

Year 10 Spring Curriculum Update

January 2024

YEAR 10 SPRING TERM OVERVIEW

Year 10 students from both campuses travelled to The Globe Theatre in London to experience Shakespeare's play 'Macbeth' first hand on the famous stage. The staff at the theatre commented on the incredible behaviour of our students and how proud we should be of them. In March, we will be visiting Milton Keynes Theatre to watch a production of Macbeth with a mixture of year groups being invited to enjoy the experience.



On the sporting front, both campuses continue to achieve success in fixtures, cup competitions and tournaments. The Year 10 netball team have won all three league games played so far this season and achieved second place in the MK Schools' Netball



Tournament with the Girls Football team comfortably winning the MK School's Tournament for a third time in a row. Having had such a great start to the season, we are looking forward to more great achievements as we start the new year.

It is positive to see so many Year 10 students actively engaging in their lessons with some fantastic class work and answers being provided. They have started the new year with great attitudes to learning and this will stand them in good stead for their mocks later in the academic year.

Subject support sessions are being run by teachers to support them with their learning. Students should be speaking with their class teachers to find out when and where these are held for each subject.

ENGLISH LANGUAGE

Working with the theme of Rebellion, this term students will develop their synthesis and comparison skills with a focus on non-fiction writing. These are key skills for their English Language Paper 2 exam.



Students will explore a range of non-fiction extracts, including news articles, speeches and letters. Students will use these texts to engage with debates about contemporary issues, such as climate change and human rights, as well as building their confidence with analysing writers' methods and comparing ideas between texts.

In the first half term, students will enjoy discussing texts by activists such as Emma Gonzalez and Micaela Loach, exploring contemporary issues from a young person's perspective. They will then learn how to compare the perspectives to older texts on a similar theme.

Later in the term, students will use the ideas and methods previously discussed to shape their own non-fiction writing. This focus on the writing section of the Paper 2 exam will effectively prepare students for their Spoken Language Endorsement speeches they will be preparing after Easter.

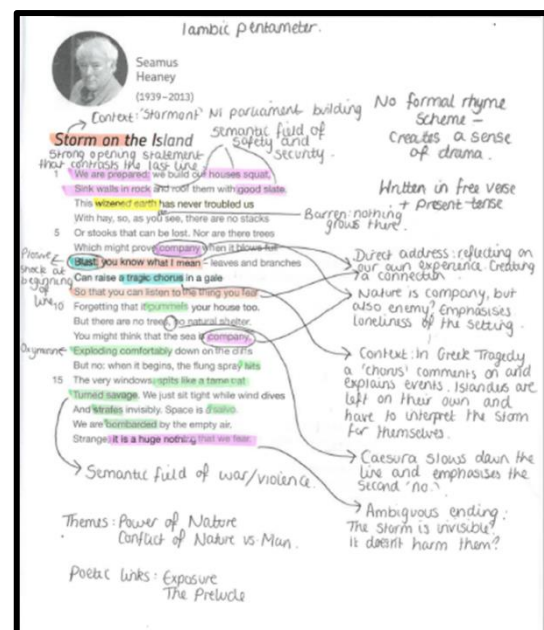
ENGLISH LITERATURE

This term students are reading and studying the AQA Power and Conflict poetry anthology, one of their GCSE set texts for English Literature.

Students will study fifteen poems that make up the anthology collection, exploring themes such as the power of mankind, the power of nature, the effects of war, memory and identity.

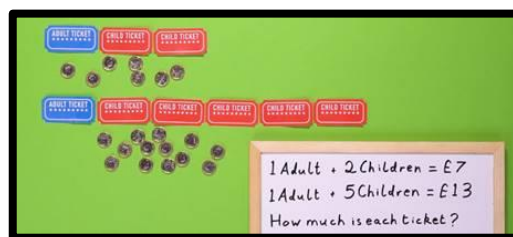
Currently, students are enjoying exploring the theme of 'Power and Conflict' and looking at the war poems from the collection. Students will go on to explore links between the poems, developing their ability to compare ideas and methods which is a key skill for GCSE English literature.

In lessons, students will continue to craft their essay-writing skills so that they feel confident in responding to a GCSE exam-style question.



