

Subject: Art Year 13 terms 1+2

Previously you have learnt



You are demonstrating all the skills you have practised in year 12 and applying these to your own project brief/ selected heading. You will be using all the skills you have previously learnt to apply to this unit, your mixed media approach throughout yr12 and you will need to be use these and continue to grow as an artist throughout your coursework unit. You will need to apply this knowledge to your practical and written elements in this coursework unit.

In this unit you will learn



You will continue with your selected theme continuing to learn how you refine and develop your own ideas, you will continue to learn how you can link your own work to the work of others and continue to learn how to develop the written element of the coursework NEA requirement alongside your practical work. You will learn how to plan for your mock exam time and this will be an opportunity for you to show all your skills and in which you will need to ensure that you are well prepared and learn to use your time with care.

Key Vocabulary and Terminology



<u>Tier 2:</u> primary observation, media, refine, artist analysis, response, present, mixed media, bibliography, extensive

<u>Tier 3:</u> contextualisation, contemporary, lino printing, stitching, installation art, progressive, post modernist art,

Further Learning



Royal Academy of Arts: Art and artists

The Student Room: Writing and Art Essay

Student Art Guide: Successful A Level Art Exam

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship



Subject: Science Year 13 Biology Homeostasis

Previously you have learnt



In <u>Combined Science</u> you have explained the role of insulin and glucagon in controlling blood glucose as well as comparing type 1 and 2 diabetes. In <u>Triple Biology</u> you have described how thermoregulation takes place. You have explained the process of osmoregulation and the role of the nephron and ADH in this process. You have also stated treatments for kidney failure.

In this unit you will learn



About homeostasis and especially its role in the negative feedback mechanism. You will explain the role of the liver, insulin, glucagon and adrenaline in the primary and secondary messenger model of regulating blood glucose concentration. You will describe the role of the hypothalamus, posterior pituitary gland and ADH. You will also explain how the structure of the nephron is related to osmoregulation.

Key Vocabulary and Terminology



Tier 2: Feedback, Coordinator, Optimum

<u>Tier 3:</u> Homeostasis, Glyogenesis, Glycogenolysis, Gluconeogenesis, Antidiuretic hormone, Nephron

Further Learning



AQA Biology A Level - Homeostasis - Physics and Maths Tutor Seneca Learning - Biology A Level - Activity 6.4 YouTube - Osmoregulation

Hatton Character Qualities

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Subject: Science Year 13 Inheritance

Previously you have learnt



<u>In Combined Science</u>, you have looked at monohybrid inheritance (inheritance of a single gene) and used terms such as homozygous, heterozygous, dominant and recessive to describe allele and genotypes. You have calculated outcomes of different crosses. <u>In Triple Biology</u>, you have also described inheritance for genes with multiple alleles and/or codominance. <u>In Year 12</u>, we studied the structure of DNA and chromosomes.

In this unit you will learn



To use labelled genetic diagrams to interpret and predict results of monohybrid and dihybrid crosses involving dominant, recessive and codominant alleles; crosses involving sex linkage, autosomal linkage, multiple alleles and epistasis. We will also use the chi-squared statistical test to compare observed phenotypic ratios with expected ratios.

Key Vocabulary and Terminology



Tier 2: Interpret, predict, reproduction, ratio.

<u>Tier 3:</u> Allele, Monohybrid, Dihybrid, Genotype, Phenotype, Homozygous, Heterozygous, Dominant, Recessive, Codominant, Autosomal, Epistasis.

Further Learning



Physics and Maths Tutor – Summary Notes, Flash Cards, Mind Maps and Questions

Seneca Learning – Biology AQA A-Level – Activities 7.1

Additional Reading – Steve Jones: The Language of Genes

Hatton Character Qualities

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Subject: Business BTEC Year 13 Unit 3 Finance LAE - Cash Flow / Break Even

Previously you have learnt



In the previous units you learned what income and expenditure is. You also researched the various ways that a business can finance their activities through both internal and external sources; and you should be able to identify the advantages and disadvantages of each. You learned to use your knowledge of these key concepts to make recommendations to a business as to which source finance is most appropriate in a given situation. It is vital that you have an understanding of these topics prior to generating business accounts as these key terms will be integral to understanding the purpose of future topics.

In this unit you will learn



Why it is important for a business to manage its monetary inflows and outflows. You will be able to calculate cash flow forecasts and make recommendations as to how a business can remain liquid. You will learn to calculate how many units of a product that a business needs to sell to break even, and use given data to make predictions as to what will happen if the selling price or costs rise / fall. You will learn how to calculate break even using both the formula and table methods and you will be able to show results in a graphical format. In addition to this you will learn to analyse both of these documents so you are able to make recommendations.

Key Vocabulary and Terminology



<u>Tier 2:</u> Describe, state, analyse, calculate, formula, evaluate

<u>Tier 3:</u> Cash Flow, in flows, out flows, opening balance, closing balance, net cash flow, break even, fixed costs, selling price, variable costs, profit, loss, output, units, contribution, margin of safety.

Further Learning



Personal and Business Finance

Cash flow forecasting

Break even analysis

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Business BTEC Unit 3 Business Finance- LAD - Sources of Finance

Previously you have learnt



In the previous unit you started to look at business finance you learned why a business will generate accounts, you will need to know this at the beginning of the business finance unit as learning to complete accounts with no context will make your learning process more difficult. You then learned about the types of income and expenditure, these are basic and key concepts that you must understand as they form the basis of all of the financial documents which you will learn to generate and analyse in later learning aims.

In this unit you will learn



How businesses fund their activities. You will look at both the internal and external sources of finance and be able to identify situations in which each would be appropriate. You will find out the advantages and disadvantages of each of the sources of finance so you are able to use that knowledge to make recommendations to a business as to which source finance is most appropriate in a given situation. It is vital that you have an understanding of this topic prior to generating business accounts as these key terms will be discussed and embedded in future learning aims.

Key Vocabulary and Terminology



<u>Tier 2:</u> Describe, state, analyse, calculate, formula, evaluate.

<u>Tier 3:</u> Short term, long term, retained profit, net current assets, sale of assets, owner's capital, loans, crowd-funding, mortgages, venture capital, debt factoring, hire purchase, leasing, trade credit, grants, donations, peer to peer lending and invoice discounting.

Further Learning



Unit 3: Personal and Business Finance

Topics | Business

Sources of Finance for an Enterprise

Hatton Character Qualities

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Subject: Business Studies A Level Year 13 3.8 Choosing the Strategic Direction

Previously you have learnt



About growth in a smaller market using Product Life Cycle, Boston Matrix and discussing why businesses want to grow. You will have also looked at competitors within a market and how that impacts a business's decision.

In this unit you will learn



Factors that influence which markets to complete in and which products to use. You will be using Ansoff Matrix and discussing whether the company should take existing products, existing markets, new products and new markets. You will then learn about choosing how to compete using Porter's generic strategy focusing on differentiation or cost. You will also consider the influences on the choice of positioning.

Key Vocabulary and Terminology



<u>Tier 2:</u> Market penetration, market development, new product development, diversification, differentiation, low cost, strategy, competitive advantage, Porter's generic strategy.

<u>Tier 3:</u> Market penetration, market development, new product development, diversification, differentiation, low-cost strategy, competitive advantage, Porter's generic strategy, value creation, strategic positioning.

