



Lowton

Church of England High School

'YOU ARE THE LIGHTS OF THE WORLD'
YEAR 10 HALF TERM 2 PARENT GUIDE

Lowton Church of England High School

Parents' Guide to Year 10 - 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>This half term the students will complete their study of 'Macbeth'. They will also begin looking at a range of non-fiction texts from the 19th and 21st centuries. Students will learn how to explore the purpose, structure and language of these non-fiction texts</p>	<p>Students will know about:</p> <ul style="list-style-type: none"> • Different types of non-fiction texts and their purposes • Different types of questions that can be asked about a piece of non-fiction and how to answer them <p>Students will be able to:</p> <ul style="list-style-type: none"> • Write about the purpose, language and structure of a non-fiction text • Write comparatively about non-fiction texts • Be able to write appropriately about non-fiction in an exam situation
Maths	<p>Foundation students will be studying units on ratio and proportion and geometry (right angled triangles)</p> <p>Higher students will be studying units on number (multiplication theory) and geometry (similarity and congruence)</p>	<p>Students on the foundation course will know about and be able to:</p> <ul style="list-style-type: none"> • Divide a quantity into a ratio • Share a value into multiple parts • Work with recipes • Calculate unknown lengths using Pythagoras and trigonometry • Calculate unknown angles using trigonometry <p>Students on the higher course will know about and be able to:</p> <ul style="list-style-type: none"> • Work with direct and indirect proportion • Work with distance, speed and time • Show that a shape is congruent • Calculate missing sides through congruence and similarity
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. Bioenergetics. 2. Particle model of matter. 3. Atomic structure. <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 chemical reactions in living things govern their life processes. • How different states of matter link to the internal energy of the material in question. • Why large atoms are radioactive and the consequences of this. <p>Students will be able to:</p> <ul style="list-style-type: none"> • Investigate the effect of light intensity on the rate of photosynthesis of a plant. • Determine the densities of different objects. • Apply their knowledge to exam practice questions to demonstrate the breadth of skills required for GCSE.

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?
RS	<p>Students will begin the second half of the autumn term by focussing on the Jewish Practices unit, which examines topics such as the Synagogue and worship, and family life and rituals.</p>	<p>Students will know about:</p> <ul style="list-style-type: none"> • The synagogue and its importance • Public acts of worship • Shabbat • Worship • The written law • Rituals and their significance • Dietary laws • Festivals <p>Students will be able to:</p> <ul style="list-style-type: none"> • Describe and explain the importance of the synagogue • Explain and evaluate the significance of Jewish practices, such as worship, Shabbat & festivals. • Compare and contrast different denominational beliefs regarding Jewish practices. • Evaluate the relevance and significance of Jewish practices for believers today.
PE CORE	<p>Practical</p> <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 many of the advanced skills - Perform consistently to a very good standard of accuracy, control and fluency - Display the physical fitness required to perform very effectively - Regularly make the correct decisions required to perform in a range of situations

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?
History	<p>Students will continue their study of the Germany paper by looking at:</p> <ul style="list-style-type: none"> • The creation of a Nazi dictatorship • Life in the Nazi dictatorship <p>Students will also begin the Cold War Paper 2 topics. They will study the:</p> <ul style="list-style-type: none"> • Origins of the Cold War • Early tensions 1946-1955 	<p>Germany</p> <p>Students will know about:</p> <ul style="list-style-type: none"> • The Police State • Control of the Churches • Nazi Youth and education • Role of women • Persecution of minorities <p>Students will be able to:</p> <ul style="list-style-type: none"> • Draw inferences from sources • Engage with interpretations of key events and identify how they are different and why • State whether they agree or disagree with a particular interpretation • Construct causal explanations about how the Police State was created, how control of the Churches was achieved, how education and youth movements became propaganda opportunities and how and why persecution of minorities such as the Jews was possible <p>Cold War</p> <p>Students will know about:</p> <ul style="list-style-type: none"> • The three conferences at Tehran, Yalta and Potsdam • The decline in the relationship of the Big Three • The start of the arms race • Berlin Blockade and Airlift • Hungarian Uprising <p>Students will be able to:</p> <ul style="list-style-type: none"> • Identify key consequences of each event • Construct narrative analyses of each event • Explain the importance of each event for the development of the Cold War
Geography	<p>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>	<p>Students will know about:</p> <p>How hot deserts ecosystems have a range of distinctive characteristics</p> <p>How hot deserts has economic and environmental impacts</p> <p>How hot deserts need to be managed</p> <p>The value of hot deserts to people and the environment</p> <p>Students will be able to:</p> <p>Describe the distribution and characteristics of large scale natural global ecosystems such as hot deserts</p> <p>Explain the interdependence of climate, water, soils, plants, animals and people and how plants and animals adapt to the physical conditions.</p> <p>Produce a case study to illustrate the opportunities and challenges in a hot desert</p> <p>Evaluate strategies used to manage desertification.</p>