MATHS

In Spring term 1 students will study fractions and percentages. They will explore the difference between terminating and recurring decimals, the relationship between fractions, decimals and percentages. They will be taught how to calculate percentages of an amount in a range of contexts, including compound interest and growth and decay.



In Spring Term 2 students will be continuing their study of equations and be introduced to inequalities. They will explore extend their algebra skills from solving single equations to solving two linear equations simultaneously. They will then further extend their skills by applying them to solving problems involving inequalities. For those students on the Higher Maths course, they will be taught different techniques to solve both quadratic equations and inequalities.

SCIENCE

BIOLOGY

In the first part of this half term students will continue with a chapter focusing on the Theory of Evolution proposed by Darwin and the evidence that he used to draw his conclusions. They will look at fossils and how organisms have changed over time, concluding this B5 chapter with looking at reasons for extinctions and impact of humans in the most recent extinction event, a topic which often poses interesting questions about whether we are able to bring animals back from extinction!



In the second half term, students will focus on 'Understanding the Environment' in chapter B4. They will look at cycles in nature, such as the water and carbon cycle, as well as learning about relationships that exist between different organisms. This chapter encourages students to look at the world around them and also to consider the balance between humans and the environment.

CHEMISTRY

This term we will be completing the trends in the periodic table and for triple scientists, the identifying substances units, looking at how we can identify unknown substances using chemical tests. Then the combined scientists will move on to rates of chemical reactions, studying kinetics and collision theory to explain why some reactions are fast and others are slow. The triple scientists will instead be moving on to the advanced calculation unit, where we work out how to calculate moles of gas volumes and solution concentrations.



PHYSICS

This spring we will conclude our journey into magnetism, its effects, and its applications around us. From the compass to tell directions, to the motors in many of our appliances at home, including vehicles we use, the generators of electricity with many of its applications to enhance and adorn our modern lives. In class we will be using the Lenz tube demonstration (images attached) of the repulsion from the magnetic fields due to a current being generated in a copper tube by a falling magnet, and its application in maglev trains (Bullet trains), and levitation demonstrations.



ART

In the first term of Year 10, GCSE Art, Craft and Design students have started to explore their 'sustained project' looking at the themes of 'Identity' or 'Messages'. For this forthcoming term, students will be working on their initial concepts and planning a range of developments from these within their projects. The sustained project will lead into the start of Year 11 with a five hour mock



exam for students to explore in depth and show a final outcome linking to their chosen theme. This is a highly individualised project based on the starting points. Students are supported with after school sessions run by their teachers to challenge, extend and scaffold their learning. An independent learning project accompanies each theme, so please ask your child about their plans for their independent outcome. Homework is set on Firefly.

Support sessions take place at Brooklands and Walnut Tree on Wednesday 3-4pm.

BUSINESS

Students have now completed their unit on the External Influences that affect business. This term we will be moving on Unit 3: Operations. Students will explore the different production processes used in business and learn about Job, Batch and Flow production and which type is most appropriate in different situations. This will link to studies regarding the procurement process and the best way businesses can obtain the resources and stocks they need to carry out their day-to-day activities. Students will then go onto explore the concepts of quality management including Quality Control, Quality Assurance and Kaizen which will link to the previous topic of procurement. Finally, students will need to consider how this all relates to the delivery of effective customer service and the consequences of neglecting these important factors. Students will complete their second central assessment and there will be an increased focus upon examination technique and effective ways to revise.



CHILD DEVELOPMENT

Students have now fully completed their Component 1 PSA and have shown amazing dedication and maturity during this process. The assessments were for a total of six hours and the groups revised wonderfully and worked so hard to answer the tasks to the best of their ability. I am so proud of them, their studiousness, and their commitment. Well done.

We have now started our new Component 2 – Learning through Play; and so far we have investigated the six stages of play and the seven types of the play. The students have worked in groups to make

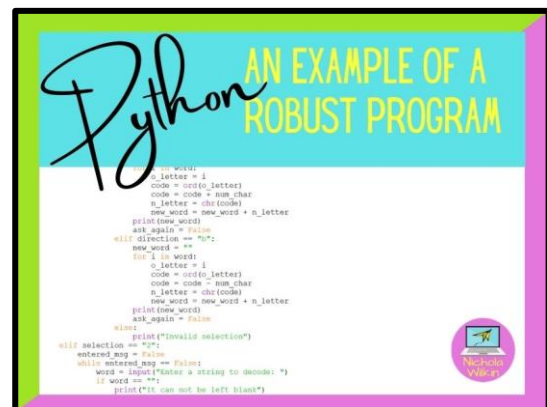


stunning collages of the areas of play which are displayed in the child development base rooms. We will also be establishing how professionals help babies and children to meet their next expected milestones through play, by providing activities which take into account the child's stage of play and the type of play that needs to be developed. We will be researching resources and activities used to support this in a range of early years settings.

