What will my child <b>know</b> , and what will they be <b>able</b> to do by the end of the half term?
<b>Spanish</b>	This term students will begin their GCSE Spanish course. They will learn how to discuss their holidays 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"> <li>• Describe a holiday explaining where they go to and why.</li> <li>• Revise the present tense and know what an irregular present tense verb is.</li> <li>• Use the preterite tense to describe which activities they did on holiday.</li> <li>• Recognise some irregular preterite tense verbs.</li> </ul> <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>

Core Subjects	What will your child learn?	What will my child <b>know</b> , and what will they be <b>able</b> to do by the end of the half term?
<b>French</b>	This 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"> <li>• Describe their relationships with various family members.</li> <li>• Explain why they get along well with friends and family and why they sometimes disagree.</li> <li>• Describe the qualities of a good friend and talk about their close friends.</li> </ul> <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>
<b>Drama</b>	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"> <li>• Round by through</li> <li>• Chair duets</li> <li>• Circle</li> <li>• A variety of lifts</li> </ul> <p>Pupils will develop timing, co-ordination, teamwork, persistence and creativity.</p>
<b>Music</b>	Students will start the year being introduced to the course and the expectations will be set out. They will begin preparation for their first assessed performance piece – a solo. We will also start to explore music theory through the elements of rhythm and metre.	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Understand the expectations of performing at GCSE level in Music and will prepare their first piece.</li> <li>• Build on knowledge from KS3 Music theory going into more detail on <b>rhythm &amp; metre</b>.</li> </ul> <p>A composition will be completed focussing on the elements above which will be assessed at the end of the half term.</p>
<b>Art</b>	During this term pupils will focus upon the theme of Natural Forms. Pupils will use the work of Heather Knight and Kate Malone as inspiration.	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Demonstrate observational drawing skills using a variety of media.</li> <li>• Use drawings of natural forms to create 6 designs for a ceramic vessel.</li> <li>• Produce a small clay maquette from one design idea.</li> </ul>
<b>Photography</b>	<p>During this half term pupils will be taught:</p> <ul style="list-style-type: none"> <li>• The basic functions of a DSLR camera.</li> <li>• Compositional rules.</li> <li>• Presentation skills.</li> </ul>	<p>By the end of this half term pupils will know:</p> <ul style="list-style-type: none"> <li>• How to take photographs using manual focus.</li> <li>• How to take photographs using Depth of Field.</li> <li>• How to take photographs using Viewpoints, Framing and Compositional rules.</li> </ul>

Core Subjects	What will your child learn?	What will my child <b>know</b> , and what will they be <b>able</b> to do by the end of the half term?
<p style="text-align: center;"><b>Food Technology</b></p>	<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"> <li>• 4 weeks of commodity-based theory and practical</li> <li>• 1 week of NEA Assessment 1 (science investigation on food) focus and practise</li> <li>• 1 week of general nutrition and diet theory, and a linked practical (with associated written work in preparation for NEA Assessment 2).</li> </ul> <p>(Based on 6 weeks in each half term.)</p>	<p>In the first half term students will know:</p> <ul style="list-style-type: none"> <li>• General introduction to macronutrients and micronutrients</li> <li>• Focus on Fruit and vegetables as a commodity</li> <li>• Nutritional values (include sources, functions, deficiencies, excess, daily requirements)</li> <li>• Dietary considerations – specifically to fruits and vegetables</li> </ul> <p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Carry out scientific investigation on enzymic browning and oxidation (carry out a simple browning experiment)</li> <li>• Introduce the concept of NEA Assessment 1 (practical and written expectations. Introduce a written brief, conduct an experiment.</li> <li>• Complete exam style questions</li> <li>• Prepare and cook high skilled dishes that encourage students to gain maximum marks at year 11</li> </ul>
<p style="text-align: center;"><b>Design Technology</b></p>	<p>Students will continue to work loosely around the AQA design and Technology specification to build their knowledge, understanding and skills.</p> <p>During this half term we are going to focus on skills. Including 3d sketching, using wood working tools, using the bag press to make bendy ply shapes and using the laser cutter. All of these are key skills that will need to be applied autonomously once Non-Exam Assessment work starts in year 11.</p>	<p>Students will know:</p> <ul style="list-style-type: none"> <li>• What the terms Isometric, oblique, 1 point perspective and 2 point perspective mean and be able to apply these to design drawings.</li> <li>• The names of manual woodworking tools and tools that can be used to process plastics</li> <li>• The principles of how the bag press and hotwire cutter work.</li> <li>• How to independently operate the laser cutter</li> </ul> <p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Draw out their designs using at least 2 of the different perspective techniques</li> <li>• Use various pieces of manual cutting and shaping tools in the workshop for woods and some plastics</li> <li>• How to create shapes and forms in bendy ply by using moulds they have self-cut using the hot wire cutter</li> <li>• Operate the laser cutter via 2d design to create components or sections to further their designs.</li> </ul>

