What we are learning this term in U2



English

This term the students will be starting work on an Entry Level Certificate in English. This will include learning about: form, audience, and purpose in relation to written English. They will also develop their use of verb tenses and sentences, as well as how to use stimuli to help them generate their own ideas for writing. Once a week, we will use the medium of film to stimulate discussion and writing, and the students will make weekly entries into their personal Journals.

Maths

Most students are working toward the new GCSE Mathematics qualification. This three year course will end with examinations being taken in Year 11. Over the course students will cover number and algebra skills, data handling, shapes and measures.

Learning could be consolidated at home through regular practise of skills such as telling the time, working out change and playing most card games. You can also access the 'My Maths' website at www.mymaths.co.uk with the username: Derrymount and the password.ncb.kg/password.ncb.kg/ncb.kg/password.ncb.kg/passwo

In the Summer Term students will strengthen their numeracy skills through regular practice. They will also work on probability and prediction, two-way tables and one of the new GCSE topics Venn diagrams. Work may include practical activities, written questions and practice of skills. Through these we hope to identify any weaknesses in student methods or understanding of these topics and strengthen their skills in these areas.

Science

Biology

This Autumn during Biology, pupils will begin by looking at some of the general concepts within the life sciences. Pupils will first look at the ways in which living species are classified, comparing the characteristics within each of the five kingdoms of life. Pupils will then progress through the various categories of classification within the animal kingdom, comparing vertebrates and invertebrates, studying the differences between animal species and looking at the work of Linnaeus.

Pupils will then look at variations within a species, including its causes, and how beneficial variations can lead to adaptations. Ultimately, this will culminate in lessons about Evolution, and the contribution to the scientific community of Charles Darwin.

Physics

The Physics lessons over the Autumn term will focus on the generation of electrical energy and its implications for the environment. Pupils will study renewable and non -renewable resources, and will appreciate the balance between their benefits and negatives for society and the environment.

Pupils will then study the differences between direct and alternating current, and will gain an understanding of how alternating current is made, and how it is transmitted throughout the country via the national grid. Pupils will also be shown how an electricity bill is calculated, and will be encouraged to gain an understanding of their own energy consumption, and to work out ways of becoming more energy and cost efficient with their consumption.

Chemistry

This Autumn, during Chemistry, pupils will work to consolidate their knowledge gained over the past years study, with an emphasis on developing their practical skills. Initially, lessons will focus on the chemistry of the Earths atmosphere, including its current composition, its development over time, and the impact of man made pollutants on the environment. Pupils will learn simple chemical tests for different gases present within the atmosphere, and study how changes in their concentration give rise to climate change and acid rain.

Pupils will then study how different rock types are exploited as natural resources, including the uses of limestone, and various metal ores. By studying the products of different chemical reactions of limestones, pupils will consolidate their understanding of acids and alkalis, including formation of salts, neutralisation reactions, and electrolysis.

Through these studies, pupils will also be able to enhance their understanding across the curriculum, tying in with economics, biology and geography.

Humanities

Students will begin to examine the Tudor and Stuart period. Specifically, pupils will be taught about the main events, issues and people facing Britain, with a focus on how the power of the monarchy changed in this period. There will be an emphasis on local history, investigating the significance of regional individuals, places and events which shaped the development of the monarchy.

Social Studies

Students will begin to investigate the society we live in on a local and wider level. Specifically, pupils will examine who makes up society by working towards an understanding of key terms. For example, this will include ethnicity, religion, migration, population, demographics and how this forms modern society.

PSVE

Students are involved in the compulsory teaching of personnel, social and vocational education. This does not result in a GCSE qualification but the students will benefit from life skills which they will acquire from the teaching of various subjects and topics. The topics covered this term include wellbeing, mental health, the dangers and positives of taking legal and illegal drugs and healthy living.

Also included for PSVE is further Titan training where students continue to develop knowledge and skills for independent living and travel.

Options

Creative Digital Media

Coding group: Mr Scholes will take the group through coding principles such as: variables, data types, loops, lists and functions, as well as testing and debugging.

Photography: The photography students will learn about a range of photographic equipment and techniques as part of a BTEC Level 1 in Photography. They will also refine their skills and control when using a camera on the Manual setting and explore different ideas for photographs e.g. taking photos for advertising purposes.

