

RAP^V V1

Autumn 2nd Half-Term

Maths

This term, students will focus on fractions, decimals and percentages. Students will compare and order fractions whose denominators are all multiples of the same number. Identify, name and write equivalent fractions. Recognise mixed numbers and improper fractions and convert from one form to the other. Add and subtract fractions with the same denominator, and denominators that are multiples of the same number. Multiply proper fractions and mixed numbers by whole numbers. Read and write decimals as fractions. Round decimals with 2 decimal places to the nearest whole number and to 1 decimal place. Read, write, order and compare numbers with up to 3 decimal places. Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per 100', and write percentages as a fraction with denominator 100, and then use place value to relate this to a decimal.

English

Students, in our vocational suite focus on all 3 key aspects of English: Reading, Writing, Speaking and listening.

This entails the following - Reading comprehension for Functional skills/AQA/IGCSE English Language exams. The study of Audience, Form and Purpose is also highlighted and developed. This ultimately leads to the study of different writing styles (Persuasive, Instructive, Argue, Describe) and their key features.

As a result, we encourage students to develop their individual writing styles with the aim to add depth and detail to their written work. This all benefits examination skills. RAPV students are further supported in finding their own voice and developing their vocabulary fully.

Students will engage with an array of established novels, short stories and well-written articles.

Science

Students will do the following:

Explain the structure and adaptations of the heart including arteries, veins and capillaries, coronary heart disease and treatment. I am able to explain the major plant structures including xylem, phloem and root hair cells. Describe using photosynthesis symbol equation, what happens during photosynthesis and use graphs to explain how limiting factors affect the rate of photosynthesis as well as recall respiration and metabolism.

Also explain how different components of the nervous and endocrine system are used to undertake voluntary and involuntary actions, including the reflex arc, how blood glucose level and the menstrual cycle is regulated. Able to evaluate type 1 and 2 diabetes and the menstrual cycle. To explain the formation of crude oil and how it's processed using fractional distillation and describe the property and reactivity trends of different lengths of hydrocarbons (inc giving general formulas for alkanes and alkenes). Students will explain the differences between direct and alternating voltage and current, explaining how electricity is transmitted efficiently in the national grid, and explain the construction and safety mechanisms in a three-core cable as well as

calculate and interpret electrical power and energy transfer by electrical work for electrical appliances.

Construction

This second half of the Autumn term we will be learning about painting and decorating and bricklaying. As well as the construction technology unit, which is about roofs, walls and foundations.

Art

This term students are investigating the theme of Power and Weakness. They are creating mind maps, artist research pages and photomontage around the theme. This work goes towards their GCSE portfolio, which will be marked in Y11 or taken to their next school.

ICT

We will be learning why we should be using computers safely - What are employer's responsibilities? How we can identify false information and consider Malware and Security. *Functional Skills Level 1 content: manage information storage / follow and demonstrate understanding of the need for safety and security practices.*

PSHE

Living in the Wider World

Financial decision making

We will be exploring the impact of financial decisions, debt, gambling and the impact of advertising on financial choices. We will learn skills to manage influence, assess risk and effectively budget.

PE

Badminton - To understand how and when to use front-court techniques understand the amount of power and force needed for the following badminton shots; Lift Shot, Net Shot, Net kill shot, Flick. Students will learn how to use the above shots in the most effective way during competition. students will learn to compete against one another using the above techniques.

Music

UNIT 1 aims to provide the learner with knowledge of studio equipment and functions. Learners will then use a variety of equipment to produce and record sound sources. This unit will allow learners to develop communication and ICT skills when using the equipment, whilst allowing them to develop a sound understanding of studio and broadcast technology.

Pupils will be able to assist with a recording studio production session.

Catering

We will be exploring and evidencing understanding of the principles and practice of food safety and hygiene as part of our BTEC coursework. We will demonstrate this weekly in our use of preparation and cooking skills and in our assessment booklet.