Further Learning



Ansoff Matrix | Business | tutor2u

Porters Generic Strategies

AQA A Level Business Study Notes: 3.8

Hatton Character Qualities

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Subject: A-Level Chemistry - C20 Acids, Bases & pH

Previously you have learnt



In both Combined Science and Triple Chemistry: You have learnt about what makes something and acid or a base / alkali. You have also learnt about the terms strong, weak, concentrated and dilute. You have met the pH scale in KS3 and KS4 and know about its logarithmic nature. In Y12 you revisited the neutralisation reactions of acids and the redox reaction of acids with metals. You did titrations in triple and in Y12 and also learnt how to prepare a standard solution

In this unit you will learn



In this unit you will learn about the Bronsted-Lowry theory of acidity and the acid dissociation constant (Ka) and how to both use and calculate it when dealing with weak acids. You will learn other equations to calculate pH, pKa and the pH of weak bases/alkalis. You will learn that the pH of water varies with temperature and how to calculate it using the dissociation constant of water (Kw). You will learn how to calculate pH after dilution and pH after reaction.

Key Vocabulary and Terminology



Bronsted-Lowry, Conjugate pair, dissociate, dissociation constant, monobasic, dibasic, tribasic, strong, weak, concentrated, dilute, spectator ion, neutralisation, logarithmic, ionisation,

Further Learning



Physics and Maths Tutor: Acids and bases Calculations

Acid-base Equilibria (chemguide.co.uk)

Hatton Character Qualities

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Subject: A-Level Chemistry – 27 Amines, Amino acids, and Polymers

Previously you have learnt



In both Combined Science and Triple Chemistry: In combined science you met polymers (via addition polymers). In triple chemistry you learnt about condensation polymers (polyesters). In Year 12 you briefly met the amine functional group (haloalkane + ammonia → amine + HX)

You have also met the concept of primary, secondary and tertiary when describing alcohols. You have met the terms aliphatic and aromatic.

In this unit you will learn



In this unit will learn how to recognise and classify the amine functional group, about its basicity and how it is formed in both aliphatic and aromatic situations. You will learn about the structure and chemistry of amino acids and their potential for chirality and optical isomerism. You will learn what amides are and how to make, classify and name them. Finally you will learn how to make polyesters and polyamides and how to determine their products of hydrolysis in both acid and alkali conditions.

Key Vocabulary and Terminology



Amine, amino acid, polyester, polyamide, primary, secondary, tertiary, base, aliphatic, aromatic, zwitterion, isoelectric point, chiral carbon, chirality, optical isomers, enantiomers, hydrolysis, di-carboxylic acid, di-amine, di-ol

Further Learning



Physics and Maths Tutor: Amines and Amino Acids

PMT - Amino Acids , Amides and Chirality (FLASHCARDS)

Aliphatic functional groups (chemguide.co.uk)

Hatton Character Qualities

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Subject: A-Level Chemistry – 28 Organic Synthesis

Previously you have learnt



In both Combined Science and Triple Chemistry: You met chromatography, filtration and distillation. In Year 12 you met reduced pressure filtration, TLC, melting point determination, Quikfit, reflux use of separating funnel, drying organic products, and redistillation. You also have met synthetic routes but these were limited to the functional groups studied in Year 12 i.e. alkanes, alkenes, alcohols, and haloalkanes (with aldehyde, ketone and carboxylic acids only being end products).

In this unit you will learn



You will learn more about synthetic routes. In particular how to extend the carbon chain and how to do multi-step synthesis. The synthetic routes will expand to include all the carbonyls, nitrogen containing and aromatic functional groups met in year 13 as well as those met in Year 12.

Key Vocabulary and Terminology



Buchner funnel, recrystallisation, Thiele tube, cyanide, ketone, nitrile, hydrolysis, reduction, aldehyde, alkylation, acylation.

Further Learning



Physics and Maths Tutor: Module 1 - Organic Synthesis notes

Physics and Maths Tutor: Module 1 - Practical Skills in Chemistry

Royal Society of Chemistry: 16-18 practical videos

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Computer Science Year 13 – NEA

Previously you have learnt



Throughout year 12 and 13, you have been learning how to program in C#.

In this unit you will learn



To complete a big programming project in C#, including a write-up that shows how you have analysed the requirements, planned the solution and designed the code.

Key Vocabulary and Terminology



Tier 2: Analyse, requirements, design, solution, testing

Tier 3: (depends on your choice of project)

Further Learning



https://isaaccomputerscience.org/topics/software_project?examBoard=all&stage=a_level

https://www.youtube.com/watch?v=JRTZCCGBZ50

Hatton Character Qualities

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Subject: Computer Science A Level OOP and Functional Programming

Previously you have learnt



object oriented programming from a practical perspective. You were also introduced to the different programming paradigms, which included functional programming.

In this unit you will learn



the theory behind object oriented programming including theories such as containment and aggregation. Then, you will learn the basics of functional programming, including its application and the importance of lists and list processing in functional programming. Finally, you will learn about Big Data and why functional programming is so important to it.

Key Vocabulary and Terminology



Tier 2: describe, convert, trace, evaluate

<u>Tier 3</u>: encapsulation, constructor, instantiation, inheritance, subclass, superclass, polymorphism, overriding, modifier, aggregation, composition, association, property, abstract/virtual/static method, interface, domain, co-domain, partial function, composition, higher-order function, map, filter, fold, reduce, head/tail, Big Data, volume, velocity, variety, immutable, statelessness, distributed code, fact-based model, graph schema, node, edge

Further Learning



A level AQA: SLR03 Programming paradigms

A level AQA: SLR25 Functional programming paradigms

A level AQA: SLR24 Big data

Hatton Character Qualities

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English Language and Literature Year 13 Voices in Speech and Writing: All My Sons

Previously you have learnt



At GCSE, you studied drama texts, such as *An Inspector Calls*, which will prepare you for Arthur Miller's modern text, *All My Sons*. When studying literature texts last year, you would have worked with contextual factors in relation to prose and drama texts, how to analyse and evaluate a writer's craft and how to engage with a writer's intended use of language.

In this unit you will learn



With this text, you will find out how to engage critically with *All My Sons* and utilise context effectively. You will also consider how to analyse dramatic conventions, such as narrative voice, genre and style, and how to dissect extracts from a larger text, as the exam question is extract-based. Finally, you will really get to grips with how to analyse and critique spoken language and dramatic features of a text to an advanced level.

Key Vocabulary and Terminology



<u>Tier 2:</u> obligation, loss, memory, moral, war, consequences, class, accumulation, liability, culpability, guilt, profiteering

Tier 3: Realism, American Dream, Capitalism, Greek tragedy, three act play, in medias res

Further Learning



Context

Timebends: A Life by Arthur Miller

The Age of Anxiety: McCarthyism to Terrorism by

Haynes Johnson

Looking for the Good War: American Amnesia and the Violent Pursuit of Happiness by Elizabeth D. Samet

Other wider reading

The Crucible by Arthur Miller

A View From the Bridge by Arthur Miller

Death of a Salesman by Arthur Miller

A Streetcar Named Desire by Tennessee Williams

Angels in America by Tony Kushner

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
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Subject: A Level English Language and Literature – Component 2: Varieties in Language and Literature: *A Single Man* and *Selected Poems* of Sylvia Plath

Previously you have learnt



At GCSE, you studied prose and drama texts, such as *A Christmas Carol* and *An Inspector Calls* and you looked at how to work with contextual factors in relation to prose and drama texts. You practised analysing and evaluating the writer's craft, paying particular attention to a writer's intended use of language. You also engaged with comparing texts when you studied Power and Conflict poetry.

