Year 10 Half Term 5 Curriculum

Subject	Half Term 5 – Topic/Summary of Powerful Knowledge
English	Marginalised Voices: • The Aristotelian Triad: Ethos, Pathos and Logos • Powerful narrative voice (in transactional texts) • Emotive language • The American Civil Rights Movement against racial segregation and discrimination (1950-60s) • The Black Lives Matter Movement (#BLM, 2013) • Rhetorical devices: anaphora, anadiplosis, figurative language, emotive language, allusion, enumeration, colloquial language, pronouns and hypophora • Colloquial language vs formal register • The birth of the NHS (1948), The NHS Act and social reform • The NHS in the modern day – Coronavirus pandemic • Rhetorical devices: sensory language, triplet, anecdote, personification, superlative, alliteration, metaphor (idiom), sematic field, statistics, modal verbs wordplay and superlatives *Extracts from:* *I Have a Dream (MLK),* NHS speeches (Bevan and Leslie), *The Good Wife's Guide* (*Housekeeping Monthly*, 1955), *The Pearl* (John Steinbeck), *Frankenstein* (Mary Shelley), *Storm on the Island* (Heaney), *Tissue* (Dharker), *The Emigree* (Rumens), *Checking Out Me History* (Agard), *War Photographer* (Duffy)
Maths	Collecting, representing & interpreting data • Understand populations and samples • Construct a stratified sample (Higher content) • Primary and secondary data • Construct and interpret frequency tables and frequency polygons • Construct and interpret two-way tables (Recall) • Construct and interpret line and bar charts (including composite bar charts) • Construct and interpret pie charts (Recall) • Criticise charts and graphs • Construct histograms (Higher content) • Interpret histograms (Higher content) • Find and interpret averages from a list (Recall) • Find and interpret averages from a table (Recall) • Construct and interpret time series graphs (Recall) • Construct and interpret stem-and-leaf diagrams • Construct and interpret cumulative frequency diagrams (Higher content) • Use cumulative frequency diagrams to find measures (Higher content) • Construct and interpret box plots (Higher content) • Compare distributions using charts and measures • Compare distributions using complex charts and measures (Higher content) • Construct and interpret scatter graphs (Recall) • Draw and use a line of best fit (Recall)

	• Understand extrapolation <u>Non-calculator methods</u> • Mental/written methods of integer/decimal addition and subtraction (Recall) • Mental/written methods of integer/decimal multiplication and division • The four rules of fraction arithmetic (Recall) • Exact answers • Rational and irrational numbers (Higher content) • Understand and use surds (Higher content) • Calculate with surds (Higher content) • Rounding to decimal places and significant figures (Recall) • Estimating answers to calculations (Recall) • Understand and use limits of accuracy • Upper and lower bounds (Higher content) • Use number sense • Solve financial maths problems • Break down and solve multi-step problems
Science	<u>Particle model of matter</u> • Density • Changes of state • Internal energy • Specific heat capacity • Latent heat • Particle motion in gases <u>Photosynthesis B</u> • Looking at stomata • Moving water • Transpiration • Moving sugar • Learning about plants and minerals • How plants use minerals <u>Atomic Structure</u> • Atomic structure • Radioactive decay • Properties of radiation • Nuclear equations • Half life • Irradiation
History	<u>History Around Us</u> • Case Study of the 'Old Dock' Liverpool's first and most important dock, pupils will look at the evolution and growth of Liverpool, migration in and out of the town in preparation for some exam questions which will be set by the OCR exam board.
Geography	<u>Coasts:</u> • Weathering processes

	• Coastal processes – erosion, transportation and deposition • Formation of coastal landforms • Hard and soft engineering along coasts.
Spanish	<u>Social issues:</u> • Talking about healthy eating • Using expressions with 'tener' • Healthy and unhealthy lifestyles • Using negative words • Listening for different tenses
Art	<u>Messages - Dadaism and Collage</u> • Critical and contextual studies • Developing compositions with mixed media and specialist outcomes; include Print, Textiles, Digital Art, 3D sculpture
Art Textiles	<u>Out of Place – Juxtaposition</u> • Completion of fabric compositions exploring a range of Textile techniques including making paper patterns, toiles, drawing with stitch, printmaking, beading, embroidery etc.
Business	Y10 Business – Component 2 Planning and Presenting a Micro-Enterprise Idea Choose an idea and produce a plan for a microenterprise idea, by • generation of ideas and choosing or rejecting ideas that may contribute to the likely success of an enterprise idea • draw on research to complete an accurate and realistic business plan for their chosen micro-enterprise idea within a given budget
Computing	Understanding what data is and how it is used **–** Students will look at the more advanced tools in Microsoft Excel and create a data dashboard using data from an external source. • Be able to import data from an external file and use formulae, sorting and filtering to manipulate that data into a usable format. • Use functions as part of formulae to help extract meaningful information from the data extract (IF, WHATIF, SUMIF, VLOOKUP, HLOOKUP, LEFT, RIGHT, COUNTBLANK, COUNTIF) and the logical operators (AND, OR, NOT). • Use processing methods to further refine the data into usable information and make it presentable for an audience including the use macros and buttons, data validation, linked worksheets, cell comments and conditional formatting.
Construction	<u>Sub-structure groundworks</u> Learners will need to know the construction and detailing of foundations and sub-structures. • Function of a foundation: to safely transmit the loads of the building to the sub-soil, to settle within acceptable limits, to support the loads of the building, to spread the load of the building over an area that the ground is capable of supporting, to transfer the loads to deeper, higher bearing capacity soils or rock. • The detailing of foundations, including the different types used to support • a low-rise building and their selection and use for differing ground conditions: strip, trench/mass fill, raft, short bored piles and ground beam, pad