COMPUTER SCIENCE

Students have been studying the fundamentals of networks, types and purposes of a network as it is the foundation for us all to communicate, connect and work effectively. What happens when it is now threatened? What computing threats are out there in the world? and what technological threats do modern companies face? The first unit this term addresses network security and cybersecurity in general.

Using the video tutorial link below can also help add to the knowledge learnt in lessons:



Network Security: <https://student.craigndave.org/videos/slr1-4-network-security>

With respect to programming, Robust programming is a style of programming that focuses on handling unexpected termination and unexpected actions. Year 10 will be looking at how we can maintain and produce well written programs, i.e. “robust” programs as well introducing some computational/Boolean logic.

Using the video tutorial link below can also help add to the knowledge learnt in lessons:

Robust programs: <https://student.craigndave.org/videos/slr2-3-producing-robust-programs>

Boolean Logic: <https://student.craigndave.org/videos/slr2-4-boolean-logic>

Do come along to our support sessions on Tuesdays in BE1 at Walnut Tree and on Thursday's in BC6 at Brooklands to help you enhance your learning in this topic.

CREATIVE MEDIA

Students will explore the relationship between genre, narrative and representation in media products, and develop their understanding of how they are interpreted by audiences. They will all learn how media production techniques are used to create different effects to communicate meaning to audiences.

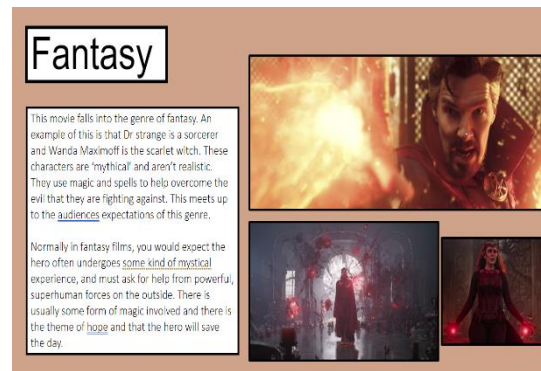
With keen interest the Pearson Set Assignment (PSA) was shared with students and work got underway.

Students produced two pieces of coursework for Component 2. Coursework activities were carried out during lesson time and outside of school for Independent Learning.

Learning Aim A = approx. 3 hours

Learning Aim B – approx. 7 hours

The PSA called for students to participate in practical workshops, with an end goal to produce a media product for a specific audience. Students have been working well in developing their camera skills and techniques, furthermore editing/manipulating their creative assets using Adobe Photoshop. Results will be provided in the summer.



DANCE

This Spring term we look at another fantastic professional work; 'Emancipation of Expressionism'. Students analyse dance phrases and styles for their written exam and personal understanding. In this piece there is also a focus on key production features, such as lighting and sound.

Students have also been participating in practical workshops, looking at styles associated with hip-hop; breaking, popping, locking, tutting, krumping and waacking! The students are now creating a group piece which fuses both contemporary and hip-hop, this will be shown on stage at Spring@Brooklands!

Next half-term, students will be looking at another remarkable professional dance work, 'Infra' by Wayne McGregor. The focus will be on his choreographic approaches using the 'Teach. Make. Task'. Students will have an opportunity to explore both the role of the choreographer and performer. They will participate in contemporary ballet workshops and break the boundaries of traditional ballet.



DESIGN AND TECHNOLOGY

Last term students learned the theory behind metals and created three different types of metal through making a bottle opener, a coat hook, and a piece of jewellery. I am proud of the work they achieved.



This term Year 10 students learn about the complicated world of Polymers and learn how to handle several different types of Polymer using various processes, culminating in the design and make of a Polymer clock with a working mechanism.