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<b>Computer Science</b>	<p>Students will be introduced to OCR Computer Science Course.</p> <p>Students will be introduced to Computer Network and how they work.</p>	<p>Students will know:</p> <ul style="list-style-type: none"> <li>• What a network is</li> <li>• The difference between the internet and the World Wide Web</li> <li>• The difference between a WAN and LAN</li> <li>• The purpose and differences between a Client Server Network and a Peer to Peer Network.</li> </ul> <p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Identify and draw a number of different network topologies.</li> <li>• Identify and use the correct network protocol and the layer it is in</li> <li>• Identify and explain network hardware</li> </ul>
<b>Creative iMedia</b>	<p>Students will be introduced to the Creative iMedia course and be introduced to the key themes introduced by RO81</p>	<p>Students will know:</p> <ul style="list-style-type: none"> <li>• What a target audience is</li> <li>• Students will understand the following term: <ul style="list-style-type: none"> <li>○ Mass &amp; Niche Audience</li> <li>○ Demographics</li> <li>○ Psychographics</li> </ul> </li> <li>• Be able to identify different camera 'shot types'</li> </ul> <p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Identify a target audience from a given scenario</li> <li>• Create a Mood Board from a given scenario</li> <li>• Create a Mind map for a given scenario</li> <li>• Create a Storyboard for a given scenario</li> <li>• Create a Visualisation Diagram</li> </ul>



Core Subjects	What will your child <b>learn</b> ?	What will my child <b>know</b> , and what will they be <b>able</b> to do by the end of the half term?
<b>PE GCSE</b>	<p><b>Practical</b> 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><b>Boys:</b> Football, rugby, handball, volleyball, fitness, badminton, trampolining, athletics</p> <p><b>Girls:</b> Football, Hockey, handball, netball, fitness, badminton, trampolining, athletics, gymnastics, dance</p> <p><b>Theory</b></p> <ul style="list-style-type: none"> <li>- The ten components of fitness required to be able to play sport to a high standard.</li> <li>- How to test each of these components.</li> <li>- How different sports require different components in order to perform well.</li> <li>- Which components are more important to a range of sports.</li> <li>- The skills and rules used in a range of sports.</li> </ul>	<p>In the sports covered in this half term pupils will:</p> <ul style="list-style-type: none"> <li>- develop their ability to perform all core and some of the advanced skills</li> <li>- skills will be performed consistently to a very good standard of accuracy, control and fluency</li> <li>- display the physical fitness required to perform effectively</li> <li>- regularly make the correct decisions required to perform in a range of situations</li> </ul> <p>They will know:</p> <ul style="list-style-type: none"> <li>- The ten components of fitness.</li> <li>- Definitions of each component.</li> <li>- How to test each component.</li> <li>- What components of fitness are used in a range of sports.</li> <li>- The skills and rules used in a range of sports</li> </ul> <p>They will be able to:</p> <ul style="list-style-type: none"> <li>- Apply these components to a range of sports.</li> <li>- Decide which components of fitness are most important to perform to a high standard in a sport.</li> <li>- Answer past exam questions on the components of fitness.</li> </ul>
<b>Triple Science</b>	See above	See above for half term 1 All pupils do the prep for GCSE