# St Robert of Newminster

Catholic School & Sixth Form College



**Key Stage Four Curriculum Information.** 

#### **Subject: English**

	Term 1	Term 2	Term 3
Year 10	Key question:	Key question:	Key question:
Key	Why do writers choose	How do writers use their	How does conflict shape
concepts/skills	to make their texts ambiguous and what impact does this have	texts to protest against social issues?	each of the texts we have studied?
	on readers/ audiences?	<b>Literature focus:</b> A Christmas	Literature focus:  Macbeth by William
	Literature focus: An Inspector Calls by J.B.	Carol by Charles Dickens	Shakespeare
	Priestley A selection of <i>Power and</i> Conflict poetry – AQA	A selection of <i>Power</i> and Conflict poetry, plus  unseen poetry analysis	Power and Conflict poetry revision
	A Christmas Carol by Charles Dickens Language focus: Language Paper 1 Q5: creative writing	Revising An Inspector Calls  Language focus:  Language Paper 1  Q5: creative writing	Revising An Inspector Calls and A Christmas Carol Language focus: Language Paper 2 Q5: creative writing
Year 11 Key concepts/skills	Key question: How can we borrow language and structural features from literary texts and use these in our own writing?	Key question: How do writers present and control different points of view to impact upon readers?	<b>Key question:</b> How do we revise best in English?
	Literature focus: Macbeth by William Shakespeare Revising An Inspector Calls and Power and Conflict poetry Language focus: Language Paper 1	Literature focus: Revision of each major text, prioritising A Christmas Carol first Language focus: Language Paper 2	Literature focus: Revision of each major text Language focus: Language Papers 1 and 2



# Subject: Maths (Higher)

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	Term 1	Term 2	Term 3
Year 10 Key concepts/skills	<ul> <li>Calculations, checking and rounding</li> <li>Indices, roots, reciprocals and hierarchy of operations</li> <li>Factors, multiples, primes, standard form and surds</li> <li>Algebra basics, setting up, rearranging and solving equations</li> <li>Sequences</li> <li>Averages and range</li> </ul>	<ul> <li>Representing and interpreting data and scatter graphs</li> <li>Fractions and percentages</li> <li>Ratio and proportion</li> <li>Polygons, angles and parallel lines</li> <li>Pythagoras and trigonometry</li> <li>Graphs: the basics and real life graphs</li> <li>Linear graphs and coordinate geometry</li> <li>Quadratic, cubic and other graphs</li> </ul>	<ul> <li>Perimeter, area and circles</li> <li>3D forms and volume, cylinders , cones and spheres</li> <li>Accuracy and bounds</li> <li>Transformations</li> <li>Constructions, loci and bearings</li> <li>Solving quadratics and simultaneous equations</li> <li>Inequalities</li> </ul>
Year 11 Key concepts/skills	<ul> <li>Probability</li> <li>Multiplicative reasoning: direct and inverse proportion, compound measures</li> <li>Similarity and congruence in 2D and 3D</li> <li>Further trigonometry</li> <li>Cumulative frequency, box plots and histograms</li> <li>Circle theorems</li> </ul>	<ul> <li>Changing         the subject, algebraic f         ractions, rationalising         surds, proof</li> <li>Vectors and geometric         proof</li> <li>Quadratics: double         brackets, sketching         graphs</li> <li>Direct and inverse         proportion</li> <li>Circle geometry</li> <li>Reciprocal and         exponential: gradient         and area under curve</li> <li>Graphs of trig         functions</li> </ul>	This term will be used for revision
Please click H	ERE to access a Sub	iectoby Subject GCS	E Information.

This has links to the exam format, exam boards and subject specific revision tips.



# **Subject: Maths (Foundation)**

	Term 1	Term 2	Term 3
Year 10 Key concepts/skills	<ul> <li>Integers and place value</li> <li>Decimals</li> <li>Indices and standard form</li> <li>Factors, multiples, primes</li> <li>The basics of algebra</li> <li>Expressions and substitution into formulae</li> <li>Tables, charts and graphs</li> </ul>	<ul> <li>Pie charts</li> <li>Fractions, decimals and percentages</li> <li>Equations and inequalities</li> <li>Ratio</li> <li>Percentages</li> <li>Sequences</li> <li>Properties of shapes, parallel lines and angle facts</li> </ul>	<ul> <li>Transformations</li> <li>Statistics, sampling and the averages</li> <li>Perimeter, area and volume</li> <li>Real life graphs</li> <li>Straight line graphs</li> <li>Interior, exterior angles of polygons</li> </ul>
Year 11 Key concepts/skills	<ul> <li>Scatter graphs</li> <li>Proportion</li> <li>Right angled triangles:         <ul> <li>Pythagoras and trigonometry</li> <li>Probability</li> <li>Multiplicative reasoning</li> <li>Plans and elevations</li> <li>Constructions, loci and bearings</li> <li>Quadratic equations: expanding and factorising</li> <li>Quadratic equations: graphs</li> </ul> </li> </ul>	<ul> <li>Circles, cylinders, cones and spheres</li> <li>Fractions and reciprocals</li> <li>Similarity and congruence in 2D</li> <li>Vectors</li> <li>Rearranging equations, graphs of cubic and reciprocal functions and simultaneous equations</li> </ul>	This term will be used for revision.



