

Welcome to our Autumn term Curriculum Letter. There are plenty of activities for students to get involved in this term and many departments will be running exciting activities in the run up to Christmas. More general information about the curriculum can be found <a href="https://example.com/here.com

We run 2 Challenge Days during the year where the normal curriculum is collapsed and specific exciting events are put on. This term's Challenge Day will be on Wednesday 23rd October. Year 10 will taking part in a Careers event and more information about this will be shared soon by Mr Neighbour.

#### Art

In Art, students will carry out an investigation into the work of the St. Ives Artists including a visit to Tate St. Ives.

### **Business**

As a brand new subject, students start at the beginning - by looking at what is needed when setting up a new small business! We analyse the skills and characteristics required as an entrepreneur and what to look for in spotting a business opportunity. We will then move on to discussing how businesses can use market research to develop and refine their business ideas. Students will learn how businesses identify gaps in the market and what is meant by market segmentation as well as learning how to analyse the competitive environment firms operate in.

#### Careers

As part of their PSHE lessons, students will start creating a Careers Action Plan.

## **Computer Science**

In Computer Science, students will develop their knowledge of Computer Hardware. They will carry out theory in Logical Operations. Students will carry out practical activities in Problem Solving , the construction of Algorithms and Programming using the Python programming language.

#### Drama

'Introduction to Drama GCSE'

Pupils will refresh/learn the history of theatre and focus on specific areas. Starting with Greek theatre and Commedia dell'arte, they will present pieces they have devised themselves using stock characters, masks, stylised body language and typical scenarios. Pupils will refine their skills with the 'basic' drama skills such as freezes, improvisation, physical theatre, characterisation and projection. They will perform a monologue to the class. Towards the later half of the term, they will be working together on their first devised piece from a stimulus.

# English

To begin their GCSE course, students will focus on their first English Literature text: Macbeth. They will draw on their knowledge and skills from Key Stage 3 to help them analyse Shakespeare's tragedy, building on their understanding of the historical context of Jacobean England and key themes such as kingship, nobility, deception and conflict.

After half term, students will begin their study of their 19th Century Literature set text - A Christmas Carol by Charles Dickens - building their analytical skills in response to short extracts and developing a critical understanding of the writer's presentation of key ideas/characters/themes across the whole text.

# Geography

After an initial exploration of what natural hazards are, year 10 students will be learning about how hurricanes form, their devastating impacts and their links to climate change.

Students will then go on to look at extreme weather at home in the UK and recall recent heatwaves, snowfall and winter storms that have caused havoc on the UK in recent years. We will then link these events to climate change and investigate the different man-made and natural causes of climate change.

## Geology

Students will be starting this new subject. They will be studying Theme 1 - "Things Geological", which gives an introduction to the science and also an historical context of why this science is so important to everyone and then moving onto Theme 2 "A Jewel in Space". where they will study the geology of the other planets in our solar system and compare them with Earth.

## History

Students will be studying the reign of King John. Once this module has been completed we will then begin Medicine through Time: Middle Ages and Renaissance. Students develop a knowledge of medieval hospitals and surgery and what the key changes were during the Renaissance.

### **Mathematics**

Students will cover the following topics:

Quadratic Equations - used for modelling and linking to topics studied in physics. It is also useful preparation for those students who will go on to study further maths.

Simultaneous Equations - Building on knowledge of linear equations from stage one, the concept of two variables, graphical solving is also used in science.

Combined Events
Mutually Exclusive Events
Independent Events and Tree Diagrams
Conditional Probability
Venn Diagrams and Set Notation
Growth and Decay
Compound Measures
More Compound Measures

# MFL - French

In French, students will complete a topic called: Le grand large (holidays).

They will learn how:

- To discuss where they usually go on holiday and what they normally do there
- To compare and contrast present, past & future holidays
- To discuss their dream holiday (conditional tense)
- To book a hotel and review their stay

### MFL - German

Pupils will complete the topic "Role models and inspirational people".

