

Year 10

Spring 2nd Half-Term

Maths

This term we will start by focussing on geometry. Students will use estimations for measure in everyday settings and become fluent in converting between units of measure. We will then build upon KS3 knowledge of area and perimeter for quadrilaterals, triangles and compound shapes. Students will then move on to study the volume of cuboids, cylinders and prisms.

Students will finish the term by delving deeper into their KS3 knowledge of linear equations. We will use function machines to find coordinates. They will sketch, plot and draw linear graphs in order to find approximate solutions, the gradient and midpoint of a line. Students will use this knowledge to draw, interpret and analyse distance time graphs.

English

In English this term year 10 will be introduced to the 19th and 20th century texts. Drawing on knowledge of the purpose and audience for the context of the writing, including social historical and cultural context. Pupils will explore aspects of plot, characterisation, events and setting. Pupils will use evidence in the text to support a point of view, including justifying inferences, collecting and organising ideas and facts. Subject specific vocabulary will be used in context in oral and written work. Exam questions will be used throughout to refine the skill of responding to exam style questions. The reading sessions will consist of retrieval, inference and clarifying.

Science

Students can explain how different pathogenic microorganisms are transmitted to animals and plants, cause disease and are fought by the immune system as well as understand how vaccinations work and the development of drugs. Students can calculate and explain rates of reaction using collision theory and explain how different factors affect it including catalyst as well as describe what reversible reactions and dynamic equilibrium are. Students for physics will then define permanent and induced magnets and give examples of each and describe how magnetic field patterns can be determined and drawn for magnets as well as explain Fleming's left-hand rule.

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 Y11 or taken to their next school. Some students will convert some of their work for the Bronze Arts Award.

ICT

We will learn more about ICT systems. Students will learn about different types of Networks. We will consider a range of input and output devices. *Functional Skills Level 1 content: enter, develop and refine information using appropriate software to meet the requirements of straightforward tasks.*

PSHE

Exploring influence

We will explore the influence and impact of drugs, gangs, role models and the media. We will learn skills to manage peer influence and personal safety in situations related to substances, gangs and crime including how to access help.

PE

Tennis - Students will learn tennis Lobs & overhead shots; overhead smash, top spin backhand lob and top spin forehand lob. Students will understand and learn how to use the above shots within competition.

Work Skills

To understand the importance of workplace attitude and roles, all of which will help them to prepare for any future workplace or work experience they may undergo. Students will also be exploring the skills and qualities for employability, and how they can make themselves more employable.

Citizenship

Theme B: Democracy at work in the UK.

This term, we will define what a free media is in all its forms and go on to examine the importance of a free media and the roles that media plays within a democratic country and also focus on the role the media has in holding those in power to account.

We will look at the different ways in which democracy could be improved within the UK and will analyse and explore the debate around allowing 16-year-olds to vote. Lastly, we will recall all that we have learnt over the last few weeks on the topic of democracy and then prepare a speech which aims to answer the overarching question of this unit: Does democracy in the UK work well?

Catering

Pupils will deepen their knowledge of food science focusing on macronutrients. We will be looking more in depth at macronutrients and the chemical structures of different food groups. Pupils will learn the chemical compounds of what food is made up of and how these converts into energy. We will be looking at recommended portion sizes based on this information of different food groups. Pupils will explain how they are able to pass on information they have learnt on to others to help them learn how to cook as a part of their BTEC Level 1 course