



ARCHBISHOP  
MCGRATH CATHOLIC  
HIGH SCHOOL



**KEY STAGE THREE  
CURRICULUM -**

**LEARNER PROGRESSION &  
EXPECTATIONS**

# **INFORMATION FOR PARENTS, CARERS & PUPILS**

## **Year 9 - 2024-5**



Our school vision is underpinned by our Catholic Ethos and the desire for all our learners to develop in line with the four purposes of the Curriculum for Wales



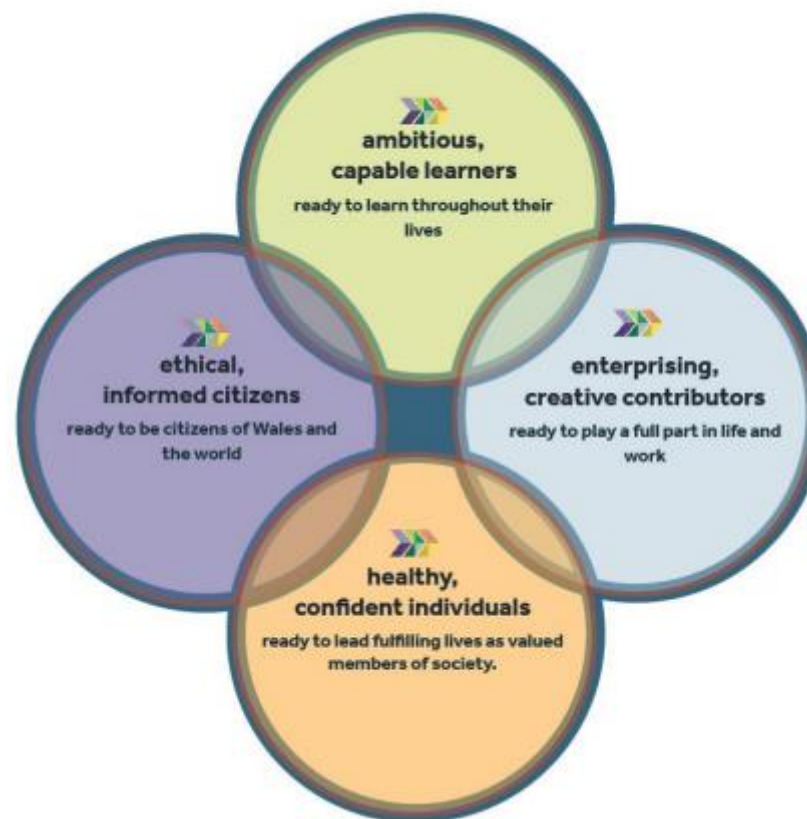
## OUR VISION



### 'Christ at the Centre'

Our core purpose is to ensure that all pupils reach or exceed their potential by using their God-given talents to develop as healthy, ambitious, capable, life-long learners ready to live as valued members of our local community, Wales and the world.

We aim for all our pupils to leave our school as:  
**Empowered, Virtuous and Employable individuals,**



# WHAT ARE THE SIX AREAS OF LEARNING EXPERIENCE IN THE CURRICULUM FOR WALES (3-16)?

Languages, Literacy & Communication

English, Welsh, International Languages

Mathematics & Numeracy

Mathematics

Science & Technology

Science, Design Technology, IT, Computer Science

Humanities

Geography, History, Business Studies\*, Politics\*

Health & Wellbeing

Physical Education, Food & Nutrition, PSE, RSE

Expressive Arts

Music, Art & Design, Drama\*

Skills

Literacy, Numeracy, Digital Competency



Skills

Creativity & Innovation, Critical thinking, Problem Solving, Personal effectiveness & organising

# MAKING SURE LEARNERS MAKE PROGRESS

## What is Progression?

As our learners move from primary school to secondary school at Archbishop McGrath, they will continue to make progress in all 6 AoLEs. As is always the case, some pupils will make progress at different rates to others. As pupils move through years 7-9, the work they cover will become increasingly developed in order to help prepare them for their GCSEs in Years 10 and 11.

## How will progress be achieved from Year 7 through to Year 9?

### Principle of Progression 1

Increased breadth & depth of knowledge

### Principle of Progression 2

Deepening understanding of the subjects and topics that make up the 6 Areas of Learning

### Principle of Progression 3

Refining and more sophisticated ways of using and applying skills

### Principle of Progression 4

Making connections and transferring learning into new contexts

### Principle of Progression 5

Increasing the overall effectiveness of learners in all subjects that make up the 6 Areas of Learning

# ASSESSMENT TO SUPPORT PROGRESSION

We want all our pupils to achieve in line with their potential. Some of our learners will need more support in order to get there but we believe in having high expectations for all.

Teachers in all subjects use a wide range of strategies in order to find out how much progress our learners are making. These may include:

- End of topic tests and exams
- Activities completed in lessons
- Projects
- Speaking, listening and writing activities
- Home learning tasks
- Asking challenging questions in lessons
- Class and individual feedback - What Went Well, Even Better If (WWW, EBI)
- Use of directed improvement and reflection time in lessons (DIRT)
- Learners self and peer assessing their work

The steps below from the Welsh Government are an approximate guide to where children of certain age groups are expected to be. Some learners will be above, below or performing in-line with their ability at any one time.

- Progression Step 1 - ages 3-5
- Progression Step 2 - ages 5-8
- Progression Step 3 - ages 8-11
- Progression Step 4 - ages 11-14
- Progression Step 5 - ages 14-16

## Religious Education

### Term Seven/Module Seven

#### Topic: Creation and Covenant/ Prophecy and Promise

**Knowledge and Experiences:** Pupils will investigate what it means to be human, they will critically analyse the Catholic teaching on the sanctity of life, the sacrament of marriage and reflect on the extent to which they recognise their own and other's dignity, irrespective of appearances, actions and feeling. In year 9 pupils will explore Catholic beliefs about Mary and analyse practises associated with devotion to Mary. Pupils will think critically about the role religion has in politics.

