

Year 9 Curriculum Summary: Term 2

The table below shows the knowledge and skills that Year 9 students are learning in their subjects this term.

Topic / Knowledge	Skills	
Art and Design		
TOPIC/KNOWLEDGE Explore and Experiment Knowledge of Agnes Cecile In the News Understanding of meanings in Art	SKILLS Drawing skills with ink Photoshop skills Compositional skills Research, analytical and evaluative skills	
Compu	ling	
TOPIC/KNOWLEDGE Python Artificial Intelligence	SKILLS Python – Students will finish their second unit of python programming at KS3. It will teach them some more advanced skills in procedural programming giving them a strong foundation for the future. Artificial Intelligence - Students learn how the modern world is affected both positively and negatively by the implementation of AI and where these developments may end up with the implementation of further AI technology.	
Design and Te	Design and Technology	
Student will rotate around the following three subjects as a co	arousel through the three terms:	
TOPIC/KNOWLEDGEFood Preparation & Nutrition – Special DietsUnderstand how fats are used to shorten pastryBe able to understand the function, sources anddeficiency of HBV and LBVEnrichment of bread to suit specific dietary requirementsBe able to explain the theory of gelatinisationComparison of the nutritional requirements of teenagersand the elderlyCalculating the cost and nutritional content of a specialdiet dishPlanning and presenting a dish for someone who has aspecial dietUsing gelatinisation to thicken a sauceSteam as a raising agent	SKILLS The melting method. Shaping and binding a wet mixture. Reduction and roux sauces. Setting mixtures through protein denaturation and coagulation. Making and rolling a whisked sponge. Pastry lamination. Evaluating practical work.	



Topic / Knowledge	Skills
Board Game How to carry detailed analytical research into a range of exiting products To develop a theme and concept for a board game with specifically design characters Design a product that to be produced commercially and understand different scales of production Understand the concept of iterative design, and how to critically evaluate each stage Translation of 2D measurements into 3D objects Understand the need for tolerances to produce work to a high degree of accuracy To evaluate the advantages and disadvantages of computer aided design	Be able to use computer software to render and modify surface graphics Selection of correct tools and materials suitable for each component
Lamp Project Understand how electronic systems work Understand vacuum forming as a manufacturing process To generate a range of design ideas that meet the needs and wants of a specific user To generate a prototype of a chosen design idea. To understand how to solder electronic components to a PCB Understand the limitations and applications of acrylic To know the different properties and applications of thermoplastic and thermosetting materials To understand how rapid prototyping can be used during prototyping and manufacturing	Utilise "Extend the Range" technique to generate innovative and creative ideas To develop a full size, detailed prototype to evaluate chosen design idea Learn how to solder components to a PCB Learn how to use the vacuum former to mould a complex shape
Dram	a
<i>TOPIC/KNOWLEDGE</i> Text in Practice Introduction to the script Nought and Crosses.	SKILLS Working from a script Vocal skills Characterisation Proxemics Dramatic intention Working collaboratively



Topic / Knowledge	Skills	
English		
TOPIC/KNOWLEDGENon-fiction Writing18 lessonsIn Mrs Cocking's unit, students will be exploring non- fiction texts that focus on distribution of wealth, inequality and environmental change with a writing focus. There will be opportunities for debating and practising public speaking skills built in.Writing Dystopian Fiction 15 lessons In this Dystopian Fiction unit, students will study a range of extracts from dystopian fiction classics like Lord of the Flies, The Lottery and 1984, and modern examples of the genre like The Hunger Games and The Maze Runner. The assessment takes the form of an extended written narrative.	 SKILLS Skills focus: DAFOREST – opinion, fact, anecdote and statistics. Integrating description into persuasive writing. TIPTOP paragraphs Narrative voice Extended metaphors Aristotelian structure 	
Frenc	h	
TOPIC/KNOWLEDGEFrenchModule 3 Content: Who am I?Revising family and describing peopleRevising places in town and activitiesTalking about friends and what makes a good friendFamily relationshipsArrangements to go outA night with friendsLife when you were youngerDiscussing role models	SKILLS French Module 3 Skills Irregular verbs in the present tense, reflexive verbs in the present tense, using the near future, using the perfect, using the imperfect tense, using the present, perfect and imperfect tenses.	
Germa	an	
TOPIC/KNOWLEDGE German 15 th April – 19 th July Musik ist mein Leben Types of music Leisure activities Reading habits Television and film Sport in Switzerland Describing festivals Singing/playing in a band Different bands A music festival	SKILLS German Using nouns and articles, adverbs of frequency and verbs, preferences – gern, lieben, am liebsten, plural nouns, the conditional, using several tenses together, reflexive and separable verbs in the perfect tense	