In this unit you will learn



In this unit, you will learn how to engage critically with prose and poetry texts and utilise context effectively. You will also consider how to analyse prose and poetic conventions, such as narrative voice and genre and style. As this is a comparative unit between two different forms of texts, you will study how to compare two canonical texts and understand connections between them and how to analyse and critique spoken language and narrative voice. You will also explore the contexts of Christopher Isherwood and Sylvia Plath.

Key Vocabulary and Terminology



Tier 2

womanhood, sexuality, conflict, isolation, love

Tier 3

American Dream, novel, poetic form, confessional poetry, Cuban Missile Crisis

Further Learning



Novels

Rabbit, Run by John Updike
American Pastoral by Philip Roth
The Bell Jar by Sylvia Plath
The Berlin Novels by Christopher Isherwood

Poetry

Ariel by Sylvia Plath **Birthday Letters** by Ted Hughes **Poems** by Elizabeth Bishop

Mercies: Selected Poems by Anne Sexton

Hatton Character Qualities

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Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship



Subject: A Level English Literature – Component 2: Prose – *Tess of the d'Urbervilles* and *A Thousand Splendid Suns* comparison

Previously you have learnt



At GCSE, you studied prose texts, such as *A Christmas Carol* and you considered how to work with contextual factors. You started building your confidence with how to analyse and evaluate a writer's craft. You also engaged with comparing poems with Power and Conflict poetry.

In this unit you will learn



During this unit, you will explore how to engage critically with a prose text and utilise context effectively, and how to analyse prosaic conventions, such as narrative voice, genre and style. As this is a comparative unit, you will also learn how to compare two canonical texts and understand connections between them. You will also develop an in-depth understanding of the late Victorian period and the Aesthetic movement by studying the life, work and legacy of Thomas Hardy. In comparison with Hardy, you will explore the oeuvre of Khalid Hosseini and the history of Afghanistan.

Key Vocabulary and Terminology



Tier 2

rural, feminine, Victorian, oppression, gender

Tier 3

Novel, Late Victorian Period, Taliban, Soviet

Further Learning



Thomas Hardy further reading

Poems - Thomas Hardy

Return of the Native – Thomas Hardy

Short Stories – Arthur Morrison

Poetry – William Wordsworth

Khaled Hosseini further reading

The Kite Runner – Khaled Hosseini **And the Mountains Echoed** – Khaled Hosseini

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
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Subject: A Level English Literature – Component 4: NEA

Previously you have learnt



You have studied prose, drama and poetry so far; now it's time to venture out on your own and create your own project. You have studied the writer's craft and developed an appreciation for how texts are created, produced and presented, and you have started to consider critical theory in response to literary texts.

In this unit you will learn



You will now use everything you have learned about your core texts and apply them to your own analysis of texts. You will choose two texts and study how to compare them, considering aspects of craft such as genre, voice and form. You will also learn about how to find and apply critical theory, evaluating it and commenting on it as you go. Along the way, you will also learn how to organise your time and plan out your extensive analytical essay.

Key Vocabulary and Terminology



Tier 2

critical, evaluation, analysis, comparison

Tier 3

genre, form, symbolism, syntax, narrative voice

Further Learning



Doing English: A Guide for Literature Students by Robert Eaglestone

Literary Theory: A Complete Introduction by Sara Upstone

Literary Theory: An Introduction by Terry Eagleton

Reading Like a Writer by Francine Prose

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: A Level English Literature – Component 3: Poetry – Modernist Poetry

Previously you have learnt



At GCSE, you studied a range of poetry, both from an anthology spanning the centuries and unseen poetry. With these poems, you considered how to explore and analyse language, structure and poetic form. You also studied and practiced how to write evaluative, analytical essays and how to compare texts effectively.

In this unit you will learn



The origins, historical context and classification of Modernist poetry. You will explore this multinational cultural movement that took hold in the late 19th century and reached its most radical peak on the eve of World War I. It grew out of the philosophical, scientific, political, and ideological shifts that followed the Industrial Revolution, up to World War I and its aftermath. For artists and writers, the Modernist project was a re-evaluation of the assumptions and aesthetic values of their predecessors.

How to apply a range of critical reading strategies to the poems, especially contextual framings. This unit requires you to evaluate the texts in light of the contexts of creation, reproduction and reception. It requires you to critically appraise how meanings have been and continue to be shaped in poetry across time. You will consider how best to approach these poems from a contextual standpoint. You will be expected to explore nuanced comparisons between varied Modernist texts.

Key Vocabulary and Terminology



Tier 2

subversion, hegemony, faith, desire, expectations, ideology

Tier 3

Prosody, Allusion, (Post) Colonial, Modernity, Aesthetic

Further Learning



Books about poetry:

Poem: Lyric, Sign, Meter by Don Paterson How to Read a Poem by Edward Hirsch A Poet's Glossary by Edward Hirsch The Cambridge Guide to Reading Poetry

Books of poetry by the Modernists:

The Waste Land and Other Poems by T.S. Eliot The Collected Poems by Robert Frost The New Collected Poems by Marianne Moore Complete Poems by e.e. cummings

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Determination	Curiosity	Verbal Confidence	Social Intelligence	<u>Citizenship</u>



Subject: A Level English Literature – Component 3: Poetry – Post-2000 Poetry

Previously you have learnt



At GCSE, you studied a range of poetry, both from an anthology spanning the centuries and unseen poetry. With these poems, you considered how to explore and analyse language, structure and poetic form. You also studied and practiced how to write evaluative, analytical essays and how to compare texts effectively.

In this unit you will learn

<u>The features of 'modern' poetry.</u> This will involve understanding what the 'modern' is and how it is defined against other periods, by evaluating its hallmarks. You will explore ideas and concepts problematised by modern and postmodern literature and theory, including notions of self, authorship, meaning and relationships.



<u>How to compare poems, and why this is a worthwhile endeavour.</u> You will explore ways in which poems can be compared, evaluating which is worthwhile and why. You will explore the ways in which ideas, thoughts and feelings can be explored and transmitted via poetry. You will consider the ways in which texts interact, and the interplay between readers, poets and contexts.

Key Vocabulary and Terminology



Tier 2

Capitalism, Nihilism, subversion, canon, metamorphosis, modernity, abstract

Tier 3

Modernism, Postmodernism, Prosody, Meter, Anapest, Iamb, Dactyl, Spondee, Irony, Fragmentation, Allusion, Transubstantiation, (Post) Colonial

Further Learning



Books about poetry:

Poem: Lyric, Sign, Meter by Don Paterson How to Read a Poem by Edward Hirsch A Poet's Glossary by Edward Hirsch The Cambridge Guide to Reading Poetry

Books of poetry by featured poets:

The Lammas Hireling by Ian Duhig
The Book of Blood by Vicki Feaver
Bloodshot Monochrome by Patience Agbabi
Countries of the Body by Tishani Doshi
Look We Have Coming to Dover! By Daljit Nagra
The Universal Home Doctor by Simon Armitage

Hatton Character Qualities

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Subject: Fashion and Textiles Year 13 NEA coursework

Previously you have learnt



In Year 12 you will have learned the core priciples of the fashion and textiles industry and are learning to apply these to your own design creations. You will have began your journey of the NEA completing section 1 and creating your own context and design brief.