**Skills developed:** To make clear links between belief and behaviours, to critically analyse and assess the role religion plays in people's lives.

### Term Eight/Module Eight

#### Topic: Galilee to Jerusalem/ Desert to Garden

**Knowledge and Experiences:** Pupils will explore is meant by 'vocation', and the nature of discipleship. Investigate the evangelical counsels. Critically analyse the view that woman should not be ordained and investigate Church teaching on wealth and evaluate the view the Church should have no wealth. Pupils will evaluate the role of forgiveness and the extent to which forgiveness is possible.

**Skills developed:** To reflect and critically assess claims made about poverty and wealth, to develop quality of written communication by completing written evaluations in preparation for the GCSE course.

### Term Nine/Module Nine

#### Topic: To the Ends of the Earth/ Dialogue and Encounter

**Knowledge and Experiences:** Pupils will investigate the structure of the 'Church on Earth', explaining why the Church teaches that the visible Church is 'the universal Sacrament of Salvation', be able to explain what is meant by 'the Church in heaven', making links with the Church teaching about the intercession of the saints. Pupils will evaluate the claim that the belief that the Church is 'holy' contradicts the teaching that the same Church is 'always in need of being purified. Investigate the role of the Common Good in interfaith Dialogue. Pupils will consider how they would answer the question 'Who is my neighbour?' and what is needed for meaningful engagement to take place.

**Skills developed:** To be able to apply their learning to their experiences and the experiences of their communities. To continue to develop their critical thinking skills of analysis and evaluation. To be able to support answers with reasoned judgements and come to a clear conclusion, supported with religious evidence.

## English

Pupils and parents/guardians can access useful resources to improve accuracy, writing and reading skills in the general Key Stage 3 Google Classroom area. Use the code bb2qxzw to join.

### Term Seven/Module Seven

#### Topic - Gothic Genre

##### **Knowledge and Experiences**

Pupils explore key texts from the Gothic genre. They also have opportunities to hone their close reading and language analysis through the study of a range of non-fiction texts on themes such as the environment, animals, teenage issues and society. Rich texts are used as a springboard for discussion and extended writing.

##### **Skills developed**

Pupils develop their knowledge and understanding of prose conventions and the format and purpose of non-fiction texts. They work on upgrading sentences to focus on grammatical accuracy and vary the length and structure of sentences to make meaning clear. Pupils hone their accuracy skills through completion of the year 9 accuracy tasks.

### Term Eight/Module Eight

#### Topic – Conflict and Crime

##### **Knowledge and Experiences**

##### **Non-fiction texts**

Pupils hone their close reading and language analysis through the study of conflict. They explore extracts on the theme of conflict from Shakespeare's 'Romeo and Juliet'. Learners respond to non-fiction texts linked to the themes of crime and conflict.

##### **Skills developed**

Reading tasks enable pupils to improve close reading and language analysis skills. They explore rivalry, conflict and parent/child relationships in Shakespeare's 'Romeo and Juliet', evaluating the characters' motives and engaging with the ways in which the playwright develops suspense and atmosphere. Pupils hone their accuracy skills through completion of tasks based on the GCSE spelling list.

### Term Nine/Module Nine

#### Topic - Prose Other Cultures- Relationships

**Knowledge and Experiences**

Pupils explore and evaluate characters' motives and engage with the ways in which the writer develops narrative structure and setting in their study of John Steinbeck's novella 'Of Mice and Men'.

**Skills developed**

Pupils broaden their understanding of other eras and cultures. They develop empathy skills as they explore contextual issues linked to American history, society, racism, disability and gender. Extract responses enable pupils to improve close reading and language analysis skills.



## Mathematics

Pupils' work will be differentiated depending on where they are in their progression. Pupils will be given work on Mathswatch to complete in class and for homework, this is a very powerful learning tool which has some outstanding videos and interactive questions to support your child's learning <https://vle.mathswatch.co.uk/vle/> .

You can also use our Maths Symbaloo to find resources to support your child <https://www.symbaloo.com/mix/maths117?lang=EN>

### Term Seven/Module Seven

#### Topic: Number Facts and Relationships, Proportion, Expressions and Equations, Money

##### **Knowledge and Experiences**

Pupils will explore prime factors and standard form. Use fractions, decimals, percentages, ratio, approximations and bounds. Moving on to algebraic expressions, factorising and rearranging formulae. Then solving various types of equations and using trial and improvement. Finishing with exchange rates and household bills.

##### **Skills developed**

Pupils will use powers and the rules of indices. Write a number as a product of its prime factors in index form and use it to find the HCF and LCM. Interpret numbers in standard form and use within calculations. Use multipliers when working with percentages. Calculate the outcome of a repeated proportional change. Understand the idea of reverse percentage to find an original quantity. Use calculations with different representations of fractions. Justify selection of method, including when to use a calculator. Define upper and lower bounds and recognise limitations on accuracy of measurements in calculations involving addition and subtraction. Manipulate indices, substitute into expressions, multiply out brackets, factorise expressions and rearrange formulae. Distinguish between equations, formulae and expressions. Form and simplify expressions. Solve a variety of equations include simultaneous equations and by trial and improvement, justifying the solution. Understand money with foreign exchange rates, best buys and comparing financial products. Calculate compound interest, household utility bills and income tax.

### Term Eight/Module Eight

#### Topic: Measures, Time, Area and Volume, Angles, Sequences, Shape and Construction, Graphs and Data

##### **Knowledge and Experiences**

Explore circles and volume of prisms. Use Pythagoras, Trigonometry and compound measures. Explore timetables, co-ordinates and sequences. Construct shapes and use bearings. Work with a variety of graphs and averages.