They will learn how to:

- Describe their role model
- Describe why their role model is important to them
- Describe what their role model has done
- Learn about famous German people who are inspiring
- Talk about what they are going to/want to do to inspire others in the future

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### Music

This term is an introduction to performance and composition and theoretical musical terminology. Students will use their exploration of the musical elements to begin their first composition and their first performance assessment.

## PE

#### CORE PE:

Students are offered a range of activities that develops their personal fitness and promotes an active, healthy lifestyle. They are able to choose 2 per week which they then develop skills in for half a term.

They are taught to use and develop a variety of tactics and strategies to overcome opponents in either hockey, badminton, basketabll. volleyball, handball, rugby, netball, or football, depending of which of these they choose.

They can choose to work on their own fitness in our fitness suite.

#### GCSE PE:

Students build on their knowledge from KS3 PSHE on the topic of Physical, emotional and social health, fitness and well-being. They develop understanding of the difference between physical, emotional and social health and the impact of exercise. Students also gain the understanding to be able to explain how lifestyle choices positively and negatively affect health. Students then analyse in detail the effect diet, alcohol and nicotine have on health, fitness and wellbeing.

Students will develop their understanding of the structure and functions of the musculo-skeletal system, including it's importance in physical activities. They will learn about the different movements possible and which main muscles are used in which physical activities. They will learn how the muscular system works with the skeleton to allow participation in physical activity and sport.

#### **PSHE**

Year 10 has two strands this year: looking at the wider world including what is citizenship, human rights, role of the media, first aid, managing money. The other strand deals with RSE such as impact of cyber bullying, good mental health, healthy/unhealthy relationships, pornography, self-examination to stay healthy, fertility and pregnancy.

## Religion, Philosophy and Ethics

The first unit studied in GCSE RS is "Relationships and families" including religious views on sexuality, contraception, marriage, divorce, gender equality and family life.

Students will then start the unit on Jewish beliefs. This links to what they have done on Judaism in year 9 and Jewish practices which is studied later in the course. In Ethics and Values, students are looking at extremism and human rights issues.

### Science

#### Biology:

We are finishing off the infection and response unit and then moving onto the nervous system. During the unit on infection and response, students cover how body responds to attacks from pathogens and then consider how we can use this knowledge to look at the development and use of vaccines. This gives us chance to cover lots of real-world examples e.g. herd immunity and the covid-19 vaccine. We finish this unit by looking at the development of drugs.

We will then be moving onto the human nervous system. Students should know the structure and function of the nervous system and Triple scientists expand this knowledge by looking at the brain and the eye. The knowledge gained here will allow us to look at homeostasis and body control in year 11.

#### Chemistry:

Students completing both the Combined and Separate Science course will develop their knowledge of materials and their properties from KS3 by looking at bonding, structure, and properties of substances.

They will then look at the topic of extent of chemical change. In this topic, students learn about reversible reactions and how changing conditions can maximise the yield of chemical reactions. This topic has links with industrial chemistry and chemical engineering.

#### **Physics**

All students in year 10 will be studying the same units in Physics this term. After completing the unit of thermal energy transfers, they will develop their knowledge of atomic structure and radioactivity. Separate Science students, not Combined Science, will also learn about the uses of nuclear radiation in medicine, as well as the pros and cons of having very energetic nuclear reactions, fission and fusion.

Students complete the electric circuit unit, including required GCSE practicals on the topic. This topic was introduced in year 7 and the complexity of the components and circuits used as well as the mathematical complexity is developed at Key Stage 4. They develop their understanding of simple circuits, what current, voltage and resistance are and how we can use these definitions to calculate the energy transferred by different components in a circuit.

Students will complete a range of tasks in their 'Learning Grids' booklets aswell as online simulations and quizzes on Kerboodle - a subscription service which supports teaching and learning in school and at home.