#### **Subject: Religious Education**

	Term 1	Term 2	Term 3
Year 10 Key concepts  Skills AO1: Knowledge and understanding AO2: Analysis and evaluation	What do Jewish people believe? Nature of G-d and Nature of Messiah Abraham and Moses Importance of Mitzvot Sanctity of Life and Pikuach Nefesh Life and Death	How do Jewish people practice their beliefs? Tenakh and Talmud Synagogue Worship at home Shabbat Rites of passage Festivals	Where do we come from? Different views of creation Sanctity of life Abortion Different views on abortion Stewardship Catholic Social Teaching
Year 11 Key concepts  Skills AO1: Knowledge and understanding AO2: Analysis and evaluation	What is good and evil? Problem of evil Catholic views on evil Trinity and Incarnation Moral sources of authority Statues and the rosary Pilgrimage	What is the afterlife? The afterlife The soul Magisterium Sarcophagi and the Paschal candle Funeral rite	What is right and wrong? Sin and crime Forms of punishment Christian teachings on forgiveness Salvation and redemption Sacraments Church and church Evangelisation



#### **Subject: Combined Biology**

	Term 1	Term 2	Term 3
Year 10 Key concepts/skills	How are organisms structured from the smallest to largest units?	How do pathogens affect living organisms and how do they defend against them?	How do cellular chemical reactions provide cells with energy?
	AO1: Demonstrate knowledge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental procedures	AO1: Demonstrate knowledge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental procedures	AO1: Demonstrate knowledge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental pro cedures
Year 11 Key concepts/skills	How do plants and animals maintain a constant internal environment?  AO1: Demonstrate knowledge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental p rocedures	How does inheritance occur?  AO1: Demonstrate knowledge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental procedures	How do living organisms survive and interact with each other in an ecosystem?  AO1: Demonstrate knowledge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental pro cedures



#### **Subject: Combined Chemistry**

	Term 1	Term 2	Term 3
Year 10 Key concepts/skills	What are atoms and what happens when they react?	How do acids behave and what do they react with?	How can we separate out compounds and measure the energy changes of reactions?
	AO1: Demonstrate knowledge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental procedures	AO1:Demonstrate Knowledge and understan ding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental proc edures	AO1:Demonstrate knowle dge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental pro cedures
Year 11 Key concepts/skills	How can we separate out compounds and measure the rate of a reaction?	How can we identify different substances?	How can we obtain safe drinkable water?
	AO1: Demonstrate know ledge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse informatio n and draw conclusions to improve experimenta I procedures	AO1: Demonstrate knowle dge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental procedures	AO1:Demonstrate knowle dge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental pro cedures



#### **Subject: Combined Science: Physics**

	Term 1	Term 2	Term 3
Year 10 Key concepts/skills  AO1: Recall knowledge and understanding. AO2: Apply knowledge and understanding. AO3: Analyse information and draw valid conclusions.	Energy and the uses of energy.  Calculating energy types.  How heat travels through solids and why we insulate our homes.  Different methods for energy generation and the impact of this on the environment.	How are electrical circuits constructed.  The difference between series and parallel circuits and the advantages and disadvantages of both.  How specialised components are used in lighting and heating.  How electricity used safely in the home.	The particle arrangement in solids, liquids, and gases and how this gives substances their properties.  How the atom has evolved over time with new discoveries.  The structure, properties, uses and dangers of radiation.
Year 11 Key concepts/skills  AO1: Recall knowledge and understanding. AO2: Apply knowledge and understanding. AO3: Analyse information and draw valid conclusions.	Forces and how they interact.  Calculating resultant forces and their effect.  Forces and motion, including speed, velocity and acceleration.	Force and acceleration.  Newton's 2 <sup>nd</sup> law.  Force and elasticity and Hooke's law.  Wave properties.	Wave properties continued.  The uses and dangers of the electromagnetic spectrum.  Magnetic fields and electromagnetic induction.



## **Subject: GCSE Triple Biology**

	Term 1	Term 2	Term 3
Year 10 Key concepts/skills	How are organisms structured from the smallest to largest units?  AO1: Demonstrate	How do pathogens affect living organisms and how do they defend against them?	How do cellular chemical reactions provide cells with energy?
	knowledge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental procedures	AO1: Demonstrate knowledge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental procedures	AO1: Demonstrate knowledge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental procedures
Year 11 Key concepts/skills	How do plants and animals maintain a constant internal environment?  AO1: Demonstrate knowledge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental procedures	How does inheritance occur?  AO1: Demonstrate knowledge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental procedures	How do living organisms survive and interact with each other in an ecosystem?  AO1: Demonstrate knowledge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental procedures