##### **Skills developed**

Pupils will calculate the perimeter and area of semi-circles, quadrants and compound shapes. Use the terms arc, sector, segment, chord and tangent. Rearrange formulae to find the radius or diameter of a circle. Work out volumes of prisms and cylinders. Use Pythagoras' Theorem and Trigonometry to find the missing sides and angles of right-angled triangles. Understand and use a variety of compound measures. Construct and interpolate from conversion graphs. Use timetables and time zones to plan a multi-stage journey. Find the distance between two points and the midpoint of a line. Generate non-linear sequences given the  $n$ th term rule and explore real life sequences with diagrams. Recognise similar shapes and calculate the size of missing sides. Draw plans and elevations of any 3D solid, explore bearings, construct perpendicular bisectors, the perpendicular from a point to a line, angles of  $60^\circ$  and  $90^\circ$  and the bisector of an angle. Shade a region defined by up to two conditions. Generate and plot points for simple quadratic and cubic functions. Construct and interpret a variety of graphs and diagrams (including pie charts) to represent discrete or continuous data, with the learner choosing the most appropriate representation, including frequency polygons and lines of best fit on scatter diagrams. Use the mean, median, mode and range from grouped frequency tables to compare distributions.

### **Term Nine/Module Nine**

#### **Topic: Collect and record data, Movement and Probability**

##### **Knowledge and Experiences**

Pupils will test hypotheses, evaluate and write questionnaires. Transform shapes and explore probability. Including sample space diagrams, two-way tables and Venn diagrams.

##### **Skills developed**

Specify and test hypotheses, taking account of sampling. Identify possible sources of bias in the design of collection sheets and questionnaires. Evaluate questionnaires and write suitable questions, including response boxes. Grouping of discrete or continuous data into class intervals of equal widths. Reflect shapes and describe reflections in horizontal and vertical lines. Rotate shapes about a point, describe rotations and find the centre of a rotation. Translate a shape by a vector and describe a translation using vectors. Enlarge a shape from a centre where the scale factor is 0.5. Know that the sum of probabilities is 1 and use this to find missing probabilities in fraction or decimal form, including where there are two equal probabilities missing. Compare an estimated probability from experimental results with a theoretical probability. Identify when to construct sample space diagrams or two-way tables to solve a problem. Use a two-way table and sample space diagram to calculate the probability of simple compound events. Estimate the number of successes where probability is expressed as a fraction or decimal.

## Science Year 9

Year 9 Science extends on the fundamental skills and knowledge of year 7 and 8 in preparation for GCSE and beyond. There are 6 main topics which all aim to develop knowledge and skills through our love of Biology, Chemistry and Physics.

### Year 9 Biology

#### Ecosystems

##### **Knowledge and Experiences**

In this module, students will explore the interconnectedness of ecosystems on a global scale, understanding how they link and interact across geographical boundaries. They'll delve into the intricacies of how living organisms survive and depend on each other within ecosystems, recognizing the interdependence that sustains life. Additionally, students will learn about food chains and how they intertwine to form complex food webs, illustrating the flow of energy and nutrients within ecosystems. Furthermore, they'll explore the concept of adaptations, understanding how animals and plants evolve traits that make them well-suited to their environments, ensuring their survival and reproduction. Through this exploration, students will develop a holistic understanding of ecological systems, biodiversity, and the dynamic relationships between living organisms and their environments, fostering a deeper appreciation for the complexity of the natural world.

#### Microbes and Disease

##### **Knowledge and Experiences**

Understanding the impact of microorganisms on health involves knowing how bacteria and viruses affect organisms, the mechanisms of disease spread such as pathogens, hygiene, and body fluids, and the basic principles of preventative measures like vaccination. It includes knowledge of the basic structures of microorganisms, how specific diseases like HIV/AIDS and malaria spread, and a fundamental grasp of the immune system, including the role of white blood cells and their involvement in the use of vaccinations.

##### **Skills developed**

Investigative skills in ecology.

Numeracy skills in sampling.

## Year 9 Chemistry – Chemical Reactions

### **Knowledge and Experiences**

In this module, students will explore the fundamental role of the Periodic Table in classifying elements, understanding how elements are categorized, such as metals and nonmetals. They'll delve into how the properties of metals impact their various uses, considering factors like density, electrical and thermal conductivity, and strength. Additionally, students will learn a range of standard reactions and how to utilize them to produce useful products, including reactions like acid + metal, acid + base, and acid + carbonate. They'll investigate the factors influencing the rate of chemical reactions, such as temperature, concentration, pressure, particle size, and the use of catalysts. Moreover, students will gain an understanding of the environmental impact of burning fossil fuels, producing carbon dioxide, a greenhouse gas, and recognize burning as a chemical reaction requiring oxygen. They'll learn the components necessary to initiate a fire, as illustrated by the fire triangle, and understand that burning releases energy. Furthermore, students will explore rusting as a chemical reaction and methods to prevent it. Lastly, they'll comprehend how certain metals can be extracted from their ores, considering processes like the reactivity series and electrolysis. Through this exploration, students will develop a comprehensive understanding of chemical reactions, the properties of elements, and their practical applications, fostering critical thinking and scientific inquiry skills.

### **Skills developed**

Observation skills and investigative skills in chemistry.

## Year 9 Chemistry – Atoms and the Periodic Table

### **Knowledge and Experiences**

In this module, students will explore the Periodic Table's role in classifying elements, including distinctions between metals and nonmetals. They'll learn about the relationship between atomic arrangements and states of matter and understand how changes between solid, liquid, and gas occur. Additionally, they'll delve into how the Periodic Table groups elements, recognizing patterns in properties. They'll also study alloys, electron arrangements in Groups I and VII, and the basic properties of transition metals. Furthermore, students will grasp the concept of chemical reactions occurring in fixed ratios and learn basic tests for identifying chemical species. Through this study, they'll develop a comprehensive understanding of the Periodic Table, elemental properties, and chemical analysis techniques, fostering critical thinking and scientific inquiry.

### **Skills developed**

Data analysis skills.