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership

In this unit you will learn



In this term you continue to work thorugh your coursework, applying new found knowledge aling the way to research, investigate and develop your ideas to complete section 2 of your NFA

Key Vocabulary and Terminology



Tier 2: Identify, investigate, analyse

Tier 3: Design movement, demographic, itterative process, design brief, design development

Further Learning



Tilly and the buttons Video tutorials

The Fold Line Pattern symbols

Victoria & Albert Museum Sew your own Mary Quant style Mini-Dress

Hatton Character Qualities



Subject: Fashion and Textiles Year 13 theory - Core technical principles

Previously you have learnt



In Year 12 you will have learned about the core fibres, fabrics and components that help define our subject. Your knowledge of construction will have grown and developed having has the opportunity to test this in your NEA unit.

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership

 Determination
 Curiosity
 Verbal Confidence
 Social Intelligence
 Citizenship

In this unit you will learn



In this term you continue to work thorugh the core technical priniples and build on your theory knowledge. We will introduce new topics such as manufacturing, modern industry and environmental implications of the garment industry. This new content will directly feed into your NEA coursework project, allowing a practial application to aid your learning.

Key Vocabulary and Terminology



Tier 2: Identify, investigate, analyse

Tier 3: Directional fabric, mechanical finish, sub-assembly, lay plan, pattern design systems

Further Learning



Tilly and the buttons Video tutorials

The Fold Line Pattern symbols

Victoria & Albert Museum Sew your own Mary Quant style Mini-Dress

Hatton Character Qualities



Subject: Year 13 Film Studies – Captain Fantastic – Component 1 – Section B – Independent film

Previously you have learnt



In year 9, you have spent time exploring the theories of representation and audience and have applied these to a range of films and extracts. In GCSE, you have learnt how to apply context to a film and how this can affect an audience response to a text. You have spent time studying the conventions of an independent film and how these will vary to mainstream film conventions. Over the course, you have studied the Hollywood film industry and the impact of this on the films being made. The study of auteur theory and application of this to Vertigo (Hitchcock) and Alien (Scott) has been completed, alongside feminist theory and psychoanalytical theories. You have also spent time studying the mainstream film Joker and have applied spectatorship and ideology to this.

In this unit you will learn



This unit will have you analyse the key scenes in Captain Fantastic and explore the themes and motifs within this. You will further study the context of the film, including the industry surrounding independent American film. You will develop your understanding of the film by applying the specialist study areas of spectatorship and ideology, alongside the wider concepts of capitalism and nihilism. Alongside this, you will analyse the representation of gender and American culture.

Key Vocabulary and Terminology



Tier 2: capitalism, alignment, allegiance, spectatorship, independent

Tier 3: nihilism, austerity, Chomsky, ideology, Democrat, Republican

Further Learning



Blog -Sound in Captain Fantastic Ideology in Captain Fantastic Interview with Viggo Mortensen

Hatton Character Qualities

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Subject: Year 13 Film Studies – Component 2 – Section C – Silent Film – Buster Keaton's shorts

Previously you have learnt



Back in Key Stage 4 you studied the key developments in the history of film and how we arrived at modern cinema. This unit moves on from technological developments to focus more on artistic and aesthetic developments in early cinema. Furthermore, this unit builds on the knowledge you have gained in your American Film study (Hitchcock) by looking at the Hollywood studio system and the influence of stars on cinema

In this unit you will learn



You will learn about Buster Keaton and why he was a transformative figure in early cinema – particularly as silent cinema grew in popularity and the reputation of Hollywood was established. You will look at how Keaton's films laid a platform for the films we watch today and how his ideas created many of the rules for film form that are still adhered to more than 100 years later. Furthermore, you will learn about the context to the silent film era and learn about the debate between realist and expressive thinkers and you will also gain an appreciate for how early cinema was used for propagandistic purposes post WW1

Key Vocabulary and Terminology



Tier 2: auteur, postmodernism, intertextuality, aesthetics,

Tier 3: actualite, realist, expressive, propaganda, studio system

Further Learning



<u>History of film unit – what you need to know</u> <u>Introduction to Keaton and Silent Comedy</u> <u>Keaton and https://youtu.be/3aFN3igwTVM?si=lwhtS0hA5lhI8Tu2 modernism</u>

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship



Subject: Further Mathematics Year 13 – Series (Pure)

Previously you have learnt



Sums of arithmetic and geometric series, sigma (Σ) notation, the sums of multiples, squares and cubes of natural numbers (Σr , Σr^2 , Σr^3), differentiating polynomial, exponential and trigonometric functions and partial fractions.

In this unit you will learn



The method of differences for sums of finite series, higher derivatives of functions, the Maclaurin Series and series for compound functions using standard expansions.

Key Vocabulary and Terminology



Tier 2: verify, valid, expansion

Tier 3: method of differences, Maclaurin series, ratio test

Further Learning



<u>Practice</u> - worksheets, cheat sheets, questions by topic, past and practice papers with model solutions.

Further Practice - tutorials and worked solutions

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Further Mathematics Year 13 – Probability Generating Functions (Applied)

Previously you have learnt



Using the Poisson, geometric, binomial and negative distributions to find probabilities, the expected value and variance of these distributions and differentiation of polynomial and exponential functions

In this unit you will learn



To understand and use probability generating functions, probability generating functions for standard distributions, Mean and variance using probability generating functions and the probability generating function for the sum and multiple of independent random variables.

Key Vocabulary and Terminology



<u>Tier 2:</u> discrete random variable, binomial, Poisson, geometric, negative binomial, mean, variance, independent, sum

Tier 3: probability generating function, dummy variable

Further Learning



<u>Practice</u> - worksheets, cheat sheets, questions by topic, past and practice papers with model solutions.

Further Practice - tutorials and worked solutions

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Further Mathematics Year 13 - Elastic Strings and Springs (Applied)

Previously you have learnt



Components of forces, resultant forces, motion under uniform acceleration, friction, motion on inclined planes, kinetic and potential energy and conservation of energy

In this unit you will learn



To understand and use Hooke's Law for statics in elastic strings and springs, to understand and use Hooke's Law for dynamics in elastic strings and springs. You will learn about energy stored in elastic strings and springs, elastic energy, the conservation of mechanical energy and the work-energy principle.

Key Vocabulary and Terminology



Tier 2: thrust, light, friction, acceleration, energy, work, potential energy, gravity

<u>Tier 3:</u> Hooke's Law, elastic, modulus of elasticity, compression, elastic energy, natural length, force-distance graph

Further Learning



<u>Practice</u> - worksheets, cheat sheets, questions by topic, past and practice papers with model solutions.

Further Practice - tutorials and worked solutions

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Geography Year 13 Carbon & Water Cycles (Edexcel)

Previously you have learnt



In your previous geography studies, you explored topics such as **Hazards** and **Coasts**. In the hazards topic, you examined natural events like earthquakes, volcanic eruptions, and floods, learning about their causes and impacts, as well as how they are managed. You studied tectonic movements, atmospheric systems, and how societies mitigate the risks of these hazards. In your work on coasts, you learned about the dynamic processes of coastal erosion, transportation, and deposition, understanding how waves and tides shape coastlines. You also explored strategies to manage coastal areas, including the use of hard and soft engineering techniques to protect against erosion and flooding. These foundations have prepared you for a deeper understanding of natural systems and human interactions with the environment.

In this unit you will learn



In the Carbon and Water Cycles unit, you will explore how water and carbon move through natural systems. The Water Cycle involves processes like precipitation, evaporation, and runoff, which maintain global water balance. You will study how water is stored and transferred between oceans, rivers, glaciers, and aquifers, and how human activities impact water availability. The Carbon Cycle examines how carbon moves between the atmosphere, biosphere, and oceans through processes like photosynthesis and combustion. You will focus on how human actions, such as burning fossil fuels and deforestation, are altering this cycle, contributing to climate change. A key theme is the interconnection between the carbon and water cycles, where disruptions in one affect the other. For example, rising carbon emissions impact global precipitation patterns and contribute to more extreme weather. This unit will give you insights into managing these cycles to address environmental challenges.