#### **Subject: GCSE Triple Chemistry**

	Term 1	Term 2	Term 3
Year 10 Key concepts/skills	What are atoms and what happens when they react?	How do acids behave and what do they react with?	How can we separate out compounds and measure the energy changes of reactions?
	AO1: Demonstrate knowledge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental procedures	AO1:Demonstrate Knowledge and understan ding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental proc edures	AO1:Demonstrate knowle dge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental pro cedures
Year 11 Key concepts/skills	How can we separate out compounds and measure the rate of a reaction?	How can we identify different substances?	How can we obtain safe drinkable water?
	AO1: Demonstrate know ledge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental procedures	AO1: Demonstrate knowle dge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental procedures	AO1:Demonstrate knowle dge and understanding of scientific ideas. AO2: Apply knowledge and understanding of scientific ideas. AO3: Analyse information and draw conclusions to improve experimental pro cedures

#### **Subject: GCSE Triple Physics**

	Term 1	Term 2	Term 3
Year 10 Key concepts/skills	Energy and the uses of energy.	How are electrical circuits constructed.	The particle arrangement in solids, liquids, and gases and how this gives
AO1: Recall knowledge and	Calculating different energy types.	The difference between series and parallel circuits and the advantages and	substances their properties.
understanding. AO2: Apply knowledge and	How heat travels through solids and why we insulate our homes.	disadvantages of both.  How specialised	Gas pressure and temperature.
understanding. AO3: Analyse information and	Different methods for energy generation and	components are used in lighting and heating.	How the atom has evolved over time with new discoveries.
draw valid conclusions.	the impact of this on the environment.	Static electricity.  How electricity used safely in the home.	The structure, properties, uses and dangers of radiation.
			Nuclear fission and fusion and how a nuclear fission reactor works.
Year 11 Key concepts/skills	Forces and how they interact.	Wave properties. Sound.	Magnetic fields and electromagnets.
AO1: Recall	Calculating resultant forces and their effect.	The use of waves for exploration.	The motor effect and generator effect and their applications.
knowledge and understanding. AO2: Apply	Forces and motion, including speed, velocity and acceleration.	The uses and dangers of the electromagnetic	Transformers, linked to the National Grid.
knowledge and understanding. AO3: Analyse	Force and acceleration.	spectrum.  The applications of light	Our Solar System.
information and draw valid	Newton's 2 <sup>nd</sup> law.	and the formation of real and virtual images.	The life cycle of a star.
conclusions.	Force and elasticity and Hooke's law.		The origins of the Universe.
	Force and pressure.		

#### **Subject: History**

	Term 1	Term 2	Term 3
Year 10 Key concepts:  • Knowledge and understanding  • Explaining and analysing events and periods  • Understanding interpretations  • Using sources	<ul> <li>Paper 1</li> <li>The People's Health 1250- present</li> <li>Including:</li> <li>The impact of living conditions on people's health</li> <li>The response to epidemics</li> <li>Attempts to improve public health</li> <li>Ways in which the following influence change and continuity in public health:</li> <li>Beliefs, attitudes and values</li> <li>Local and national government</li> <li>Science and technology</li> <li>Urbanisation</li> <li>Wealth and Poverty</li> </ul>	<ul> <li>Paper 1</li> <li>The Elizabethans 1580-1603</li> <li>Including:</li> <li>Elizabeth and government</li> <li>The nature and extent of a Catholic threat</li> <li>Daily lives</li> <li>Popular Culture</li> <li>The nature and significance of England's connections with the wider world</li> </ul>	<ul> <li>Paper 3</li> <li>Living under Nazi Rule 1933- 1945</li> <li>Including:</li> <li>Dictatorship</li> <li>Control and Opposition 1933- 1939</li> <li>Changing Lives 1933- 1939</li> <li>Germany in War</li> <li>Occupation</li> </ul>
Year 11 Key concepts:  • Knowledge and understanding  • Explaining and analysing events and periods  • Understanding int erpretations  • Using sources	Paper 2     History Around Us:     Durham Castle Including:     Reasons for the location of the castle within its surroundings     When and why is was first created     How the site has changed through the Medieval, Tudor and Victorian time periods     Analysis of the physical remains of the castle     Typicality compared to other similar castles	<ul> <li>Paper 3</li> <li>The Making of America 1789- 1900</li> <li>Including:</li> <li>America's expansion 1789- 1838</li> <li>The West 1839- 1860</li> <li>Civil War and Reconstruction 1861- 1877</li> <li>Settlement and conflict on the Plains 1861- 1877</li> <li>American cultures 1877- 1900</li> </ul>	Revision of all units