## Year 9 Physics- Electricity and Magnetism

## **Knowledge and Experiences**

In this module, students will explore various aspects of electric circuits and energy generation, starting with understanding the difference between a battery and a cell. They'll learn how to construct circuits in series and parallel configurations, including the placement of bulbs or LEDs. Furthermore, students will grasp how different power sources impact circuits, considering factors like voltage and connections in series or parallel. They'll understand electricity as the flow of current, measured in volts for voltage and amps for current, and identify resistors as objects opposing current flow, measured in ohms. Students will recognize circuit symbols for common components like batteries, bulbs, switches, and meters, and comprehend the basic process of electricity generation, such as in power stations. Moreover, they'll learn about electrons' movement in electric current, how to build circuits for specific functions like two-way light switches and understand less common circuit components and their symbols. Additionally, students will know how to add resistors in series, build and control electromagnets, and assess the advantages and disadvantages of different energy generation methods, including fossil fuels, solar, wind, tidal, and nuclear power. Through this exploration, students will develop a comprehensive understanding of electric circuits, energy generation, and practical applications, fostering critical thinking and problem-solving skills in electrical engineering.

Students will explore the concept of magnetic fields and their applications. They'll understand that magnetic fields surround magnets and extend into space, with field lines pointing from North to South. Additionally, students will learn about the practical uses of magnetic field lines, such as in compasses. Moreover, they'll discover how electromagnets are created using electricity and how to control their strength through factors like the number of turns, iron core, and current. They'll also learn that a wire carrying a current generates a magnetic field. Furthermore, students will explore various applications of electromagnets, including sorting recycling, lifting ferrous metal objects, operating circuit breakers, powering loudspeakers, and driving motors. Through this study, students will develop a comprehensive understanding of magnetism and electromagnetism, as well as their practical applications, fostering critical thinking and scientific inquiry skills.

## **Skills developed**

- Practical skills in building circuits.
- Measuring skills in measuring current and voltage
- Design skills when making electromagnets

## **Waves**

### **Knowledge and Experiences**

In this module, students will explore the characteristics of light and sound waves. They'll learn that light and sound travel at different speeds and how altering properties of musical instruments, such as string length or column of air, can change their pitch or frequency. Additionally, students will understand how the volume of a sound and the brightness of a light source change with increasing observer distance. They'll also discover that different animals can hear different frequency ranges, such as bats, dogs, and dolphins. Moreover, students will differentiate between the two types of waves, longitudinal and transverse, and

learn how to describe waves using terms like amplitude, frequency, speed, period, and wavelength. Furthermore, they'll understand the wave equations and how to apply them. Lastly, students will explore reflection and refraction phenomena in light and water, enhancing their understanding of wave behaviour. Through this study, students will develop a comprehensive understanding of wave properties and behaviors, fostering critical thinking and scientific inquiry skills.

**Skills developed**

**Investigation skills.**

## Cymraeg

### Term Seven/Module Seven

**Topic :** Champions and Wellness: Celebrating Welsh Sports Heroes and Embracing Health in Our Hills

#### **Knowledge and Experiences**

In the "Champions and Wellness" unit, pupils will explore the achievements of Welsh sports heroes and the health benefits of Wales' hills. They'll learn about athletes' resilience and the role of physical activity in well-being, alongside the mental and physical health advantages of engaging with the natural environment. Through research, discussions, and outdoor activities, students will connect with Wales' sporting heritage and the importance of wellness. This unit aims to inspire healthier lifestyles and foster national pride by linking sports, nature, and health, all while fostering a sense of national identity and pride in Welsh achievements and landscapes.

#### **Skills developed**

In this unit, students will examine the role of sport in daily life, Welsh sports heroes, and the holistic benefits of a healthy lifestyle, focusing on both physical and mental health, through Welsh. Numeracy skills will be applied in analyzing athletes' performance, enhancing understanding of sports science. Reading and listening to varied literature will deepen their appreciation of sports' mental health benefits, such as stress reduction and improved self-esteem. Through Welsh-speaking and writing exercises, students will explore and express the psychological advantages of physical activity, fostering a comprehensive view of health that integrates physical fitness and mental well-being.

### Term Eight/Module Eight

**Topic :** Shaping Tomorrow: Navigating the Future of Work in Wales

#### **Knowledge and Experiences**

In this streamlined module on the world of work and future planning for Welsh learners, we combine theoretical insights with practical experiences to explore diverse career paths in Wales. Students will look at industry professionals, engage in workshops and gain a real-world perspective of the world of work. They'll learn about setting career goals, strategic planning, and the importance of adaptability and digital skills. This compact curriculum aims to prepare students for the evolving job market, equipping them with the knowledge and experiences needed to navigate their future careers successfully.

#### **Skills developed**

In the topic of the world of work and future plans, pupils will develop a comprehensive set of skills to prepare them for their career journeys. They will explore various careers to understand the diversity of opportunities available. The creation of a CV and the process of writing application letters will enhance their ability to present themselves professionally in written form. Giving presentations will further refine their verbal communication skills, ensuring they can articulate ideas and plans effectively. Throughout these activities, pupils will engage in reading, writing, listening, and speaking, thereby improving their literacy and communication skills. The incorporation of the Digital Competence Framework (DCF) ensures that pupils also develop crucial digital skills, preparing them for the digital aspects of the modern workplace. The use of the future and conditional tenses in these exercises will not only enhance their language skills but also encourage them to think critically about their future aspirations and how to navigate potential career paths.

## **Term Nine/Module Nine**

**Topic** : From Legends to Likes: Celebrating Welsh Icons and the New Digital Vanguard

### **Knowledge and Experiences**

In this unit, Year 9 pupils will investigate the role of Welsh celebrities in promoting the Welsh language and its cultural significance. They will explore how these figures use their online platforms to engage with and inspire broader audiences. This leads to a discussion on personal online footprints, emphasizing the importance of responsible digital behavior through a unit on technology, the impact of their online actions, and the connection between public advocacy for the Welsh language and individual online presence. This topic aims to foster an understanding of how personal and public online activities contribute to cultural preservation and responsible internet use.

