

# Year 9

## Spring 2<sup>nd</sup> Half-Term

### Maths

Students will begin this term by revisiting polygons. We will consolidate previous knowledge and carry out investigations to work out which regular polygons tessellate. We will then move on to building on our algebraic abilities. Students will be able to expand, factorise, simplify and solve equations involving fractions. To finish the term, students will look at metric conversion. We will recap our knowledge of area and perimeter in 2D shapes and develop how this translates to volume and surface area of 3D shapes.

### English

Pupils will be exploring teenage homelessness, and how this affects young people across the country. Pupils will understand the different definitions of homelessness and why young people find themselves in such situations. Pupils will read fiction and non-fiction texts, where they will extract information from the texts, identify language techniques and answer detailed comprehension questions. Pupils will write a range of fiction and non-fiction texts for a variety of purposes, such as writing to argue, persuade and advise.

Pupils will begin to write PEE paragraphs to create structured points of view to a series of exam questions. Some pupils will also begin working towards their functional skills level 1 & level 2.

### Science

The second part of this term, students will be able to explain how different pathogenic microorganisms are transmitted to animals and plants and cause diseases. Students will conduct practicals to state the tests for common gasses and then explain what a pure substance is, formulation and explain chromatography. For physics, students will define and identify in diagrams; transverse/longitudinal waves, amplitude, wavelength, period, and frequency, calculate wave speed, and also describe how electromagnetic waves are grouped.

### Art

Students will learn 3D modelling techniques using paper clay. They will learn how to paint 3D pieces, using base coating, applying ink, dry brushing and detailing.

### Humanities

Pupils will examine the contributing factors to WW1 and the overall effects on Britain and the soldiers who fought during the war. Pupils will explore what it was like to fight on the front line in trenches and the different weapons used in combat. Pupils will use subject terminology where appropriate, reference ideas and points using facts in order to develop an informed personal response. Pupils will create graphs and use maps and other sources to inform their ideas.

### ICT

We will learn the difference between Software and Hardware. Students will learn about different items of computer hardware including what they are commonly used for. *Entry Level 3 content: interact with and use ICT systems to meet given needs / store information.*

## PSHE

We will be exploring how to maintain a healthy lifestyle through diet, mindset, exercise and healthy choices. We will learn skills to independently manage our physical and mental health, including first aid and accessing health services.

## PE

Tennis -Students will learn tennis lobs & overhead shots eg. the 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

Students will look at employment opportunities and how these are advertised. Learners are going to be given a range of straightforward job-related tasks and asked how they would respond to them without carrying them out. Students will explore the meaning and factors associated with part-time, full-time, and voluntary employment.

## Music

UNIT 4 will allow you to explore the concepts, tools and techniques used in music production in order to create a song of your very own. You will be personally guided through your learning journey by an expert music producer who will assist you in achieving your musical goals..

## Catering

Pupils will deepen their understanding of food science. We will be looking at different food groups and which nutritional benefits they have within our diets. We will learn how each type of nutrient contributes to a healthy and balanced diet and how each type will affect our energy levels. Pupils will identify different types of dishes that can contribute to a healthy and balanced lifestyle.