#### **Subject: Geography**

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	Term 1	Term 2	Term 3
Year 10 Key concepts/ skills AO1/AO2	Component 1 Topic 2: Development Dynamics Topic 1: Hazardous Earth Topic 3: Challenges of an urbanising world.	Component 1/2 Topic 3: Challenges of an urbanising world Topic 2: The UK Evolving Physical Landscape	Component 2 Topic 3: Coastal Landscape and Change Topic 3: River Processes and Pressures Physical Fieldwork
	Key Questions -What is the scale of global inequality and how can it be reduced? -How is India, one of the world's emerging countries, managing to develop? -What are the causes and challenges of rapid urban change? -Why does quality of life vary so much within Mumbai? -How does the world's climate system function, why does it change and how can this be hazardous for people?	Key Questions -How are extreme weather events increasingly hazardous for people? -Why do the causes and impacts of tectonic activity and management of tectonic hazards vary with location? -Why does the physical landscape of the UK vary from place to place? -Why is there a variety of distinctive coastal landscapes in the UK and what are the processes that shape them? -What are the challenges for coastal landscapes and communities and why is there conflict about how to manage them?	Key Questions -Why is there a variety of river landscapes in the UK and what are the processes that shape them? -What are the challenges for river landscapes, people and property and how can they be managed? -How do river characteristics change flood risk along the Wear
Year 11 Key Concepts/ skills AO1/AO2/ AO3/AO4	Component 2: Topic 3: River Processes and Pressures Physical Fieldwork Topic 5: Geographical Investigations – Human Fieldwork -Topic 4: The UK's Evolving Human Landscape Key Questions: How and why does quality of life vary within Newcastle? Why are places and people changing in the UK? How is London, a major UK city, changing?	Component 3 Topic 1: People and the Biosphere Topic 2: Forests Under Threat Topic 3: Consuming Energy Resources Key Questions: Why is the biosphere so important to human wellbeing and how do humans use and modify it to obtain resources? What are the threats to forest biomes and how can they be reduced?	Component 3 Making a Geographical Decision  Key Question: How do you make a geographical decision?  *Revision of Components 1-3



#### **Subject: Spanish**

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	Term 1	Term 2	Term 3
Year 10 Key concepts	•Family members/names/ages •Family relationships: who they get on with and why •Physical descriptions •Pets and descriptions •Role models •Ideal future partners/ weddings and future plans  •The journey •Accommodation •Weather on holiday •Holiday activities •Best/worst days •Christmas in Spain	•Seasons/ Weather •Opinions + free time activities •Reasons for opinions •Sports •TV preferences •Cinema  •Mobile phone usage •Social media advantages and disadvantages •Making arrangements •Semana Santa	•Daily routines •Mealtimes •Buying food •Restaurants + special day in the past •Illnesses •Spanish traditions: meals, siesta, paseo, •Fallas/ La Tomatina/Los Castellers •Los San Fermines + injuries •La Noche de San Juan •El festival de Benicassim + music preferences
Year 11 Key concepts	<ul> <li>Places in towns</li> <li>Location of places/directions</li> <li>Geographical features</li> <li>The positives and negatives of cities</li> <li>How hometown has changed</li> <li>Lifestyle problems/Healthy living</li> <li>Social issues in my region</li> <li>Environmental issues</li> <li>Protecting the environment</li> </ul>	•Jobs+ Workplaces •Part time jobs/chores + jobs recently done •Work experience •Applying for jobs •Importance of languages •Gap year activities/ Future plans	<ul> <li>Revision:         Themes 1-3</li> <li>Past Paper         Practice</li> </ul>



#### **Subject: French**

	Term 1	Term 2	Term 3
Year 10 Key concepts	<ul> <li>Talking about getting on with others</li> <li>Describing family and friends</li> <li>Talking about future relationships</li> <li>Discussing future relationship choices</li> <li>Talking about the uses of social media</li> <li>Discussing the pros and cons of social media</li> <li>Discussing the uses of mobile technology</li> <li>Grasping the present and future tenses of regular and irregular verbs</li> </ul>	<ul> <li>Describing free time activities in the past</li> <li>Talking about leisure activities</li> <li>Talking about different cuisines and eating out</li> <li>Discussing world food and eating habits</li> <li>Talking about sports and taking risks in sports</li> <li>Talking about celebrations</li> <li>Discussing what traditions mean to you and describing and event</li> </ul>	<ul> <li>Describing my home and my ideal home</li> <li>Describing what a town is like and what there is to see and do</li> <li>Describing a region</li> <li>Describing charity work</li> <li>Understanding the importance of charities</li> <li>Comparing old and new health habits</li> <li>Describing health resolutions</li> <li>Discussing environmental problems and their solutions</li> <li>Discussing global issues, inequality and poverty in the world</li> </ul>
Year 11 Key concepts	<ul> <li>Talking about holiday preferences</li> <li>Describing holidays in detail</li> <li>Talking about visiting different places in France</li> <li>Talking about visiting French towns and cities</li> </ul>	<ul> <li>Describing a day in school</li> <li>Describing school life in different countries</li> <li>Talking about school rules and uniform</li> <li>Talking about your ideal school</li> <li>Talking about future options, university and apprenticeships and how to get a job</li> </ul>	<ul> <li>Revision         of Themes 1-3</li> <li>Past Paper Practice</li> </ul>