Key Vocabulary and Terminology



Tier 2: Cycle, Rain, Water

<u>Tier 3:</u> photosynthesis, respiration, carbon sequestration, combustion, decomposition, fossil fuels, greenhouse gases, deforestation, ocean acidification, global warming, precipitation, evaporation, transpiration, condensation, surface runoff, groundwater flow, infiltration, percolation, water balance, hydrological cycle.

Further Learning



- 1. NASA Climate Change and Carbon Cycles
- 2. Met Office Climate Science: Carbon and Water Cycles
- 3. <u>National Geographic The Water Cycle</u>
- 4. IPCC Reports on Carbon Emissions and Climate Change

Hatton Character Qualities

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Subject: Geography Year 13 Superpowers (AQA)

Previously you have learnt



In previous units, you explored key topics such as **globalisation** and **urbanisation**. Through the study of globalisation, you gained an understanding of how the world has become increasingly interconnected through trade, technology, and the movement of people, ideas, and capital. You examined the economic, social, and environmental impacts of globalisation, as well as the challenges and opportunities it presents for different regions and countries. In the urbanisation topic, you studied the growth of cities and urban areas, the factors driving urbanisation, and the issues that arise from rapid urban growth. You also explored how cities are planned and managed, and the impact of urbanisation on the environment, economies, and societies. These foundational topics have provided you with a broad understanding of global patterns of change and development, which will support your learning in this next unit.

In this unit you will learn



In the **Superpowers** unit, you will examine the global influence and power of nations and international organisations. You will learn what defines a superpower, including economic strength, military capability, political influence, and cultural reach. You will explore the historical development of superpowers, from colonial empires to the present day, and analyse the rise of new powers, such as China, India, and emerging economies. The unit will cover the **geopolitical landscape**, including how superpowers interact and compete for global dominance, and the role of international organisations, such as the United Nations and NATO. You will investigate the influence of superpowers on global trade, international relations, and environmental issues, as well as the challenges they face in maintaining their power, such as economic instability, internal divisions, and environmental sustainability. Through case studies, you will analyse the impact of superpower status on different regions and countries, and the shifting balance of power in the 21st century. You will also explore the future of superpowers, considering factors such as climate change, resource management, and shifting global alliances.

Key Vocabulary and Terminology



<u>Tier 3:</u> superpower, emerging powers, geopolitics, hegemony, geostrategy, bipolar world, multipolar world, unipolar world, soft power, hard power, economic sanctions, colonialism, neocolonialism, geopolitical influence, sphere of influence, global governance, and international organisations like the United Nations and NATO. military alliances, global trade networks, cultural imperialism, BRICS (Brazil, Russia, India, China, South Africa), the Global South, environmental diplomacy, resource security, and climate change diplomacy.

Further Learning



<u>The Geopolitics of Superpowers</u> – A platform that discusses global power shifts and the influence of superpowers on the geopolitical landscape.

<u>BBC Bitesize - Power and Influence</u> - Provides explanations of global superpower dynamics and related topics.

<u>The Foreign Policy - Geopolitical Analysis</u> – Offers detailed articles on global power shifts, international relations, and superpower diplomacy.

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Year 13 Unit 3: Rassismus

Previously you have learnt



In Year 11 you learnt about social issues in Germany and the UK and, you learnt how to discuss issues such as poverty and living in cities versus in the countryside. In Y12 we began to read about Russendisko which includes many themes about immigration. Last term we have looked at migration and how Germany is currently integrating other cultures.

In this unit you will learn



The term we will look at racism and the issues Germany is facing integrating new arrivals to their society. We will evaluate the success of immigrations for immigrants and projects that are successful. We will examine issues affecting a country's migration policy.

Key Vocabulary and Terminology



Tier 2: weak masculine nouns, adjectival phrases, adjective endings

<u>Tier 3:</u> Asyl, Flüchtling, Schlepperbande, Staatsangehörigkeit, Zuwanderer, fördern, auswandern

Further Learning



A level German 2020 (padlet.com)

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
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Subject: A-Level History Year 13 Making of Modern Britain – Section 4 The Impact of Thatcherism 1979-1987

Previously you have learnt



How Labour lost the support of the electorate largely because of the mistakes made before the Winter of Discontent by PM James (Jim) Callaghan. You covered the referendum on Britain's entry into the EEC and the continuing issues in Northern Ireland following internment and dirty protests in prison. You compared the second premiership of Harold Wilson with Jim Callaghan and assessed Labour's economic promises that were not followed through as promised with the unions.

In this unit you will learn



About the three premierships of the first female prime minister Margaret Thatcher. You will understand the term Thatcherism and the New Right Ideology that moves away from previous Conservative leader Edward Heath's One Nation Conservatism. You will assess her drastic political, social, economic and foreign policies but how Labour was no competition. You will understand more about the north-south divide and will judge her influence on the end of the Cold War before finally assessing her political assassination from within.

Key Vocabulary and Terminology



Tier 2: Privatisation, deregulation, north-south divide, handbag diplomacy

Tier 3: Thatcherism, New Right, Militant tendency, monetarism, Junta

Further Learning



<u>Thatcher's premiership Cambridge debates</u>

Books by Thatcher

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
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Subject: A-Level History Year 13 Tsarist and Communist Russia: The emergence of the Communist dictatorship, 1917 – 1941

Previously you have learnt:



About the state of Russia in 1855 when Alexander II first came to power, the emancipation of the serfs, and how the attempts at reform were trying to preserve the autocracy in Russia. You will also have learnt about Alexander III's reactions to his father's death and the growing of opposition in Russia as well as the rise of socialism and Marxism. Additionally, you will have studied Nicholas II's time as Tsar, the damage the First World War did to his reputation, the eventual collapse of the autocracy in October 1917 and the rise of the Bolsheviks.

In this unit you will learn:



How Lenin consolidated his power after the October Revolution and the Russian Civil War, how Lenin established his ideology across Russia, and how it became the USSR. You will also study the attempts to instil socialism in Russia through social and economic reforms. Additionally, you will look at the rise of Stalin, his attempts at economic and social policies, as well as how he dealt with opposition through control and terror with the use of purges, and the position the USSR was in by June 1941.

Key Vocabulary and Terminology



Tier 2: Assess Explain

<u>Tier 3:</u> Bolshevik, Russian Civil War, State Capitalism, War Communism, New Economic Policy, Collectivisation, Five-Year Plans, Cult of personality, Cultural revolution, Faction, Yezhovshchina

Further Learning



Lenin Archives

AQA 1H Course Content

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: IT Year 13 BTEC Unit 6 Learning Aim A, Website Development

Previously you have learnt



How website pages can be requested and then received by client browsers from web servers. You have also learnt that website pages are created using HTML and delivered to clients using the HTTP/HTTPS protocols.

In this unit you will learn



How websites are used by businesses and the principles used by website developers to create websites that are creative and perform well.

Key Vocabulary and Terminology



Tier 2: Explain, evaluate, impact, discuss, analyse.

<u>Tier 3:</u> Target audience, requirements, usability, whitespace, accessibility, typography, intuitiveness, optimisation.