In Year 10 students can expect an hour a week of Independent Learning and they sit a mock exam in the summer term.

DRAMA

Year 10 Drama students finished last term with a devised performance, a portfolio to back up their ideas and a written evaluation of their work. This was a mock unit following the same process they will take next year when in Year 11. Their met high GCSE standards with the majority of students equaling or overachieving their target grades. We are really proud of them.



This half-term Year 10 drama students switch to scripted work and adapt two extracts from the same play into one performance. Already student work is of a professional standard for high quality and memorable performances which we hope to stage for the public in mid-March.

At the end of this half- term students look again at the set text. This time they are to solve the challenge of staging the play on different stages and they are to create prologues and epilogues to 'bookend' the play performance.

Students are also members of the ensemble for 'Godspell' and they invite you come along and enjoy the show. Others in the class have lead roles for other community groups; one has had the lead role in a short film, already big things are happening for this group of students.

ECONOMICS

Students will continue to study Unit 3.2 – How the economy works. Learners will examine the distribution of income in the UK, how inequality in the distribution of income can occur and how the redistribution of income and wealth can be achieved through taxation and government spending. Additionally, students explore the tools available to government to manage the economy. Government economic policies will be looked at, with a focus on monetary, fiscal and supply-side policies. Each policy will be examined in turn to show how they can be used to influence economic performance.



FOOD AND NUTRITION

Students will spend much of this term working on food science including how and why food is cooked, how to select appropriate cooking methods and the functional and chemical properties of food including protein, carbohydrates, and fats. Students will make a range of recipes that demonstrate the working characteristics and functional properties of ingredients. Students will also explore where and how ingredients are grown, reared, and caught and will consider advantages and disadvantages of local produced foods, seasonal foods and GM foods. Students will use this knowledge when selecting ingredients explaining the choices they have made.



Throughout the term students will continue to develop their technical cooking skills and enhance their evaluation skills by using a range of testing methods.

GEOGRAPHY

We have started to investigate our urban centres in Geography, first looking at trends and their locations on a global scale before focusing on our own country. Our case study of Birmingham is providing students with an insight into the historic purposes of UK cities and the challenges they have faced since the passing of the industrial revolution. Students will continue to explore Birmingham in more detail, investigating the changes made by local governments and evaluating the impacts of these changes. Later in the term will compare the success and failures of Birmingham to our contrasting case study, Rio De Janeiro in Brazil. This will allow students to evaluate the differences between two contrasting places and help to gain an understanding of how places are changing and are affected by different locational, economical, and historical factors.



HEALTH AND SOCIAL CARE



This term we will complete the Pearson Set Assignment for Component 1, which makes up 30% of the final grade. The pre-released material for the students is shared in January and students will be completing the four tasks the exam board sets.

HISTORY

Year 10 have now completed their study on Germany 1890-1945 and will begin the third unit on Britain, Health and the People c.1000-the present day. This is a thematic unit where students will study medical progress across a thousand years. They will examine doctors, causes and treatments of disease, surgery and public health.

The unit will begin with Medieval medicine where the students will learn about the works of Galen and Hippocrates, the influence of the Christian Church and Islamic Empire on medicine, the consequences of the Black Death of 1348 and the poor living conditions in Medieval Towns.



IT

This half term, students start off on their second set assignment which is on “Augmented Reality” which contains three to five practical tasks. It is scenario based and set at 36GLH (guided learning hours) and worth 60 marks of their course. In lessons, students will be looking at what AR is and the use of it to present information so that users can see more detail in items/ products with 2D or 3D images and can place the item digitally in their surroundings. AR provides increased engagement; interaction and a richer user experience and students will be completing the exam board’s set assignment, which will involve designing and creating an AR prototype. They will work on this till the end of April 2024.



Do come along to our support sessions on Tuesdays in BE1 at Walnut Tree and on Thursdays in BC6 at Brooklands to catch up on coursework and help you meet the deadline.

LANGUAGES

FRENCH

Students in Year 10 will continue to work on their GCSE course, moving on to Unit 8, which is on holidays. In this unit, students will revise the past tense in full and learn how to write about past, usual and future holidays. Students will also learn key vocabulary to talk about problems that you might experience on holiday, along with some cultural work to learn more about French cities and places of interest in France.