#### Subject: Art

	Term 1	Term 2	Term 3
Year 10 Key concepts/ skills A01: Develop	Organic/ natural form skills building  Observational drawing from	Ceramics - sculpture Organic/ natural form  Ceramics (pinch pot)	Drawing and mixed media Unit 1: Fantastic & Strange OR
AO2: Explore A03: Record AO4: Present	primary and secondary sources.  Own photography — developing skills with light.  Presentation skills  Charcoal drawings  Oil pastel enlargements  Pen and wash  Watercolour  Design development	Ceramics (slab or coil building) Working in the style of an artist Colour mixing Compositional theory Ceramic techniques (coil building, slab building and pinch pots) Painting/glazing	Geometric form (year 11 coursework)  Observational drawing from primary and secondary sources. Own photography — developing skills with light. Working in the style of an artist Colour mixing Compositional theory Mixed media Oil painting Dry point etching Compositional theory Grid method Digital editing
Year 11 Key Concepts/ skills	Drawing, 2D, 3D and mixed media Fantastic & Strange OR geometric form (year 11 coursework)	Drawing, 2D, 3D and mixed media Externally Set Assignment January 2023 (Year 11 Exam)	Externally Set Assignment January 2023
A01: Develop AO2: Explore A03: Record AO4: Present			

#### **Subject: Business**

	Term 1	Term 2	Term 3
Year 10 Key concepts/skills	What is enterprise and entrepreneurship?	How can we make a business effective?	How can an entrepreneur grow their business?
	How is a business opportunity spotted?  How do we put a business	How can we understand the external influences that impact a business?	How can an entrepreneur finance their business?
	idea into practice?  AO1 – Knowledge AO2 – Application	AO1 – Knowledge AO2 – Application AO3 – Analysis	AO1 – Knowledge AO2 – Application AO3 – Analysis
	AO3 – Analysis  Numeracy skills and data analysis	Numeracy skills and data analysis	Numeracy skills and data analysis
Year 11 Key concepts/skills	How can an entrepreneur grow their business?  What marketing decisions	What operational decisions need to be made?	What human resource decisions need to be made?
	need to be made?  AO1 – Knowledge  AO2 – Application	What financial decisions need to be made?	AO1 – Knowledge AO2 – Application AO3 – Analysis
	AO3 – Analysis  Numeracy skills and data analysis	AO1 – Knowledge AO2 – Application AO3 – Analysis	Numeracy skills and data analysis
		Numeracy skills and data analysis	



#### **Subject: Computer Science**

	Term 1	Term 2	Term 3
Year 10 Key concepts	<ul> <li>Computer systems</li> <li>1.1 Systems         <ul> <li>architecture</li> </ul> </li> <li>1.2 Memory and             <ul> <li>storage</li> <li>1.3 Computer</li></ul></li></ul>	<ul> <li>Computer systems</li> <li>1.4 Network security</li> <li>1.5 Systems software</li> <li>Programming Skills</li> </ul>	Computer systems  1.6 Ethical, legal, cultural and environmental impacts of digital technology  Programming Skills
Year 11 Key concepts	Computational thinking, algorithms and programming • 2.1 Algorithms • 2.2 Programming fundamentals • Programming Skills	Computational thinking, algorithms and programming • 2.3 Producing robust program • 2.4 Boolean logic • 2.5 Programming languages and Integrated Development Environments • Programming Skills	<ul> <li>Computer systems         Revision</li> <li>Computational         thinking, algorithms         and programming         Revision</li> <li>Programming Skills</li> </ul>



#### **Subject: Engineering**

	Term 1	Term 2	Term 3
Year 10 Key concepts/skills	What are the links between the various engineering sectors and the role of design in the production of engineered products?	How can we use Computer Aided Design to solve an engineering problem?	How can we investigate and create solutions to problems in response to given engineering briefs?
	Learning Aim A: Understand engineering sectors, products and organisations, and how they interrelate.  A1 Engineering sectors, engineered products and interconnections.  A2 Engineering organisations, functions, job roles and career	Learning aim B: Explore engineering skills through the design process. B1 The design process	AO1 Understand how to respond to an engineering brief AO2 Select skills and techniques in response to an engineering brief.
Year 11 Key concepts/skills	progression.  What are common Materials, Components and Processes used in engineered products?  Learning Aim A: Understand materials, components and processes for a given engineered product.  A1: Materials A2: Components A3: Processes  Learning Aim B: Investigate a given engineered product using disassembly techniques.  B1: Practical engineering skills. B2: Disassembly techniques. B3: Product Design Specification (PDS).	What are the planning, making, testing and evaluating processes needed to manufacture an engineered product.  Learning Aim C: Plan the manufacture and safely reproduce, inspect, test a given engineered component. C1: Engineering make process. C2: Develop a production plan.	How can we investigate and create solutions to problems in response to given engineering briefs?  A03: Apply skills and techniques in response to an engineering brief.  A04: Evaluate and review the outcomes of the application of skills and techniques in response to an engineering brief.