### **Skills developed**

Students develop a range of essential skills including digital competence (DCF), as well as comparing texts, writing for different purposes, listening, and speaking unscripted in Welsh. They gain confidence in speaking Welsh fluently, enhancing their ability to use various tenses accurately. Learners also focus on comparing themselves with others, agreeing and disagreeing effectively, and justifying their opinions with strong reasons. This comprehensive approach ensures they can communicate with ease and proficiency in diverse contexts as they move towards GCSE, with a strong focus on oracy.



# Art

## Term Seven

### Topic: Environmental Art

#### **Knowledge and Experiences**

Through exploring local and national environmental artworks, pupils will explore how Art can be made for different purposes and be made for different viewers or audiences.

#### **Skills developed**

Observational drawing development

Analyse the work of other artists and explore comparing and contrasting two artists.

Exploring context of artworks

Create artwork for a particular place/site/location

Choose appropriate materials relevant to idea(s).

Evaluate artwork as it progresses to show refinement of practical making technique and ideas.

## Term Eight/Module Eight

### Topic: Portraiture

#### **Knowledge and Experiences**

Pupils will learn how artists have represented themselves, and others, using portraiture. They will learn that self-image is the idea of oneself and what defines a good and a bad self-image isn't fixed. After researching and analysing other artists' self-portraits, pupils will learn how to create a meaningful self-portrait. Pupils will learn how to research and respond to several artists and identify individual sub-themes focusing on 'Identity' and 2D techniques.

Techniques include pencil, coloured pencil, oil pastel and watercolour. Pupils will also develop their knowledge of how to use colour to communicate and express emotions, feelings and ideas.

#### **Skills developed**

Mono-printing technique

Mark-making technique

Drawing facial features

Creative thinking

Create texture with magazines/pencil/pen/newspaper

Improve analytical thinking

Develop how to critically discuss artwork

Digital portrait.

## Term Nine/Module Nine

### Topic: Surrealism

#### **Knowledge and Experiences**

Learners will explore how the Surrealist artists can create work using realistic elements in a surreal setting. Learners will explore a variety of visual material including artworks, advertisements and video games.

#### **Skills developed**

Observational drawing (detailed grid method).

One-point perspective

Designing a final piece using thumbnail sketches.

Acrylic painting techniques

Digital painting technique

Use of colour to create a mood and contrasting colours.

## ICT & Computing

### Module One – Year 9

Topic – Data Modelling

#### **Knowledge and Experiences**

Pupils acquire proficiency in basic spreadsheet operations, adeptly navigating functions such as charts and conditional formatting to present and interpret data effectively. Delved into what-if predictions, learning to manipulate data to forecast potential outcomes, and have grasped the intricacies of IF statements, enabling them to create logical formulas for decision-making processes. These essential skills not only deepen their understanding of data modelling but also equip them with versatile tools for problem-solving and critical thinking.

#### **Skills developed**

Pupils focus on vital skills in data modelling using Microsoft Excel to develop spreadsheets. Discern the most suitable format for data storage and interrogation, honing their abilities to investigate the validity of predictions effectively using formula. Employ mathematical and logical operators within Microsoft Excel spreadsheets.

### Module Two – Year 9

Topic – Web Authoring

#### **Knowledge and Experiences**

Pupils delve into the realm of web design, applying design principles to craft websites with efficient user interactions, fostering creativity and technical skills. Engage in comprehensive research on a variety of topics, exploring Welsh events and culture, cyber security, and digital communication methods, offering pupils opportunities to not only expand their knowledge base but also cultivate essential skills in critical thinking, research, and digital proficiency.

#### **Skills developed**

Develop proficiency in web design and development essential skills in CSS, and website creation using Adobe CC Dreamweaver. Craft new web page, mastering techniques to insert tables, merge and split cells, and integrate images and text into their designs. Delve into the realm of CSS rules, learning how to format pages for optimal presentation and user experience. Grasp the intricacies of incorporating hyperlinks, both for internal navigation and external references.

### Module Three – Year 9

Topic – Computational Thinking

#### **Knowledge and Experiences**

Pupils decompose complex problems into manageable components and selecting the most suitable constructs to devise effective solutions using Visual Basic programming language. Develop Visual Basic forms and programs tailored for various purposes, such as control panels, calculators, and savings accounts.

#### **Skills developed**

Produce forms incorporating a range of Visual Basic objects such as labels, text boxes, buttons, and lists. Include fundamental programming concepts like sequencing, iterating, and decision-making, while also mastering the use of the Visual Basic Integrated Development Environment (IDE) for writing, debugging, and testing code.

### **Module Four – Year 9**

#### **Topic** - Infographics

#### **Knowledge and Experiences**

Pupils explore digital creativity and information dissemination. Delve into the world of graphic design, utilising shapes in Photoshop to craft original graphics objects, honing their skills in digital artistry. Embark on the creation of informative infographic posters, employing Canva to produce professional designs that effectively communicate complex concepts such as Cyber Careers and CPP virtues. Through extensive research, pupils curate relevant images and information and learn the importance of referencing sources, fostering product integrity.

#### **Skills developed**

Apply design principles effectively to craft visually appealing and functional infographics. Photoshop proficiencies in the use of shape and transformation tools to create original illustrations with precision. Explored the versatility of Canva, becoming adept at selecting and utilising a myriad of available templates for specified requirements.

### **Module Five – Year 9**

#### **Topic** – Advanced Animations

#### **Knowledge and Experiences**

Pupils expand their experience in digital storytelling and visual expression. Delve into the intricacies of vector animation methods, mastering techniques to bring their narratives to life with depth and creativity. Gain a deeper understanding of animation principles and how to apply them appropriately to a variety of scenarios with hands-on experiences and guided exercises.

#### **Skills developed**

Refine animation skills using Adobe CC Animate. Master techniques to provide seamless transitioning between movements with motion tweens, organising complex animations with nested timelines, and adding fluidity and realism to character movements with the bone tool.