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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?
Spanish	<p>This term students will continue to study the free time section of the GCSE course.</p> <p>They will continue to learn and build on prior knowledge about how to describe in more detail what they do in their free time and to talk about the advantages and disadvantages of different leisure activities. They will develop their skills in giving and understanding information in more complex situations and will be introduced to more stem changing verbs and the past tense.</p>	<p>By the end of the term students will be able to:</p> <ul style="list-style-type: none"> • Understand information about other people and their opinions about free time in more detail. • Understand how to compare things in Spanish • Use stem changing verbs • Confidently tackle a range of GCSE style exam questions across the four skill areas <p>They will understand increasingly complicated pieces of written and spoken Spanish and will be able to produce longer, and more complex pieces of written and spoken Spanish. They will write to a Spanish penfriend in Seville about their free time and hobbies.</p>
French	<p>This term students will continue to study theme 2 of the GCSE course. (Local, national, international and global areas of interest.)</p> <p>They will master how to describe their local area and to talk about the advantages and disadvantages of living in different regions. They will develop their skills in giving and understanding information in more complex situations and will be introduced to another future tense.</p>	<p>By the end of the term students will be able to:</p> <ul style="list-style-type: none"> • Understand information about the weather (including in different tenses) • Understand how to compare things in French • Understand a variety of ways to ask questions in French • Confidently tackle a range of GCSE style exam questions across the four skill areas <p>They will understand increasingly complicated pieces of written and spoken French and will be able to produce longer, and more complex, pieces of written and spoken French. They will have the opportunity to write to a French penfriend.</p>
Drama	<p>Pupils will focus on devising techniques before starting their GCSE practical work in February. This half term we will be adding more written work to their devising process to prepare them for the controlled assessments after Christmas</p>	<p>Pupils will be introduced to a variety of stimuli and explore different approaches to using them to create drama. They will also practise writing up their work ready for the written logs they will complete for the exam in February.</p> <p>Pupils will:</p> <ul style="list-style-type: none"> • Create and perform full length pieces and short extracts. • Be able to write about their initial response to stimuli, how they used research and brought ideas to their work. • They will produce work with a clear message to their audience. • They will use and be able to write about a variety of rehearsal techniques they have used to develop their work. • Pupils will evaluate their finished practical work and plan how they could improve in future work.

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?
Music	The second unit of study is textures as part of our contextualised study within the four areas of study. We will again apply the three core skills; listening/appraising, performance and composition.	Pupils will demonstrate the learning and development of the following skills: <ul style="list-style-type: none"> • Understanding the different types of textures within music and hear them within different styles. • Perform demonstrating the different textures. • Compose demonstrating the different textures. For more detailed evidence of the pieces studied, please see pupil's work.
Art	During this half term pupils will continue working on the theme "Masks of the World". Pupils will be using their research and development drawings to produce a mixed media mask.	During this half term pupils will be able to: <ul style="list-style-type: none"> • Translate a 2-dimensional design into a 3-dimensional form. • Use papier-mache to construct areas of relief. • Use tonal gradients of acrylic paint. • Use mixed media materials to add adornments to the mask.
Photography	During this half term pupils will be analysing the work of other artists who have used portraiture as subject matter. To fulfil the course requirements, this project is used to experiment with drawing in photography.	During this half term pupils will be to demonstrate: <ul style="list-style-type: none"> • Stitching into photographs. • Drawing and painting onto photographs. • Produce light drawing photograph through exposure.
Design Technology	<p>During half term 2 students will continue with learning about the core and specialist principle areas of the specification. They will focus on systems and mechanical devices, modern and smart materials, materials properties and materials working properties.</p> <p>At approximately 4 weeks into term we will begin a Non-Exam Assessment style task where students will focus on Design and Make principles. This will cover design strategy and research, components, communication of ideas, stock forms, ecological and social footprint and scales of production.</p>	<p>Students will know:</p> <ul style="list-style-type: none"> • The key terms: component, stock size, ecological, social, materials and working properties. • Various ways of beginning a project and how to proceed with research and designing. • Why working properties must be considered. • How we use different methods to analyses different tasks. • How to freehand sketch in 3d • How to layout a design sheet <p>Students will be able to:</p> <ul style="list-style-type: none"> • Research and record their findings on A3 portfolio sheets. • Demonstrate different methods of task analysis • List and explain the working properties of materials relevant to their programme of study. • Draw in isometric, 2pt perspective and oblique.