#### **Subject: Design and Technology**

	Term 1	Term 2	Term 3
<b>Year 10</b> Key concepts/skills	Renewable Energy Modern and Smart Materials Composites & Technical Textiles Electronic systems / Inputs Processes / Outputs Design: Sketching and rendering Isometric drawing Context, brief and customer research Existing product research, ergonomic and anthropometric research The work of others — designers and companies Specification	force Material sources Papers and boards Timbers Metals and Polymers Textiles and material properties Specialist: Selecting materials / forces and stresses Ecological and socially responsible design Material properties	Key question: Where can I take this design context? (Coursework from June 1st) Key Knowledge: Specialist: Shaping and forming materials stock form Manufacturing volumes/Production Aids Wastage and Addition Deforming / Commercial processes Treatments and Finishes / Quality control NEA: Task analysis, scenario Design context, design problem, existing product examples Research plan, Existing product Analysis and Design inspiration Client interviews, customer profile and survey Brief and specification Specification Producing design ideas



#### **Subject: Design and Technology**

	Term 1	Term 2	Term 3
<b>Year 11</b> Key concepts/skills	Key question:  NEA (Coursework): How do we ensure a product is fit for purpose?  Key Knowledge:  NEA  Design idea review / decision matrix Sketch model and evaluation Development model and evaluation SCAMPER Final development model Analyse design against specification Packaging nets Further research - materials/components etc CAD development Orthographic drawing, cutting list, Materials and Processes testing Manufacturing spec Design issues MESS development Commercial design	making Evaluation against specifications Testing and third party feedback Design improvements Commercial development Core (retrieval) Industry and Enterprise/ Sustainability & People and Society Production Systems / New technology and Design Decisions Fossil Fuels and Nuclear Power / Renewable Energy Modern and Smart Materials Composites & Technical Textiles	Key question: What transferrable skills from our NEA can we use in the exam? Key Knowledge: NEA Explicit links to core and specialist content Specialist (retrieval) Selecting materials / forces and stresses Ecological and socially responsible design Material properties/modifying material properties Shaping and forming materials stock form Manufacturing volumes/Production Aids Wastage and Addition Deforming / Commercial processes Treatments and Finishes / Quality control



#### **Subject: Food and Nutrition**

	Term 1	Term 2	Term 3
Year 10 Key concepts/skills	Why does our body need specific nutrients and how does it use them?  AO1: Knowledge recall of micro and macronutrients and impact on health.  Specification •Macronutrients •Micronutrients •Making informed choices for a balanced diet •Energy needs •Nutritional analysis •Diet and health	Why do we cook food? Why Is hygiene and safety important when storing, preparing and cooking food?  AO2: Practical skills including storing, preparing and cooking food. Presentation of dishes and use of equipment.  Specification Heat transfer and cooking methods •Functional and chemical properties of foods •Food safety and spoilage •Buying and storing food •Preparing and cooking food	What are the wider factors which influence food choice? How can food production and sale have an impact on the environment?  A03: Knowledge recall of the whole specification covered in year 10.  Specification  •Factors which influence food choice •Religion, culture, moral and ethical considerations •Food labelling and marketing •International cuisines •Sensory evaluation •Environmental impact and sustainability of food
Year 11 Key concepts/skills	NEA 1 - Set by the exam board – Released Sept 1 <sup>st</sup> 15% of final grade  NEA 2 – Set by the exam board – Released Nov 1 <sup>st</sup> 35% of final grade  NEA 1 – Food Science investigation (30 marks)	NEA 2 - Food preparation assessment (70 marks) Students' knowledge, skills and understanding in relation to the planning, preparation, cooking, presentation of food and application of nutrition related to the chosen task.	Final written exam – revision of full specification 50% of final grade.



#### Subject: PE

	Term 1	Term 2	Term 3
Year 10 Key concepts	Paper 1: Structure & Function of Skeletal and Muscular Systems.  Paper 2: Sports Psychology (Skill & Ability, Guidance & Feedback, Arousal & Aggression)	Paper 1: Structure & Function of Cardio-Vascular and Respiratory Systems.  Paper 2: -Socio-Cultural Influences (Social Groups, Commercialisation,	Paper 1: Movement Analysis, Components of Fitness, Fitness Testing.  Paper 2: Ethical Conduct & Spectator Behaviour.
		Technology)	
Year 11 Key concepts	Paper 1: Continuation of Fitness Testing, Principles of Training, Training Thresholds.  Paper 2: Health, Fitness & Well being.  Completion of Written Coursework assignment	Paper 1: -Methods of Training, Periodisation, Warm up/ Cool Down/ Lever Systems.  Paper 2: Somatotypes/ Balanced Diet/ Energy Use.	Revision for both papers.