## Design and Technology

### Product Design – Year 9

**Topic:** Coat Hook

#### **Knowledge and Experiences:**

Pupils complete an in-detail research task looking specifically at material properties of metals, including the different categories. Pupils will demonstrate the ability to produce a Design Specification while paying careful consideration to the users' needs and wants and justifying the need for each criteria. The specification is then used to create several design ideas and later a final concept to meet the user's needs and wants. Final designs must include dimensioned drawings for later use. Using the final concept, a card model is then made to give a representation of the final product. Pupils use hand tools and advanced workshop machinery to create their proposals using mild steel and pine wood. To complete the rotation, pupils evaluate their product and project as a whole, reflecting on both the work which is completed and their performance within the manufacturing stage.

#### **Skills developed:**

Computer generated research page of metals and the properties of numerous metal materials. Using the needs and wants of the consumer to create a list of detailed and justified design specifications for their product. Problem solving to create concept that will meet the previously set criteria for the intended user. This includes both 3D and 2D drawings to follow the iterative process to develop a successful solution. Colour rendering is also used to show the depth and texture of pine wood and mild steel, alongside annotation to fully describe the many areas of the concepts. When manufacturing the pupils select to use a tenon saw or coping saw to cut the pine wood to their desired shape and hack saw to cut the mild steel to desired length. A pyrography pen is used for each individual to customise the pine back plate with a design of their choice. For the mild steel hook, pupils need to use a pillar drill to create holes for the screws to be used later and once this stage is completed, the metal forge is used to be form the shape of their hook design. Hand drill is used to drill holes within the pine back plate for screw fixings which are fixed with a hand screwdriver. Evaluating on the project is the final step where pupils offer 3D drawings of alternative improvements alongside a detailed analysis of the final product, gauging if it has met the design specification from the start of the project.

### **Food Nutrition – Year 9**

**Topic:** Food science and the functions of ingredients

Learning the importance of the function of ingredients to make successful food products

To build up understanding of food science terms.

To develop food preparation skills

To enable students to gain experience in answering GCSE style questions.

### **Knowledge and Experiences:**

Pupils will continue to demonstrate full knowledge of safety principles when preparing, storing and cooking food. Students will demonstrate food science in their practical outcomes and learn about the different methods of cake making and apply their knowledge to exam style questions. Students will also carry out experimental work in the form of scientific investigations to understand the function of ingredients. In addition students will carry out a variety of practical work to further develop their food preparation and cooking skills.

### **Skills developed:**

Prepare and cook dishes which demonstrate the function of ingredients.

Apply knowledge of food science in a series of scientific experiments

Develop numeracy skills by measuring and weighing.

Development of oracy skills through teamwork during practical and experimental lessons.

An understanding of the technical aspects behind the use of some ingredients will help students select and replace ingredients.

Students will be able to demonstrate the whisking creaming and rubbing-in methods of cake making.

Developing more advanced design skills when presenting and styling their dishes.

Enable students to develop their self-knowledge, self-esteem and self-confidence.

Encourage students to accept responsibility for their behaviour and to understand how they can contribute positively to society generally.

## **Product Design – Year 9**

**Topic:** Mobile Phone Holder

**Knowledge and Experiences:**

Pupils complete an in-detail research task looking specifically at smart materials and renewable energy resources, including the importance of sustainable design. Pupils will demonstrate the ability to analyse existing products while paying careful consideration to the users' needs and wants and justifying the need for each criteria within a design specification. Pupils explore different methods of construction and how to join materials together in a functional format. A pupil's knowledge and understanding of the iterative design process is developed further through initial design idea and development concepts. Using the final concept, a three-dimensional computer aided design (CAD) model is then created with the use of Solid Works to give a representation of the final product. Pupils use hand tools to create their proposals using recycled or sustainable materials. To complete the rotation, pupils evaluate their product and project as a whole, reflecting on both the work which is completed and their performance within the manufacturing stage.

**Skills developed:**

Computer generated research page of smart materials and renewable energy resources. Using the needs and wants of the consumer to create a list of detailed and justified design specifications for their product. Problem solving to create concept that will meet the previously set criteria for the intended user. This includes both 3D and 2D drawings to follow the iterative process to develop a successful solution. CAD skills are developed to incorporate rendering and to show the depth and capabilities of the SolidWorks programme, and how they are transferrable to the design/engineering industry. When manufacturing the pupils develop numeracy based skills when constructing their final concepts. A range of tools and equipment are used for pupils to customise their final design concepts. For the Mobile Phone Holder, pupils need to use recycled and sustainable materials to manufacture their final prototypes. Evaluating on the project is the final step where pupils offer 3D drawings of alternative improvements alongside a detailed analysis of the final product. These skills not only deepen their understanding of Product Design/Engineering practices but also foster creativity, critical thinking, and teamwork abilities essential for success in engineering and related career pathways.

# Geography

## **Our Vision:**

Our learners are curious, informed and confident global citizens, who can apply their God given talents, skills and conceptual understanding to the world around them

## **Year 9 - Module One**

Topic: Earthquakes and their hazards

Knowledge and Experiences

Learners can define plate tectonics, describe the structure of the Earth and explain why tectonic plates move. They can describe the location of major earthquake events, using longitude and latitude. Learners can describe the location of a country, explain the impacts of an earthquake and examine why the impacts were so severe. Learners can use empathy when looking at the impacts of an earthquake and they can appreciate how an earthquake affects people differently. Learners can define and describe the term tsunami. They can describe how tsunamis are formed. Learners can locate places affected by tsunami, describe impacts of the tsunami and categorise impacts using SEE (social, economic, environmental). Learners can interpret statistics about a disaster and plot data on a graph accurately. Learners can appreciate how widespread the devastation and destruction can be.