Further Learning



https://www.w3.org/WAI/

https://www.bluearcher.com/blog-item-key-to-golden-ratio

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship



Subject: IT Year 13 BTEC Unit 1 Learning Aim B - Transmitting Data

Previously you have learnt



You have been using the Internet and the school network for your school work for the past 6 years. You understand how to connect to a wireless network using its ID and security parameters. You have sometimes experienced some performance issues when connecting to a network.

In this unit you will learn



You will learn the different types of networks available as well as what the factors are to make the choice of network for a specific purpose. You will also be able to explain the reasons behind connectivity issues. Finally, you will learn how to draw system diagrams to model how an IT system works.

Key Vocabulary and Terminology



<u>Tier 2:</u> Explain, discuss, evaluate, describe, analyse, draw, annotations, factor, drawback, implication, feature, process, diagram.

<u>Tier 3:</u> Connectivity, network, transmission, system diagram, bandwidth, broadband, cable, wireless, security, reliability, LAN, WAN, PAN, protocol, latency, compression, acknowledgement.

Further Learning



https://www.youtube.com/watch?v=3xEsLWdW9wk

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship



Subject: IT Year 13 BTEC Unit 1 Learning Aim C – Operating Online

Previously you have learnt



You have learnt about digital devices and how data can be transmitted using different types of network and cables. You have also learnt the factors that affect the performance of a network and the reasons why it can sometimes provide slower speed access.

In this unit you will learn



You will be learning about the different ways of working online, along with the advantages and disadvantages of each method. You will also be looking at how these methods can be used in business and the impact they have on organisations in the modern world. You will also be looking at security implications of working online on individuals and businesses.

Key Vocabulary and Terminology



<u>Tier 2:</u> Discuss, analyse, risk, benefit, factor, drawback, feature, explain, impact.

<u>Tier 3:</u> Cloud computing , SaaS , IaaS , PaaS , blog , forum , podcast , implementation.

Further Learning



11 Pros and Cons of Cloud Computing Everyone Should Know (linkedin.com)

The Good, the Bad, and the Ugly of Online Communities (shondaland.com)

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship



Subject: IT Year 13 BTEC Unit 1 Learning Aim D – Protecting Data and Information

Previously you have learnt



You have learnt about communication between computers on a network whether that is a LAN or a WAN (including the Internet).

In this unit you will learn



You will be learning about some threats that data being sent over network lines or being stored might be susceptible to and the impact of those threats to organisations holding the data as well as individuals who own this data. You will also learn different methods to protect data against these threats and the laws and legislation that relate to data protection.

Key Vocabulary and Terminology



<u>Tier 2:</u> Describe, assess, risk ,feature , explain, impact, consequence.

<u>Tier 3:</u> Encryption, virus, digital certificate, integrity, malware, worm, trojan, ransomware, denial of service attack (DOS), phishing, spear-phishing, firewall, cookie.

Further Learning



https://www.youtube.com/watch?v=m75PStqWcX4

https://www.youtube.com/watch?v=kUZsV4si2x0

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship



Subject: IT Year 13 BTEC Unit 1 Learning Aim E – Impact of IT Systems

Previously you have learnt



About IT systems used in organisations and how they are used. You have also learnt how organisations use these systems to collect personal data and the measures they need to apply to protect that data.

In this unit you will learn



The impact of using these IT systems on both organisations, individuals and also the world and environment around them. You will also learn how the data collected through these systems can be used.

Key Vocabulary and Terminology



<u>Tier 2:</u> Describe, assess, analyse, collect, primary, secondary.

<u>Tier 3:</u> Collaborative, reliability, quantitative, qualitative, accessibility, productivity, implementation, availability.

Further Learning



https://www.usability.gov/what-and-why/user-interface-design.html

https://www.businessnewsdaily.com/15987-crm-marketing-benefits.html

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship



Subject: IT Year 13 BTEC - Unit 1 Information Technologies Learning Aim F - Issues

Previously you have learnt



About IT systems used in organisations and how they are used. You have also learnt how technology is advancing and being used across the globe for a range of purposes.

In this unit you will learn



The impact of technology on the environment as well as the moral and ethical factors around using technology in different areas. You will also look at online behaviour and how to respect other people's rights and privacy.

Key Vocabulary and Terminology



<u>Tier 2:</u> Describe, assess, discuss, globalisation, ethics, morals, carbon footprint.

<u>Tier 3:</u> Acceptable use, netiquette, digital divide, censorship, digital footprint.

Further Learning



https://www.theguardian.com/technology/2019/nov/24/tim-berners-lee-unveils-global-planto-save-the-internet

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship

Subject: Mathematics Year 13 Pure - Parametric Equations

Previously you have learnt



Re-arranging a formula, trigonometric identities, functions including range and domain. The equation of a circle, co-ordinate geometry, differentiation, tangents and normals.

In this unit you will learn



To convert between parametric and Cartesian form, understand and using parametric equations, including sketching curves, use parametric equations in co-ordinate geometry and model real-life situations using parametric equations.

Key Vocabulary and Terminology



Tier 2: parameter, domain, range, maximum, minimum, identity, sketch, intersection

Tier 3: parametric, Cartesian

Further Learning



<u>Practice</u> - worksheets, cheat sheets, questions by topic, past and practice papers with model solutions.

Further Practice - tutorials and worked solutions

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship

Subject: Mathematics Year 13 Pure - Differentiation

Previously you have learnt



Differentiation of polynomial expressions, tangents and normal, turning points, parametric equations and trigonometry using radians.

In this unit you will learn



Differentiating trigonometric, exponential and logarithmic functions, the Chain Rule and differentiating products and quotients. You will learn differentiating parametric equations and implicit functions, using the second derivative and rates of change and forming differential equations.

Key Vocabulary and Terminology



<u>Tier 2:</u> radian, exponential, logarithm, parametric, differentiate, stationary value, tangent, normal

<u>Tier 3:</u> Chain rule, function of a function, product rule, quotient rule, implicit, concave, convex, point of inflection, rate of change, differential equation

Further Learning



<u>Practice</u> - worksheets, cheat sheets, questions by topic, past and practice papers with model solutions.

Further Practice - tutorials and worked solutions

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Mathematics Year 13 Applied - Projectiles

Previously you have learnt



Motion with uniform acceleration, motion under gravity, trigonometry in a right-angled triangle, and Pythagoras' Theorem.

In this unit you will learn



Horizontal projection, resolving velocities into components, projection at an angle and deriving projectile-based formulae.

Key Vocabulary and Terminology



<u>Tier 2:</u> horizontal, vertical, acceleration, velocity, displacement, gravity, resolve, component, particle

Tier 3: projectile, angle of projection, horizontal range, time of flight, greatest height, trajectory

Further Learning



<u>Practice</u> - worksheets, cheat sheets, questions by topic, past and practice papers with model solutions.

Further Practice - tutorials and worked solutions

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship

Subject: Mathematics Year 13 Applied – Conditional Probability

Previously you have learnt



Probability of event and combined events using tree diagrams, Venn diagrams and possibility spaces, set notation and operations, mutually exclusive and independent events, discrete probability distributions and the binomial distribution.

In this unit you will learn



Set notation applied to probability, conditional probability and using two-way tables and Venn diagrams. You will learn to use probability formulae and Conditional probability with tree diagrams.

Key Vocabulary and Terminology



<u>Tier 2:</u> intersection, union, complement, Venn diagram, independent, mutually exclusive, two-way table, tree diagram

Tier 3: Conditional probability, given that, multiplication formula

Further Learning



<u>Practice</u> - worksheets, cheat sheets, questions by topic, past and practice papers with model solutions.