# **Subject: Y10 GCSE Music**

	Y10 Term 1	Term 2	Term 3
<b>Year 10</b> Key	Skills:	Skills:	Skills:
concepts /skills	Treble and Bass Clef	Use Noteflight Software	Write for drums
,	Instrumental and Rehearsal Technique	Set text to music	Write for Bass
	·	Understand the pitch	Write for Guitar
	Main musical terminology	range of various instruments	Use chord progressions in
	Vocal Music associated		compositions
	terminology	Instrumental music terminology	
	Concepts:		Concepts:
		Concepts:	
	Understand the structure of		Self assess and set
	the course	Compose in various styles	appropriate targets for
		and understand the main	development
	Understanding Component	features of different styles	
	1: Solo performance grading		Understand Sonata form
	criteria	Understand how different	
	Understanding Component	musical elements can be used to create a mood or	Understand key features of Musical Theatre
	Understanding Component 2:Composition grading	fit a musical intention	Wusical Theatre
	criteria		
	Criteria	Understand how to use the	
	Knowledge of musical	grading criteria to set areas	
	elements	of improvement for solo	
		performance	
	Understand how to analyse		
	two of the set works	Instrumental music	
		analysis	



#### **Subject: Y11 GCSE Music**

	Y10 Term 1	Term 2	Term 3
Year 11	Skills:	Skills:	Skills:
Key	Practice as part of an	Know all terminology for	Write for drums
concepts	ensemble	each style of music studied	
/skills			Write for Bass
	Record final free	Recognise a variety of	
	composition	instruments and know their key qualities	Write for Guitar
	Revise year one appraisal		Use chord progressions in
	material	Identify aurally musical terminology from each	compositions
	Use correct music	area of study.	
	terminology depending on	area or stady.	Concepts:
	the style/genre of music		Self assess and set
	,	Concepts:	appropriate targets for
	Identify styles of music	Understand how exam	development
	based on instruments and	technique can help create	
	characteristics	success and apply	Understand Sonata form
		techniques you have been	
	Concepts:	taught	Understand key features of
	Identify gaps in knowledge		Musical Theatre
	and address these	Understand the differences	
	Lindoustond houstonships	and similarities of the Set	
	Understand how to achieve marks in the higher grade	Works.	
	boundaries	Understand the difference	
		between a musical	
	Understand how to	performance and	
	compose to a set brief	technically accurate one	
	Understand how music for	Understand context of Set	
	Stage and Screen is written	Works and unheard pieces	
	and idioms used.		
	Understand where your		
	strengths and weaknesses		
	are and make the correct		
	choices for composition and		
	performance based on		
	these.		



#### Subject: Y10 GCSE Drama

	Term 1	Term 2	Term 3
Year 10 Key	Skills	Skills	Skills
Year 10 Key concepts /skills		Skills  Design fundamentals such as scale, shape, colour, and texture The design of props and the design of sets such as revolves, trucks, projection, multimedia, pyrotechnics, smoke machines, and flying The design of costume, including hair and make-up The design of lighting such as direction, colour, intensity, special effects  The design of sound such as direction, amplification, music, sound effects both live, and recorded Understanding the social, cultural and historical context in which the performance texts studied are set and using this to discuss and create.  Understanding the theatrical conventions of the period in which the performance texts studied were created and being able to discuss and use this information to inform their own decisions.  Concepts	
		Social, cultural and historical contexts. How meaning is interpreted and communicated.	



#### Subject: Y11 GCSE Drama

concepts /skills use in practice: and know how to use/discuss in creation and appreciation: Be able to put into the skills taught to the course.		Term 1	Term 2	Term 3
Actor and audience configuration Relationships between performers and audience Performers' vocal interpretation of character such as accent, volume, intonation, phrasing, emotional range, delivery of lines Performers' physical interpretation of character such as build, age, height,	Key concepts	Understand and be able to use in practice:  Performance conventions Use of performance space and spatial relationships Actor and audience configuration Relationships between performers and audience Performers' vocal interpretation of character such as accent, volume, pitch, timing, pace, intonation, phrasing, emotional range, delivery of lines Performers' physical interpretation of character such as build, age, height, facial features, movement, posture, gesture, facial expression  Concepts How meaning is interpreted and	Understand the following and know how to use/discuss in creation and appreciation:  Genre Structure Character Form Style Language Sub-text Character motivation and interaction The creation of mood and atmosphere The development of pace and rhythm Dramatic climax Stage directions The practical demands of the text  Concepts Characteristics of performance texts and	Know the meaning of all Drama terminology and apply to written work. Be able to put into practice the skills taught throughout the course.  Concepts Know which revision techniques work best for the individual and create a revision plan based on this Have a solid plan and technique for sitting the final exam. Knowledge and understanding of how drama and theatre is developed and performed, including in connection to a set play and on their ability to analyse and evaluate the live theatre



# **Subject: KS4 BTEC Performing Arts**

	Term 1	Term 2	Term 3
Key concepts /skills	Skills Understand and be able to use in practice: Stage positioning. Stage configurations. Role and responsibilities of theatre makers. Using theatrical skills in performance appropriate to specific styles. Script writing. Use of dramatic conventions in devised work.  Concepts Drama and theatre terminology and how to use it appropriately. The roles and responsibilities of theatre makers in contemporary professional practice. Knowledge and understanding of how drama and theatre is developed and performed. Charateristic features of different styles of theatre.	Skills Understanding the requirements of being a performer. Practical understanding of how performing arts work is created. Roles, responsibilities and the application of relevant skills and techniques in theatre. Research and communication skills.  Concepts Understanding of professional performing arts work and the processes and practices that contribute to the creation of a range of performance styles.  Understanding of performance styles.  Understanding of performance work and influences.	Skills How to use rehearsal processes. Skills and techniques in performance or realisation. How to review your own development and application of performance skills.  Concepts Working as a performer to produce and interpret performance work.  How to communicate intentions to an audience through performance.  Throughout your development, you will review your own progress and consider how to make improvements.