After half term, students will move on to Unit 9 of their course, which focuses on school. In this unit, students will learn vocabulary to describe their school day, and subjects they like and dislike. They will also have the opportunity to learn more about the differences between schools in the UK and in France.

SPANISH

Students will continue Theme 2 with a focus on travel and holidays. Students will enjoy learning about transport, accommodations, and holiday activities. At the same time, they will develop their communication skills and apply their knowledge to simulated real life situations, such as asking for directions, managing a hotel booking, and asking for refund. They will grow their accuracy and their understanding of language patterns with a focus on retaining vocabulary and referring to three times frames.



MUSIC



Students are exploring music from Broadway shows, film and computer games and making links with other popular styles. As we continue to develop our instrumental skills we are practically exploring songs or part of a score from student's favourite shows, films and games between 1950 and the present day.

In the second half term our focus will shift to the Hungarian composers Kodaly and Bartok as we explore how they combine traditional compositional techniques with new and original ones. Students are keen to add more techniques to their composition skill set and will be trying these out.

PE

Students will be completing a number of lessons on Table Tennis this half term, where they will be playing many different types of conditioned games as they build towards playing proper competition. A ranking system will also be introduced to the students this year, where they will get the chance to play for ranking places amongst their classes. This allows our students to experience and understand how individual sports are administered, and some of our budding tennis plays will already have experience with this in their local leagues.

After half term, girls will be experiencing Rugby lessons at Walton High, where we hope to create a positive experience which the girls can use as a new opportunity both in and out of school. After half term, all boys will change to Football with a game for understanding approach, the focus of these lessons is to improve technical skills through conditioned games.

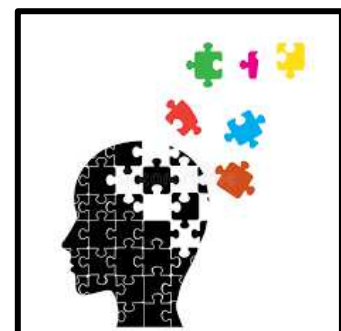
Cambridge National students have already completed the components of fitness element of the unit and applied these within their chosen sports. They have now moved on to the principles of training and how these are necessary when planning a six-week training plan (which they will need to do later this year). All aspects of the current lessons go towards students' final grade for R181- Applying the principles of training: fitness and how it affects skill performance. Students' final grade for this unit will equate to 40% of their final grade so it's really important that students are putting as much detail into their work as possible.



PSYCHOLOGY

This term students will be studying the memory topic. This is an exciting topic for students to focus on, as there are few areas of psychology that can have a bigger impact on our day to day lives; remembering the names of our friends, song lyrics, the name of the footballer who scored yesterday, and perhaps, most importantly, the vast amount of information that is directed at students every day in their lessons. Students will learn various theories about how our memories work and why it is that some memories can stay lodged in our minds forever, whilst it can sometimes be hard to remember what someone said 15 minutes ago! One such theory is called the Multi Store Model of memory, and we will carry out various experiments to see just how long memories can be stored in what is known as our 'short term store' if rehearsal cannot take place.

The memory topic is one that really engages students; it is easy for them to see how it links to so many aspects of their lives, and they will even learn tips along the way to how to improve their memories as well.



RELIGION, PHILOSOPHY AND ETHICS

In Religious Studies this half term, Year 10 will begin their study of Philosophical and Ethical Themes by starting the Religion and Life module. They will have the opportunity to explore different philosophical and ethical questions such as 'When does life begin?', 'Should we protect the environment?', 'Do we have the right to die?' Students will grapple with their views on these questions as well as apply their prior religious knowledge.



SOCIOLOGY

Year 10 continue to learn about education this term, which is an excellent module which students find highly engaging. Early on we will focus on the final part of education, which is factors affecting educational achievement. They will then explore how processes in school might affect students in different ways based on social class, ethnicity, and gender. Students will revisit sociological



perspectives, such as functionalism, feminism, and Marxism. Students are also introduced to the sociological perspective of interactionism, also sometimes referred to as labelling theory. This will consolidate their previous knowledge whilst also expanding and extending it, allowing them to develop their ability to critically examine sociological ideas and theories. They will also study the influential work of two sociologists – Stephen Ball's 'Beachside Comprehensive' and Paul Willis' 'Learning to Labour'.