## Skills developed

Literacy - GCSE style question, explanation

Map skills – longitude & latitude

Personal Effectiveness

Numeracy – data analysis, construct bar graph

Digital Competency – Planet Planners

## **Year 9 – Module Two**

Topic: The Geography of Stuff

Knowledge and Experiences

Learners can define consumerism, identify the impacts of increased consumerism and examine causes of increased consumerism. They can define e-waste, describe what happens to e-waste and examine the impacts of e-waste. Learners can define the term sustainable, identify the impacts of the trainer industry and examine what brands are doing to be more sustainable. Learners can define fast fashion, explain the impacts of fast fashion on people and the environment and consider how we can reduce these impacts. Learners can describe, explain and evaluate the impacts of palm oil production.



Skills developed

Literacy - explanation

Evaluation

Map skills – atlas skills

Personal Effectiveness

Numeracy – data analysis

**Year 9 – Module three**

Topic: Exploring India

Knowledge and Experiences

Learners can describe human & physical features in India and locate significant places on a map of India. They can describe population change in India, construct a line graph to show population change and examine the impacts of rapid population growth for India. Learners can produce a choropleth map to show population density in India. They can define push and pull factors, describe the causes of rural to urban migration in India and explain the impacts of rural to urban migration in India. Learners can identify gender inequality issues in India and explain consequences of gender inequality in India.

Skills developed

Literacy - explanation

Map skills – choropleth map

Personal Effectiveness

Numeracy – line graph, data analysis, percentages

## History

### Year 9 - Module One

#### Topic: The Struggle for Suffrage

##### **Knowledge and Experiences:**

This module starts with class discussions and debates on the importance of the vote. Learners will study two historical groups who campaigned for suffrage: the Chartists and the Suffragettes. Reference will be made to prior learning in previous modules to help learners appreciate the historical context of the campaigns. Learners will examine the methods used by the two groups and will assess their impact on British society. Examples from Wales will be explored in relation to both the Chartists and Suffragettes. Learners will also be introduced to GCSE style questioning and will have a choice of which protest group to focus their assessment on.

##### **Skills developed:**

Literacy – reading and writing  
Creativity  
Critical thinking

### Year 9 - Module Two

#### Topic: 'The Great War'

##### **Knowledge and Experiences:**

In this module, learners will explore the long- and short-term causes of World War One. Learners will identify the countries that took part in the Great War and will make judgements on which nations were most prepared for the conflict. A key focal point in the early part of this module will concern the issue of recruitment in the British Armed Forces. Learners will examine the various pressures faced by many British men living in the early 20<sup>th</sup> century and will consider the impact of the controversial Military Service Bill of 1916. Interpretations of 'Conscientious Objectors' will be examined through reference to contemporary propaganda and historical texts. Learners will develop knowledge and understanding of key battles and will examine the types of warfare that characterised the conflict. The module will end with an investigation into how the war came to an end and will explore the nature of remembrance.

##### **Skills developed:**

Literacy – reading, writing and oracy  
Personal effectiveness  
Critical thinking

### Year 9 - Module Three

## Topic: The American Civil Rights Movement

### **Knowledge and Experiences:**

Learners will develop knowledge and understanding of the American civil rights movement. Learners will explore the nature of segregation in American society and will consider key events like that of the Montgomery Bus Boycott of 1955. The contribution of various civil rights groups and individuals will be evaluated and explored through analysis of contemporary texts. Particular focus will be placed on the significance of Martin Luther King Jr. to the civil rights movement.

### **Skills developed:**

Literacy – reading, writing and oracy

Personal effectiveness

Critical thinking

## Year 9 - Module Four

### Topic: Independent Project – ‘Days that Shook the World’

### **Knowledge and Experiences:**

In this module, learners will create a project on any significant event of the 20<sup>th</sup> century. Learners will develop their research skills by utilising books from the History department’s library and online resources. A key focus of the project will be on the issue of significance and learners will be expected to explain why their chosen event is so significant.

### **Skills developed:**

Literacy – reading, writing and oracy

Digital competency

Personal effectiveness

Critical thinking

## International Languages

### Term Seven/Module Seven

#### Topic: The world around me

#### **Knowledge and Experiences**

In this unit pupils will study the topics of local area and holidays. They will be able to discuss the advantages and disadvantages of where they live as well as discussing environmental issues in their region. Pupils will be introduced to French speaking countries around the world and compare and contrast these with their own area.

#### **Skills developed**

Pupils will consolidate knowledge from the last 2 years such as adjectival agreement and positioning, asking questions and using the present tense. They will develop their understanding of the future and conditional tenses. Pupils will discuss French poetry and use this as inspiration to create their own poems.

### Term Eight/Module Eight

#### Topic: My life as a young person

#### **Knowledge and Experiences**

Pupils will discuss free time activities with a specific focus on making healthy choices to keep fit. They will discuss what constitutes a healthy diet and how their choices can impact positively or negatively on their health and well-being.

#### **Skills developed**

Use of the perfect tense with avoir and être verbs. Receptive knowledge of the imperfect tense. Consolidate knowledge of the partitive article and how it is impacted by the negative. Consolidate knowledge of modal verbs followed by the infinitive.

### Term Nine/Module Nine

#### Topic: La Francophonie

#### **Knowledge and Experiences**

Pupils will develop their knowledge of Francophone countries and understand the diverse cultures that make up the French speaking world. They will compare and contrast traditions and cultural heritage from the French speaking world with that of their own and look at songs, poetry and literature from around the world to fire their imagination and understand how languages connect us.

#### **Skills developed**

## Music

### Term Seven/Module Seven

**Topic:** Pop Music through the Decades & Ukulele

**Knowledge and Experiences:** Year 9 will trace the development of pop music through the decades from the 1960's to 2000's. Pupils will learn a brief history of the development of pop music in each decade with the main trends musically and culturally. Pupils will learn to sing a selection of songs from each decade and then learn to play one of these songs on the keyboard. Pupils will learn collaboratively as a whole class when singing and independently when practising the keyboard. Pupils will also complete a listening task based on knowledge learnt on pop music through the decades. Ukulele – pupils will learn new and more advanced chords on the ukulele and perform these chords when playing along to backing tracks. Songs will include a variety of well-known pop songs. In December, pupils will learn Christmas songs on the ukulele.