#### **Subject: Health and Social Care**

	Term 1	Term 2	Term 3
Year 10 Key concepts/skills	Types of services. Functions of HSC services. Job roles within HSC. Referrals to HSC. Barriers to accessing services.	Formal care. Informal care. Role of regulatory bodies. Ofsted. Care Quality Commission	Explained and unexplained life events.  Nature/nurture argum ent for development.  The role of
	Care needs throughout life stages.	Who can care for people and who regulates the carers?	care planning in meeting needs of individuals .
	What is the health and social care sector?	Stages of development from conception to birth.	What are the
		Key milestones of development throughout the life stages.	key influences on human development?
		How do humans grow and develop through the life stages?	
Year 11	Legislation.	Legislation.	REVISION:
Key concepts/skills	Professional skills. HSC values.	Professional skills. HSC values.	TAHSC1
Correcpes, sixins	Person-	Person-centred practice.	TAHSC2
	centred practice. Partnership working. Barriers to partnership working . Career development.	Partnership working. Barriers to partnership working. ng. Career development. Careers advice. Qualifications and training.	TAHSC 3
	Career development.  Careers advice.  Qualifications and training.	What are the responsibilities of HSC workers?	
	What are the		
	responsibilities of HSC		
Please click		Subject by Subject GCS	F Information

## **Subject: Textiles**

	Term 1	Term 2	Term 3
Year 10 Key concepts/ skills  A01: Develop A02: Explore A03: Record A04: Present	Drawing & Textile techniques Organic/ natural form skills building  •Observational drawing from primary and secondary sources. •Own photography – developing skills with light. •Presentation skills •Pencil drawings •Pen and wash •Watercolour •Sewing machine skills	Textiles— Cushion Organic/ natural form  •Applique •Reverse applique •Machine embroidery •Hand embroidery •Working in the style of an artist •Colour mixing •Tie-Dye •Design development •Pattern development •Construction skills	Drawing and Textiles Unit 1: Oceans and Sustainability OR Beauty of Decay OR Futuristic (year 11 coursework)  Observational drawing from primary and secondary sources. Own photography — developing skills with light. Working in the style of an artist Colour mixing Compositional theory Printmaking Fabric manipulation Digital editing
Year 11 Key Concepts/ skills  A01: Develop A02: Explore A03: Record AO4: Present	Orawing and Textiles (year 11 coursework)	Drawing and Textiles Externally Set Assignment January 2023 (Year 11 Exam)	GCSE examination begin

# **Subject: BTEC DIGITAL IT**

	Term 1	Term 2	Term 3
Year 10 Key concepts	Component 1: Exploring User Interface Design Principles and Project Planning Techniques  Learners will develop their understanding of what makes an effective user interface and how to effectively manage a project. They will use this understanding to plan, design and create a user interface.		Component 1 Non-Examined Assessment Window  Component 2: Collecting, Presenting and Interpreting Data Learners will understand the characteristics of data and information and how they help organisations in decision making. They will use data manipulation methods to create a dashboard to present and draw conclusions from information.
Year 11 Key Concepts	Component 2: Collecting, Presenting and Interpreting Data     Learners will understand     the characteristics of data     and information and how     they help organisations in     decision making. They will     use data manipulation     methods to create a     dashboard to present and     draw conclusions from     information.	Component 2 Non-Examined Assessment Window  Component 3: Effective Digital Working Practices Learners will explore how organisations use digital systems and the wider implications associated with their use.	



# **Subject: Construction**

	Term 1	Term 2	Term 3
<b>Year 10</b> Key concepts/skills	engineering products Building services and engineering Raw material extraction Manufacturing: Timber and metals (steel and copper), polymers, crushed rock, clay, cement, mortar, concrete. Professional and managerial	External and internal walls and floors Roof and internal finishes Materials used in construction Building services and materials	Benefits of sustainable construction, pollution and preservation trades, employment and careers
<b>Year 11</b> Key concepts/skills	Key question: What are the key factors to consider for low rise building construction? Skill assessment 1: Tiling Key Knowledge: Sustainable construction techniques for low rise buildings. Hooke Law, Young Modulus	Key question: How can we balance economical and environmental considerations in our work? Skill assessment 2: Joinery Key Knowledge: Calculating Building costs using surface area. Thermal Expansion	Key question:  How are designs developed and improved to meet the requirements of all parties?  Skill assessment 3: Electrical installation  Key Knowledge:  Using CAD software to develop presentation drawings.  Analysing own designs against client briefs.

