

# Year 11

## Autumn 2<sup>nd</sup> Half-Term

### Maths

This term's focus will be shape and constructions. Students will look into plans and elevations, loci and bearings. Students will be able to make accurate drawings of triangles and other 2D shapes using a ruler and a compass. Students will be able to draw front and side elevations and plans of shapes made from simple solids; given the front and side elevations and the plan of a solid, students will be able to draw a sketch of the 3D solid. Next, we will look at similarity and congruence and learn the following rules; sss, sas, asa, rhs and ssa. Students will move on to loci and be able to draw and construct diagrams from given instructions, including regions satisfying a combination of loci. Finally, we will use three-figure bearings to specify direction, be able to mark on a diagram the position of a point given its bearings and give a bearing between points.

### English

Pupils will continue revision of literature text Jekyll and Hyde and revisit the Shakespearean text Macbeth in order to further their understanding of the themes that run throughout the play. Pupils will study the various dramatic techniques such as soliloquy and dramatic irony along with their effects. Pupils will analyse the text to uncover the central messages, through the analysis of language, structure and action. Pupils will identify symbolism, which aids meaning. By studying Macbeth pupils will refine their understanding of 16th century politics, societal organisations and questions about the themes of ambition, power and manipulation. Pupils will read independently and aloud as a whole class to appreciate the purpose of dialogue and stage directions in pushing the narrative forward. Pupils will use textual reference to structure their writing when responding to exam style questions in preparation for examinations. Students will also be required to refine their analysis of linguistics, dramatic techniques to provide a social commentary on how Shakespearean themes prevail into the 21st century, broadening their cultural capital.

### Science

Students will complete the following:  
Explain the heart's anatomy and adaptations, including the arteries, veins, and capillaries, as well as the causes and treatments of coronary heart disease. I can describe the main plant structures, such as xylem, phloem, and root hair cells. Show what happens during photosynthesis using the photosynthesis symbol equation, and use diagrams to explain how limiting factors affect the rate of photosynthesis, as well as recall respiration and metabolism. Explain how different components of the neurological and endocrine systems, such as the reflex arc, blood glucose levels, and the menstrual cycle, are employed to perform voluntary and involuntary behaviours. Type 1 and 2 diabetes, as well as the menstrual cycle, can be assessed. To describe the properties and reactivity trends of different lengths of hydrocarbons, as well as the creation of crude oil and how it is processed via fractional distillation (inc giving general formulas for alkanes and alkenes). Students will calculate and interpret electrical power and energy transfer by electrical work for electrical appliances, as well as explain the differences between direct and alternating voltage and current and how electricity is efficiently transmitted in the national grid. They will also explain the construction and safety mechanisms in a three-core cable and calculate and interpret electrical power and energy transfer by electrical work for electrical appliances.

## Art

This term students are investigating the theme of Power and Weakness. They are creating mind maps, artist research pages and photomontage and spraying painting techniques around the theme. This work goes towards their GCSE portfolio, which will be marked in May.

## ICT

We will be learning about Health & Safety - Display Screen Equipment legislation. Students will be auditing their working environment to identify and solve risks. *Functional Skills Level 2 content: manage information storage to enable efficient retrieval / use appropriate search techniques to locate and select relevant information / select information from a variety of sources to meet requirements of a complex task.*

## PSHE

Living in the Wider World - Next steps - We will be identifying effective revision techniques and strategies. We will be exploring post-16 options and application processes, including writing CVs, personal statements and interview technique.

## PE

Badminton - To use a range of different techniques to be able to beat an opponent. Students will have a full understanding of rules and regulations. Students will be able to compete in a full game of badminton with an understanding of all rules and regulations. Students will learn the different types of shots used in badminton.

## Work Skills

Students this term will be looking at managing their own money and budgeting, Practise how to effectively budget. Identify bills they may need to pay and when to pay them and recognise the impact of poor money management.

## Citizenship

This term we will explore the importance of voting and democracy and how digital democracy is used in political campaigns. We will also learn about the roles and methods of pressure groups, charities, and voluntary groups, and how trade unions protect people at work. Students will analyse how mass media informs and influences the public through the conceptual lenses of Noam Chomsky's 5 Filters and Stuart Hall's Representation Theory, paying close attention to the roles of propaganda and censorship. They will further explore why a free press is important within a democracy, with reference to case studies within current affairs such as the protests in Iran, and the war between Russia and Ukraine

## Catering

Pupils will recap on prior knowledge of allergies, carbohydrates, protein and e numbers. Pupils will identify from their assessment dishes what type of equipment they will need to use and look at their ingredients to see if they need to use alternatives or replacements. Pupils will then create a time plan for how long each step will take them taking into account Setting up, Preparation, cooking and cleaning.