**Skills developed:** more advanced note reading skills and performing more complex rhythms on the keyboard, refining performance techniques when playing the keyboard, ukulele and singing.

### Term Eight/Module Eight

**Topic:** Blues & Jazz

**Knowledge and Experiences:** Pupils will learn the history of Blues and Jazz music. Pupils will write their own lyrics for a Blues song learning about the correct structure of a verse in a Blues song. Pupils will learn to play the 12 bar blues chord progression and walking bassline on the keyboard as well as improving a short melody along to a 12 bar Blues backing track using notes of the Blues scale. A listening activity on traditional and more modern blues music will deepen knowledge and understanding of Blues music. Pupils will then move onto Jazz, learning to play a typical Jazz standard chord progression for Autumn Leaves on the keyboard and the famous ragtime piano piece, The Entertainer.

**Skills developed:** independent learning when practising the keyboard, understanding and knowledge of Blues and Jazz music, playing blues and jazz music on the keyboard reading standard music notation in the treble and bass clefs, deepening understanding of the elements of music in Blues and Jazz music and the ability to aurally analyse the elements of music accurately.

### Term Nine/Module Nine

**Topic:** Hooks & Riffs and Fusion in Pop Music

**Knowledge and Experiences:** Pupils will learn the difference between a hook and riff in pop music and learn to play famous hooks on the keyboard. Pupils will then compose their own riff on the keyboard. For the final part of this module, pupils will learn about fusion in pop music, learning to play Pachelbel's Canon on the keyboard and then learning how the bassline from Pachelbel's canon has been used in many pop songs created fusion. Pupils will also compose a melody above the bassline of Pachelbel's Canon.

**Skills developed:** Independent learning when practising the keyboard, consolidation of note reading in the treble and bass clefs. Deepening knowledge of pop music and the essential features in a pop song including hooks and riffs. Composing a riff on the keyboard and adding a melody above the bassline of Pachelbel's Canon. The ability to aurally analyse the elements of music accurately in a listening task.

# Physical Education

## Module Nine – Year 9

### Topic Year 9 – **Sporting Values**

#### **Knowledge and Experiences**

Students will:

- Students will learn respect through sports and sporting etiquette. They will learn what the term means, and how to demonstrate respect.
- Students will follow on from the lesson on respect and continue to reflect on the importance of and how to show good etiquette.
- Students will learn the value and importance of rules and its role in ensuring fairness.
- Students will consider determination and resilience and when/how it is important to continue trying.
- Students will have the chance to reflect on the importance of Equality in different settings.
- Students will learn about what courage is and attempt to reflect on what it may look like in PE and different settings.

#### **Skills developed**

1. **Respect**
2. **Etiquette**
3. **Fair Play**
4. **Determination**
5. **Equality**
6. **Courage**

The themes above will be explored through a variety of activities including: Multiskills using a variety of health and skill components, net wall activities, invasion games, striking and fielding and exploring a range of health benefit activities.

## Module 10 – Year 9

## Topic Year 9 - Redefining Competition

### Knowledge and Experiences

Students will:

- Students will have an understanding of the self-determination theory (SDT) and begin to reflect on their own personal motivations.
- Students will understand and experience the power of autonomy, competence and flow to individual motivations in line with the self-determination theory.
- Students will understand good sportsmanship and the importance of demonstrating good behaviours after competition.
- Students will understand the term self-motivation and focus on improving individual self-motivation through a range of challenging activities.
- Students will understand the meaning of term persistence and to improve individual persistence.
- Students will understand the positive impact of balancing competition with cooperation.

### Skills developed

1. Self Determination
2. Winning & Losing
3. Rising to a Challenge
4. Competing Against Yourself
5. Cooperation & Competition

The themes above will be explored through a variety of activities including: Multiskills using a variety of health and skill components, net wall activities, invasion games, striking and fielding and exploring a range of health benefit activities.

## Module 11 – Year 9 - Problem Solving

### Topic Year 9 – Sporting Values

#### Knowledge and Experiences

Students will:

- Students will understand what problem solving is and how to identify potential problems to ensure success through a range of problem solving techniques.
- Students will learn how to identify and analyse 'issues' from different perspectives, considering ways to tackle the problem.
- Students will understand the importance of cooperation and being a good team player.
- Students will have a chance to practice and reflect on planning skills.
- Students will have a chance to continue to develop skills taught in this unit, this time by enhancing their decision-making skills.
- Students will understand what is meant by the term 'reflection' and to be able to apply this knowledge to PA, Sport and further aspects of life.

#### Skills developed

1. Identify problem
2. Gather Information
3. Collaboration
4. Planning
5. Decision Making
6. Reflection

. The themes above will be explored through a variety of activities including: Multiskills using a variety of health and skill components, net wall activities, invasion games, striking and fielding and exploring a range of health benefit activities.



## Module 12 – Year 9 - Problem Solving

### Topic Year 9 – Power of Positivity

#### Knowledge and Experiences

Students will:

- Students will understand how a fixed mindset will limit success.
- Students will understand the differences between a growth and a fixed-mindset and demonstrate the traits of a growth mindset.
- Students will develop and demonstrate the tools required to think and act positively.
- Students will continue to develop and demonstrate the tools required to think and act positively.
- Students will understand the importance of a positive attitude and the impact it can have upon team dynamics.
- Students will continue to develop and demonstrate the tools required to think and act positively.

#### Skills developed

1. Fixed Mindset
2. Growth Mindset
3. Look for Positives
4. Perspective
5. Spread Positivity
6. Handle Criticism

The themes above will be explored through a variety of activities including: Multiskills using a variety of health and skill components, net wall activities, invasion games, striking and fielding and exploring a range of health benefit activities.