GCSE Textiles Technology

After completing the first piece of coursework pupils will need to choose their second task. The emphasis for this part of the course is on the quality of making to produce a final product. Pupils will further develop skills and abilities gained while undertaking the first task. They will need to choose suitable fabrics for making their chosen idea. Pupils need to demonstrate their ability to plan, develop and carry out a range of practical activities.

Textiles Enrichment

Pupils are encouraged to choose a theme and explore ideas around it before deciding what to make. It could be a piece of clothing, soft furnishing or accessory. They will learn about choosing suitable fabrics and the different ways to embellish and decorate fabrics alongside construction techniques.

Art-Enrichment

Utilising 3 dimensional skills pupils will first be looking at mask making and coiled pottery inspired by African art. Collaboration and mosaic is the following theme and pupils will be required to exercise their teamwork skills during the creation of a flower inspired mosaic. Pupils will be taught Health & Safety, tool usage, design and application of tesserae during this project. Focusing on holiday celebrations, pupils will end the term by exploring the possibilities of decoration on cards, glass and clay tree decorations.

Art-Wednesday

This term pupils will be starting a new BTEC unit titled 'Explore Painting'. This unit will require pupils to explore a variety of painting techniques, processes, paint mediums, scales and artists whilst practically experimenting. Pupils will demonstrate their gained knowledge and understanding through their sketchbooks, worksheets and Health & Safety logs, finalising practical skills with a series of landscape paintings focusing on trees. Peer and self-assessments will complete the project to help pupils recognise any development points and celebrate their successes.

Art -Friday

This term pupils will be starting a new BTEC unit titled 'Explore Drawing'. Pupils will explore a variety of drawing techniques, mediums, processes, scales and artist whilst practically experimenting. Pupils will demonstrate their gained knowledge and understanding through their sketchbooks, worksheets and Health & Safety logs, finalising practical skills through series of still life drawings. Peer and self-assessments will complete the project to help pupils recognise any development points and celebrate their successes.

Land Base Studies

Within this unit student will be learning how to prepare and select the certain plants needed for the seasons, create and display their work and have an understanding of using a range of different equipment needed to complete the task set out.

Adventure School

The first term of Adventure School will focus on Bush Craft and Camp Skills, predominantly in and around the newly developed Adventure School area. The sessions will cover setting up a camp, making shelters, learning knots and lashings and making simple structures, knife skills and whittling, cooking outdoors, first aid and navigation. During this term, there will be two overnight stays (in the school grounds) and an optional survival camp.

Health and Social Care

The aim of this unit is to introduce pupils to physical and emotional needs, factors that affect health and the general health and social care available for individuals. The unit also helps pupils to understand how health may be affected by different factors. The group will also visit different health centres and care providers.

First Aid

Heart start- Emergency Life Support: The aim of this course is to teach pupils a set of actions needed to keep someone alive in and emergency situation until professional help arrives. Pupils will be taught skills step to step from personal safety, keeping calm, acting quickly in situations and use acquired skills learnt on the course.

Animal Care

Floralands: The Animal care course is being delivered by Access Training following ABC Awards in Animal Care and Countryside Skills. The Course will teach pupil show to care for animals, maintain and promote their wellbeing. Pupils will also become aware of countryside and environmental issues relating to animal and wildlife.

Geology Enrichment

In Geology lessons this Autumn, pupils will first gain an appreciation for the bulk structure of the Earth, including the size, composition and origin of its various layers. This will also include an understanding of some of the core principles of Geology, including the law of superposition and plate tectonics.

After studying the large scale structure of the Earth, pupils will then investigate the minerals that make up the rocks that we find on the earths surface. Using hand specimens, pupils will investigate their various properties, and will use these properties as a means to differentiate between them. Pupils will investigate their crystal structure, their hardness and measure their specific gravities as a means of identification. These skills will have cross curricular links to their studies in chemistry, physics and geography.

Pupils will also have the opportunity to visit Wollaton Hall to study their own geological collection, and also to visit the Dinosaurs of China exhibition.

PΕ

This term, students will be developing and analysing skills in a number of sporting activities including Football, Rugby, Basketball and Badminton. Students will be examining issues such as teamwork, leadership and health and safety in sport. They will also be developing their understanding of both the mental and physical benefits of physical activity.