Further Practice - tutorials and worked solutions

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
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Subject: Religious Education Year 13 Ethics

Previously you have learnt



You have a good understanding of the 4 main normative ethical theories learnt in year 12: Natural Moral Law, Situation Ethics, Utilitarianism and Kantian Ethics. You are able to apply these to complex ethical issues such as Business Ethics and Euthanasia. You have developed your evaluative writing skills and are focused on analysis and evaluation. You can apply scholarly views to evaluate the effectiveness of ethical theories, and understand the views of many thinkers which are key to the course.

In this unit you will learn



You will study the complex topics of Meta Ethics, Conscience and Sexual Ethics. When considering Meta Ethical theories you will be thinking about the relationship between ethics and religious language, and answering questions such as 'What is it to be good' and 'Can ethical language have meaning?'. You will be considering the changing landscape of sexual ethics, and its relationship with key ethical thinkers and you will also be considering the view of Freud and Aquinas on the conscience.

Key Vocabulary and Terminology



Tier 2: Evaluation, ethics, dilemma, analytical

<u>Tier 3:</u> Normative, Absolutist, Situationist, Deontological, Teleological, Antinomianism, Legalism, Utilitarianism, Sola Scriptura, Conscientia, Ratio, Analytic, Symbolic, Emotivism, Rationalism, Intuitionism, Naturalism

Further Learning



The Panpsycast Philosophy Podcast

Peped Educational & Teaching Resources

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Physics - Year 13 - Physics - 22 Electric Fields

Previously you have learnt



You will find that there are many links with the previous topic, 21 Gravitational Fields. The equations are similar but substituting charge for mass. Field lines and equipotentials are the same.

In this unit you will learn



How to calculate the forces between two point charges as well as electric field strength, work done and gravitational potential. Understand that for a charged sphere, the charge can be considered to be at the centre. Comparisons between uniform fields and spherical fields.

Key Vocabulary and Terminology



Tier 2: Calculate, investigate, explain

Tier 3: Electrostatic, equipotential, infinity, charge, uniform fields, spherical fields.

Further Learning



<u>Seneca – Physics AQA A-Level 7.3.1-7.3.6</u> <u>AQA Physics A-level Section 7: Fields and Their Consequences Revision - PMT</u>

Hatton Character Qualities

(physicsandmathstutor.com)

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
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Subject: Physics - Year 13 - Physics - 23 Capacitors

Previously you have learnt



You have just completed topic 23 on Electric fields which is integral to understanding how a capacitor works. Topics 12 Electricity and 13 DC Circuits which you covered in year 12 also lay the foundation for key concepts such as current, potential difference and circuit building.

In this unit you will learn



Definitions of capacitance. The structure of a parallel plate capacitor including polar dielectric materials. Charging and discharging capacitor circuits and their respective current, potential difference and charge versus time graphs. Time constant calculations.

Key Vocabulary and Terminology



Tier 2: Calculate, investigate, explain, describe

Tier 3: Capacitance, permittivity, dielectric, polar, charge, discharge, time constant

Further Learning



Seneca – Physics AQA A-Level 7.4.1-7.4.5

<u>AQA Physics A-level Section 7: Fields and Their Consequences Revision - PMT (physicsandmathstutor.com)</u>

Hatton Character Qualities

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Subject: Politics Year 13 Paper 2: Political Ideologies – Nationalism

Previously you have learnt



About the core principles of liberalism such as, liberty, and the differences between how modern, classical and neoliberals look at areas such as the state, society, human nature and the economy. Additionally, you will have learnt about the core ideas and principles of conservatism and how they relate to human nature, the state, society and the economy, and the differing views and tensions within conservatism, such as: traditional conservative, one-nation conservative, and the New Right.

In this unit you will learn



About the core ideas and principles of nationalism and how they relate to human nature, the state, society and the economy, including areas such as: nations, self-determination, nation-state, culturalism, racialism, internationalism. You will also study the different types of nationalism, such as liberal nationalism, conservative nationalism, anti/post-colonialism, and expansionist nationalism. Additionally, you will study key thinkers such as Jean-Jacques Rousseau, Johann Gottfried von Herder, Giuseppe Mazzini, Charles Maurras, and Marcus Garvey.

Key Vocabulary and Terminology



Tier 2: Evaluate, Analyse, Examine, To what extent, compare

<u>Tier 3:</u> Civic nationalism, Liberal internationalism, Socialist internationalism, Ethnicity, Rational, Progressive, Regressive, Inclusive nationalism, Exclusive nationalism, Chauvinistic nationalism, Imperialism/colonialism, Volksgeist, Integral nationalism, Black nationalism

Further Learning



Tutor2U Socialism

Nationalism

Nationalist Thinkers & Ideas

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Politics Year 13 Paper 2: UK Government – Parliament

Previously you have learnt:



How the UK Political system works; ways in which people can and do participate in democracy, as well as the arguments around if there is a participation crisis. You have also looked at the history and current policies of major political parties, electoral systems and the impact on the types of governments they produce. You have also studied the different factors that go into people voting, including the role of the media, as well as the nature of the US Constitution, its strengths and weaknesses, and constitutional reforms since 1997.

In this unit you will learn:



About the structure and role of the House of Commons and House of Lords, including the selection of members to both chambers, and the functions of both houses. You will also learn about the comparative powers of both Houses and the exclusive powers of the House of Commons. You will also learn about the legislative process, including the different stages a bill goes through, and the way the two chambers interact during the process. Additionally, you will learn about how Parliament interacts with the Executive.

Key Vocabulary and Terminology



Tier 2: Evaluate, Analyse, Examine, To what extent

<u>Tier 3:</u> Parliament, House of Commons, House of Lords, Confidence and supply, Salisbury Convention, Parliamentary privilege, Legislative bills, Public bill committees, Backbenchers, Select Committees, Opposition

Further Learning



UK Parliament

Parliamentary Bills

Tutor2U Parliament

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
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Subject: Politics Year 13 Paper 3: US Politics and Government – US Democracy and Participation

Previously you have learnt:



About the nature of the US Constitution, the vagueness of the document and the strengths and weaknesses of it being a codified constitution. You have also learnt about the process of amending the US Constitution, the characteristics of US federalism, and the impact that the Constitution and federalism has on the US government. You have also learnt about the structure and nature of the US Congress, the three major functions of the US Congress, and how effective the Congress' powers are as outlined in the US Constitution.

In this unit you will learn:



About the electoral systems of the USA, the significance and presidential elections, and the campaign finance that goes into elections. You will also learn about the key ideas and principles of the Democratic and Republican parties, the distribution of power and significance of the parties. You will also about the conflicts and changing power within the parties, as well as the significance of interest groups in the USA, the tactics they deploy and their impact on democracy in the USA.

Key Vocabulary and Terminology



Tier 2: Evaluate, Analyse, Examine, To what extent

<u>Tier 3:</u> Campaign finance, Factions, Invisible primary, Political Action, Committees (PACs), Party system, Policy group, Professional group, Single interest group, Soft/hard money, Super PACs Religious right

Further Learning



Democratic Party

Republican National Committee

Tutor2U US Politics

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship



Subject: Product Design Year 13 Design process and critical analysis

Previously you have learnt



You have explored a range of design methods and process (3.2.1) with a focus on Iterative design. You have explored design theory (3.2.2) through design influences, design styles and movements, and designers and their work. You have gained an understanding of how your design can have an impact (3.2.3) on individuals, society and the environment. You have

In this unit you will learn



You will learn more about design processes linking this to your NEA.