Topic / Knowledge	Skills
Geogra	phy
TOPIC/KNOWLEDGE Threatened World – A connected Planet – Globaisation. How are we connected to people and places through	<i>SKILLS</i> Though an enquiry-based approach; we aim to foster the knowledge of places, spaces and scale by studying countries and particular regions at a variety of scales from local to global. Through the study of
trade? What are the impacts of globalisation on people and places? Pupils are to initially explore the concept of globalisation	places, we integrate the concept of interdependence and how in an ever-increasing globalised world we are connected and rely on other places. Embedded across all units are the physical and human
and what connects the people on our planet. The focus will then move to how our 'stuff' links us to different parts of the world, especially the NICS like China, India and Bangladesh for example.	processes that shape our planet from topics such as weather and climate, climate change to globalisation and population change. A theme that is common within and between our topics in Key Stage 3 is how people and places impact on the environment and
Investigate the reasons for rapid growth of manufacturing in the NICS and the positives and negatives this brings to people and places including Sweatshops.	how the concept of sustainability is considered in different contexts. Cultural understanding and diversity is promoted through Geography, broadening students understanding of the wider world and
Investigate the rise of Trans National Corporations and their 'footprint' on the planet.	developing their role as global citizens in the 21st Century.
Histor	(Y
TOPIC / KNOWLEDGE	SKILLS
Kennedy Assassination and the Interwar Years	Students will continue to focus on second order concepts, including cause and consequence,
Students will gain an understanding of a significant	similarity and difference, change and continuity as
society or issue in world history and its interconnections	well as significance. Students will be expected to
with other world developments. They will consider the	consider a wide array of source material to
main challenges facing America in 1960s, including the	understand the controversy surrounding the
growth of the Civil Rights movement and the impact of the	assassination of Kennedy. They will develop their
assassination of President Kennedy in 1963. They will learn about how the government appointed the Warren	ability to judge how useful the Warren Commission is in finding out the truth behind the assassination.
Commission to investigate and consider how useful their	Students will be able to study differing interpretations
findings were. They will then focus on the impact of World	of the Russian Revolution and learn how to apply
War One and consider what changes were wrought by war	contextual knowledge to judge how convincing these
through a study of the Russian Revolution as well as the	interpretations are. They will be afforded the
experiences of people in both America and Britain in the	opportunity to consider the level of change and
interwar period.	continuity created as a result of the impact of World War One.
Mathematics	
TOPIC/KNOWLEDGE	SKILLS
Students in Year 9 will study a range of topics from each of	Higher Tier
the core Mathematical strands: Number, Algebra, Geometry, Ratio and Proportion and Statistics.	 Interpret percentages and percentage changes as a fraction or decimal and interpret these multiplicatively.



Topic / Knowledge	Skills
To navigate the transition from Key Stage 3 to GCSE Mathematics, students will begin to gain familiarity with GCSE style exam questions and develop both their problem- solving skills and understanding of real-life Maths. In the Spring half terms 3 and 4 we provide students with the opportunity to revisit and master topics from Year 7 and 8 Number and Geometry before developing skills in applying their knowledge to problems in context and solving problems within mathematical and real-life contexts.	 Express one quantity as a percentage of another. Compare two quantities using percentages. Identify properties of the faces, surfaces, edges and vertices of: cubes, cuboids, prisms, cylinders, pyramids, cones and spheres. Calculate the perimeter of a 2D shapes and composite shapes. Find the surface area of pyramids and composite shapes. Know and apply formulae to calculate area of triangles, parallelograms and trapezia. Plot and interpret graphs (including reciprocal graphs and exponential graphs) and graphs of nonstandard functions in real contexts, to find approximate solutions to problems such as simple kinematic problems involving distance, speed and acceleration including problems requiring a graphical solution. Interpret the gradient of a straight-line graph as a rate of change.
	 Foundation Tier Interpret and construct tables, charts and diagrams for categorical data such as frequency tables, bar charts and pie charts. Interpret and compare the distributions of data sets through appropriate graphical representation. Know and understand the terms primary data, secondary data, discrete data and continuous data. Generate terms of a sequence from either a termto-term or a position-to-term rule. Recognise different types of sequence such as triangular, square and cube numbers, Fibonacci type sequences. Calculate the `nth term of a linear sequence. Interpret percentages and percentage changes as a fraction or a decimal. Express one quantity as a percentage of another. Compare two quantities using percentages. Interpret fractions and percentage problems using a multiplier. Identify properties of the faces, surfaces, edges and vertices of: cubes, cuboids, prisms, cylinders, pyramids, cones and spheres. Calculate the area of composite shapes.



Topic / Knowledge	Skills
	 Know and apply formulae to calculate area of triangles, parallelograms and trapezia.
Music	
TOPIC / KNOWLEDGE Film Music	SKILLS Composing / performing
Physical Education	
TOPIC/KNOWLEDGE HRF Table tennis Netball Rugby Basketball	SKILLSHRF – To understand the importance of measuringthe different states of heart rate (bpm) and how thiscorrelates with intensity. What are the differentthresholds of exercise training and how will thisimpact an athlete's fitness progress?Other sports – Start building a tactical understandingof the sport, with an emphasis on outwitting anopponent. This is to prepare pupils for the practicaldemands of KS4 examination PE. Promoting a love forhealthy and active lifestyles through variousmethods.Racket sports – To learn and understand the rules oftable tennis, further develop the basic techniquesand gain a tactical awareness of the sport through
C eluna	shot selection to outwit an opponent.
Science	
TOPIC/KNOWLEDGE Separating mixtures Electric circuits Transport in cells	 SKILLS Further development of science skills, which include: Planning investigations: writing detailed methods, naming specific apparatus and safety precautions Conducting investigations, including working safely with acids and alkalis, Bunsen burners, electrical equipment and microscopes Analysing data, including finding and describing errors, plotting graphs and explaining trends, and drawing lines of best fit Further mathematical skills: Rearranging equations for worded tasks Identifying and converting units Calculating averages and ranges Rounding numbers to a number of significant digits Presenting answer in standard form



Topic / Knowledge	Skills	
Personal Development (PD)		
TOPIC/KNOWLEDGE Legal and illegal drugs: Students will learn about different types of addiction and learn about different illegal substances. Students will learn what a 'party' drug is.	<i>SKILLS</i> Students will build on prior knowledge about sex and relationships.	
Sex, the law, and consent: Students will know what consent is. Students will learn about FGM and the law, and STIs.		
Throughout this term, students will use 'Unifrog' to embed their careers education.		