

**What we are learning  
this term in U1**



## **English**

Students will begin to examine *Frankenstein* by Mary Shelley in the Autumn Term. Essentially, based on various versions of this text, students will be writing for a wide range of purposes and audiences. This includes: stories, scripts, poetry and other imaginative writing, narrative and non-narrative texts, including persuasive arguments, formal letters and newspapers. This will promote an appreciation for reading across a wide variety of literature, as well as support learner understanding of prominent narrative devices and techniques of the author.

## **Science**

### **Physics**

In September, pupils will begin studying topics that will contribute towards their final examinations. Pupils will be following the curriculum by first studying the application of forces. Pupils will be looking at velocity and acceleration, velocity time graphs, and looking at the implications of Newtons laws of motion. To this end, they will be performing their own experiments, and looking at case studies based on the International Space Station.

### **Chemistry**

In September, pupils will be looking at the different types of chemical reactions. They will study how the different physical and chemical properties of materials can be used to separate and purify them on a laboratory and industrial scale. Pupils will begin to develop their own practical skills, and will learn how to develop their ideas to assist when making a fair test. Pupils will then begin an in depth look at the atom, and will learn that atomic structure governs the type and amount of chemical bonds that different atoms make.

## **Maths**

Most students have started 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](http://www.mymaths.co.uk) with the username: Derry-mount and the password: NG58HN.

In the Autumn Term students will strengthen their numeracy skills through regular practice. They will also work on number machines, sequences and work toward understanding the algebra involved. They will use tables, charts and graphs to deliver and collect information. 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.

## **PE**

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

## Options

### BTEC Sport and Leisure

Students will begin working a new unit titled; "How the Body Works". Students will learn about the Skeletal and Muscular systems as well as the heart, lungs and nutritional requirements of the body. Lessons will consist of both theory and practical sessions. Therefore, appropriate kit should be available for each session.

### Astronomy

The Astronomy option will initially focus on the basics of star gazing, such as the definitions of astronomical terms, constellations, and the use of celestial coordinates. Pupils will then study the techniques used in practical observations, the solar system including the motions of moons and planets, and how the different bodies within the solar system are formed. Pupils will then be briefed on how they can begin their own investigation of the night sky, so that they can produce an assessed piece of work for their GCSE.

### German

This term the students will explore the topic Travel. They will learn to describe holiday destinations, describe journeys and holiday experiences. They will have opportunity to use more complex sentences including the past tense. You can support your child by asking for new phrases each week and to look for language games on-line.

### Home Cooking

Cooking is an essential life skill that benefits our health and wellbeing. The course aims to give the students basic skills and knowledge to be able to cook for themselves in a healthy and cost effective way. This term we will be looking to work on gaining confidence in using different skills whilst cooking, learning basic recipes and understanding food safety and hygiene. Students will be taught how to handle equipment safely during these sessions, so that they are safe at both school and home. Each week students will be given a choice of recipe and as part of the lesson they will plan the meal and calculate the budget for the meal.

Once they gain the correct skills throughout the year and become more confident in the kitchen, we will be looking to work towards a BTEC (Level 1).

### First Aid

The group will be following a Heart start UK Course this term. They will learn about Emergency Life Support (ELS) and actions needed to keep a person alive in an emergency until professional support arrives. ELS skills can be used in a wide range of emergency situations, from choking, serious bleeding to cardiac arrest. The group will also be learning basic bandaging techniques including slings, assessing and dressing injuries.

### BTEC & ENRICHMENT Art

This term pupils will be exploring painting along with methods, properties and techniques. Initially pupils will be investigating/ recapping the colour theory before being introduced to a variety of artists to inspire their own artwork. Pupils will demonstrate learnt methods on four paintings, exercising a variety of paint, techniques and surfaces. To celebrate learning pupils will finalise project by creating a large scale painting in subject, mediums and techniques of choice.

Students registered on the BTEC qualification will additionally be completing worksheets to reinforce their learning, consider all Health & Safety aspects, document experimentation, demonstrate an understanding of formal elements and complete peer/self-assessments throughout the painting process.

## **Adventure School**

### **DofE Group**

This term the DofE Bronze group will work on expedition preparation: map reading, packing a rucksack, pitching tents and using stoves, resilience when hiking. The final expedition will see the group complete their Bronze Award

### **Tuesday group**

Work this term will consolidate and extend the group's ability safely, and with growing independence:

- Light and control a fire
- Cook simple meals in the outdoors
- Refine skills with using a hand axe and knife to prepare kindling for a fire
- Improve their knife skills when working with pieces of wood (whittling)

Make simple objects and structures out of wood, lashing pieces together and using appropriate knots where necessary

### **Dog Care / Dog Walking**

Each week the group will spend the morning at Jerry Green Dog Rescue Centre where they will learn about how the kennels are run, become familiar with the facilities and meet and learn about the four-legged friends that are temporarily homed there.

The students will learn about:

- Different dog breeds and their characteristics
- Understanding dog body language and how dogs read our body language

Training techniques

The students will also be helping out at the centre: cleaning out, basic care of the dogs, walking dogs in the exercise field. Gryff will be there too, of course, so he will need looking after and lots of cuddles from time to time.

### **History**

Students will participate in a thematic study unit, Medicine through Time. This will support learners in developing an understanding of how events have shaped various attitudes, beliefs and advances in civilisations throughout history, how this influences modern day society and how causes and effects can be open to interpretation. Cross-curricular skills such as analysing primary and secondary sources will be taught alongside how to construct an argument based on what students have learned. This will develop communication and written skills, as well as the ability for students to independently come to a judgement based on what they have learned.