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Food Technology	<p>In Year 10 students continue with the EDQUAS GCSE Food Preparation and Nutrition 9-1 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"> • 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) 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
Computer Science	<p>Students will be introduced to Python programming, which is an essential part of the Computer Science Curriculum.</p> <p>Students will also continue looking into the CPU, Computer Systems, and Networks</p>	<p>Students will know:</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

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<p>Creative iMedia</p>	<p>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>	<p>Students will know:</p> <ul style="list-style-type: none"> • 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 website's 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 • Start to create the website for the RO85 Unit

PE GCSE

Practical

PE will be taught on a carousel of sporting activities. During each carousel students will follow one or more of the following sports:

Boys: Football, rugby, handball, volleyball, fitness, badminton, trampolining, athletics

Girls: Football, Hockey, handball, netball, fitness, badminton, trampolining, athletics, gymnastics, dance

Theory

1.1.c - Movement Analysis

- The three classes of lever, their locations, the order of the components (fulcrum, load and effort) and their use in physical activity and sport.
- The definition of mechanical advantage.
- The locations of the three planes of movement in the body and their application to physical activity and support.
- The locations of the three axes of rotation in the body and their application to physical activity and support.

1.1.d - The Cardiovascular and Respiratory Systems

- The three different types of blood vessel.
- The pathway of the blood through the heart.
- The definitions of 'heart rate', 'stroke volume' and 'cardiac output'.
- The role of red blood cells.
- The pathway of air through the respiratory system.

In the sports covered in this half term pupils will:

- Develop their ability to perform all core and many of the advanced skills
- Perform consistently to a very good standard of accuracy, control and fluency
- Display the physical fitness required to perform very effectively
- Regularly make the correct decisions required to perform in a range of situations

1.1.c:

They will know:

- The three levers, planes of movement and axes of rotation.
- What is meant by the term 'mechanical advantage' and the levers where this is present.

They will be able to:

- Apply this content to physical activity/sporting examples.
- Answer past exam questions on movement analysis.

1.1.d:

They will know:

- The three different types of blood vessel.
- The pathway of the blood through the heart.
- The definitions of 'heart rate', 'stroke volume' and 'cardiac output'.
- The role of red blood cells.
- The pathway of air through the respiratory system.
- The role of the respiratory muscles in breathing.
- The definitions of 'breathing rate', 'tidal volume' and 'minute ventilation'.
- The role of alveoli.
- The difference between aerobic and anaerobic exercise along with practical examples.

They will be able to:

- Apply this content to physical activity/sporting examples.
- Answer past exam questions on the cardiovascular and respiratory systems.

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	<ul style="list-style-type: none"> - The role of the respiratory muscles in breathing. - The definitions of 'breathing rate', 'tidal volume' and 'minute ventilation'. - The role of alveoli. - The difference between aerobic and anaerobic exercise along with practical examples. 	
Triple Science	<p>Students will study the AQA topic:</p> <p>Bioenergetics.</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 know:</p> <ul style="list-style-type: none"> • How chemical reactions in living things govern their life processes. <p>Students will be able to:</p> <ul style="list-style-type: none"> • Investigate the effect of light intensity on the rate of photosynthesis of a plant. • Apply their knowledge to exam practice questions to demonstrate the breadth of skills required for GCSE.
	<p>Students will study the AQA topic:</p> <p>Quantitative chemistry.</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:</p> <ul style="list-style-type: none"> • How to use data about formula masses and moles to make calculations of the quantities of chemicals involved in reactions. <p>Students will be able to:</p> <ul style="list-style-type: none"> • Balance chemical equations. • Apply their knowledge to exam practice questions to demonstrate the breadth of skills required for GCSE.
	<p>Students will study the AQA topic:</p> <p>Particle model 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/physics-8463</p>	<p>Students will know:</p> <ul style="list-style-type: none"> • How different states of matter link to the internal energy of the material in question. <p>Students will be able to:</p> <ul style="list-style-type: none"> • Determine the densities of different objects. • Apply their knowledge to exam practice questions to demonstrate the breadth of skills required for GCSE.