	• The detailing of sub-structure walls: engineering brickwork to damp-proof course (DPC) and cavity fill, use of trench blocks, weepholes. • Damp proof course (DPC) types and positions: polythene, polyvinylchloride (PVC), slate, class A engineering bricks,bitumen • Understand how ground floors are detailed, constructed and supported: solid, concrete, suspended, beam and block, suspended timber floor, sub-floor ventilation, the insulation of ground floors to reduce heat losses, the use of damp proof membranes (DPM) under floors to prevent moisturetransfer. • Learners will need to understand the benefits and drawbacks of each type of foundation or sub-structure for different scenarios, including: ground conditions water table levels, presence of mature trees. <u>Component 3 - Construction and Design</u> Learners will gain an understanding of clients' needs and develop skills in producing building design briefs and sketches that consider construction constraints.
Design Technology	<u>Core technical principles - All materials</u> Learners will understand core technical knowledge and understanding that consists of: new and emerging technologies, energy generation and storage, developments in new materials, systems approach to designing, mechanical devices, materials and their working properties. • SMART and modern materials • Composites • Technical textiles • Systems approach to desig Section B and C drawing and Analysis techniques
Hospitality & Catering	<u>NEA Preparation</u> • *<u>Macro-nutrients:</u>* • carbohydrate • fat • protein. • <u>Micro-nutrients:</u> Vitamins: • fat soluble vitamin A and vitamin D • water soluble: vitamin B group and vitamin C. Minerals: • calcium • iron • sodium • potassium • magnesium as well as: • dietary fibre (NSP) • water. • <u>Different life-stages:</u> • adults; early, middle, late (elderly) • children; babies, toddlers, teenagers. • <u>Special dietary needs for individuals</u> who: • require different energy requirements based on lifestyle, occupation, age or activity level • require special diets • have medical conditions; allergens, lactose intolerance, gluten intolerance, diabetes (type 2), cardiovascular disorder, iron deficiency • have dietary requirements, such as religious beliefs • are pescatarians, vegetarians, vegans • Know how cooking methods impact on nutritional value: • boiling • frying • grilling • poaching • roasting • steaming • baking • stir-frying • Pork belly with BBQ sauce and apple slaw • Korean style fried chicken
Drama	Component 2 Developing Skills and Techniques in Performing Arts <u>Learning aims A, B & C</u> • Students will develop performing skills and techniques, through participation in workshops and classes to develop technical, practical and interpretive skills through the rehearsal and performance process. • They will work with an existing performing arts repertoire, applying relevant skills and techniques to reproduce a performance of the work.

	• Identifying strengths and areas for improvement, target setting and evaluation of final performance.
Health	<u>Health and social care services and values – Component 2 Learning Aim A1</u> • Healthcare conditions e.g. arthritis, cardiovascular conditions • Healthcare services e.g. primary, secondary, tertiary, MDT <u>Health and social care services and values – Component 2 Learning Aim A2</u> • Social care services e.g. services for children, adults, elderly • Additional care offered e.g. informal, voluntary
Music	<u>Popular Music Set Study Pieces-'Little Shop of Horrors'</u> Little Shop of Horrors: Prologue/Little Shop (overture), Mushnik & Son and Feed Me. Understanding the features of the music in relation to these elements: • Melody • Harmony • Tonality • Structure • Timbre • Texture • Tempo • Metre • Rhythm • Dynamics • Articulation
PE Core	<u>Development of skill and tactics in one of the following sports : rounders, athletics, badminton, football and fitness.</u> • Consequences of a sedentary lifestyle - Issues caused by inactivity.
Photography	<u>Portraiture and Disguise</u> This unit is designed to introduce students to photography through portraiture and disguise. Students will be given the opportunity to explore a studio environment as well as post production techniques in Photoshop.
RE/PSHE	<u>Living without harm</u>: • Healthy Lifestyle • Benefits of rest and sleep • Difference between a healthy and a harmful relationship. • Lifestyle factors that can affect health. <u>GCSE: Relationships and Families</u> • Human Sexuality • Marriage • Contraception • Divorce • Families • Gender
Sport	<u>J185-Sport Performance and leadership</u> • **Topic Area 5**: Reviewing your own performance in planning and leading of a sports activity session • Review of session-

	J184- Contemporary issues in sport • **Topic Area 5**: The use of technology in sport
Psychology	Non-experimental research methods • Questionnaires and interviews • Cast studies and observations • Data analysis • Recording and interpretating data • Qualitative and quantitative • Ethical issues
Sociology	Education • Different views of the role and functions of education. • The functionalist perspective of Durkheim on education as the transmission of norms and values and Parsons on achieved status and the operation of schools on meritocratic principles. • Different views of the correspondence principle on the relationship between education and capitalism as developed from a Marxist perspective by Bowles and Gintis.