You will be able to describe an implement a range of design strategies (3.2.4). You will further develop your understanding of the use of prototyping within Product Design and how iterative design is used in commercial and industrial contexts. You will further develop critical and evaluation skills (3.2.5) including the use of third part feedback

Key Vocabulary and Terminology



<u>Tier 2:</u> Investigation, analysis, evaluating, commercial, manufacture, modification, feedback

<u>Tier 3</u>: **Prototype**, **iterative design**, design specification, **Critical Assessment**

Further Learning



<u>Iterative Development (International Design Foundation</u>

The Power of Prototyping (video)

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	<mark>Team Work</mark>	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship



Subject: Sociology Year 13 Crime and Deviance

Previously you have learnt:



What the core sociological theories, the changing nature of society, social stratification and current social issues. You will have gained a broad understanding of CAGE factors in their influence across sociology. You will also have learnt about the difference conceptions of culture, the role and functions of the education system, including its relationship to the economy and to class structure, and the sociological research methods within the context of education, including quantitative and qualitative methods of research; research design.

In this unit you will learn:



About crime, deviance, social order and social control. The social distribution of crime and deviance by ethnicity, gender and social class, including recent patterns and trends in crime, as well as globalisation and crime in contemporary society; the media and crime; green crime; human rights and state crimes. You will also learn about crime control, surveillance, prevention and punishment, victims, and the role of the criminal justice system and other agencies.

Key Vocabulary and Terminology



<u>Tier 2:</u> Evaluate, Analyse, Explain, Define, Outline.

<u>Tier 3:</u> Crime, Deviance, Culture, Recorded crime, Reported crime, Dark figure, Victim survey, Social construct, Nature, Nurture, Biological, Psychological, Deviant career, Status frustration, Interactionism

Further Learning



Tutor2U Crime & Deviance

Crime & Deviance

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Year 13 Unidad 2: El Racismo

Previously you have learnt



In GCSE, you learnt how to conjugate in the conditional and future tenses and have a strong grasp of this grammar. From Year 12, you have learnt how to give your point of view and respectfully and disagree. In our recent unit 1 on immigration, we developed these discursive skills to discuss challenging societal issues empathetically. You have learnt in GCSE how to use modals and the gerund, which we will build on in the grammar this unit.

In this unit you will learn



About describing and discussing racist and xenophobic attitudes in the Spanish-speaking world; how to discuss measures to combat racism and their effectiveness; look at current legislation against racism in Spain.

Key Vocabulary and Terminology



<u>Tier 2:</u> Hacer un resumen, analizar, evaluar, describir, narrar, conjugar, condicional, verbo de obligación

<u>Tier 3:</u> ¿Crees que exite racismo en el deporte? ¿Conoces algún acto racista en el fútbol español?

Further Learning



This website gives information about racism and discrimination in Paraguay

This website is the <u>BBC Mundo website page</u> dedicated to news stories regarding racist issues.

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
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Subject: Year 13 Unidad 11: Monarquías y Dictaduras

Previously you have learnt



In unit 1 of Year 12, we learnt contextual knowledge about the society in Spain and how this has changed over time. In our study of both pieces of literature we have further learnt about Spanish culture and society. In GCSE we learnt in depth how to conjugate in the imperfect tense, a structure that was revised in unit 2 of Year 12.

In this unit you will learn



How to discuss and understand the impact of the civil war and life under the dictatorship of Franco; discuss changes to monarchy the republic; discuss dictatorships in Latin America

Key Vocabulary and Terminology

<u>Tier 2:</u> como resultado de, en los años de la posguerra, posteriormente, por aquel entonces, es dudoso que, existe la posibilidad de que, lamento que, después de que, con tal que, quienquiera



Tier 3:

1. ¿Qué sabes sobre la Guerra Civil Española? ¿Cómo empezó? ¿Cuales eran los bandos? ¿Cuánto duró? ¿Qué bando ganó?

Further Learning



If you access <u>this web page</u> you will be able to read an article that gives really fascinating background information about the civil war, including giving stories and information about the politics of that time period.

Hatton Character Qualities

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Subject: Btec Sport Level 3 – Unit 1 Anatomy and Physiology (CV Sytsem)

Previously you have learnt



- The basic structures of the heart
- The main function of the cardiovascular system during exercise
- The main components of the blood

In this unit you will learn



- The structures of the heart and the functions of each of these
- The structures of the different types of blood vessels and how these allow them to function within the CV system
- The way in which the different components of blood allow a variety of functions of the CV system to occur
- The immediate response of the CV system to exercise and how the system adapts to exercise over time

Key Vocabulary and Terminology



Tier 2 Structure, function, characteristics, responses, adaptations

Tier 3 Vasodilation, vasoconstriction, semi permeable membrane, diffusion, neural control of the cardiac cycle, purkinje fibres, atrioventricular valve.

Further Learning

BTEC Nationals | Sport (2016) | Pearson qualifications

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship



Subject: Btec Sport Level 3 – Unit 1 Energy Systems

Previously you have learnt



- The use of calories to produce energy
- The difference between aerobic and anaerobic energy production
- Basic nature of sporting events that use either aerobic or anaerobic energy production

In this unit you will learn



- The structure of ATP and how it used to produce energy
- The difference between aerobic and anaerobic respiration
- The process of energy production in the Phosphocreatine System
- The process of energy production in the Lactate System
- The process of energy production in the Aerobic Energy System
- The duration, intensity and uses in sport of each energy system
- The recovery times for each energy system

Key Vocabulary and Terminology



Tier 2 Respiration, Adenosine Triphosphate, Intensity,

Tier 3 Coupled reaction, Electron transport chain, Krebs Cycle, Exothermic, Endothermic, Energy continuum

Further Learning

BTEC Nationals | Sport (2016) | Pearson qualifications

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship



Subject: Btec Sport Level 3 – Unit 1 Anatomy and Physiology (The Skeletal System)

Previously you have learnt



Basic names of bones and muscles. Basic knowledge of the structure of the body systems: Cardiovascular and Respiratory systems.

In this unit you will learn



Knowledge of the structure, functions, characteristics and other additional factors of the skeletal system. Understand the short and long term effects of sports and exercise on the skeletal system and additional factors that can affect the skeletal system. Analyse exercise and sports movements and evaluate how body systems are used and interrelate to carry out exercise.

Key Vocabulary and Terminology



Tier 2 Structure, function, characteristics, responses, adaptations

Tier 3 osteoblasts, osteoclasts, ossification, epiphyseal plate, kyphosis, scoliosis, sesamoid, axial/appendicular skeleton, cartilaginous/ fibrous/ synovial joints. Flexion, extension, dorsiflexion, plantarflexion, lateral flexion, horizontal flexion/ horizontal extension, hyperextension, abduction, adduction, horizontal abduction and adduction, rotation, circumduction).

Further Learning

BTEC Nationals | Sport (2016) | Pearson qualifications

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship



Subject: PE Btec Level 3 Sport Unit 2 Fitness Training and Programming

Previously you have learnt



You have covered the components of fitness from the Btec Level two course with the assessment method being similar to the level two course. You have also covered the components of a balanced diet.

In this unit you will learn



The Lifestyle factors and Health Monitoring Tests along with lifestyle modification techniques. The course then moves on to cover questions on diet, training methods and applying the principles of training to your client

Key Vocabulary and Terminology



Tier 2 develop, client, explain

Tier 3 interpret, justify, lifestyle factors, training methods

Further Learning

BTEC Nationals | Sport (2016) | Pearson qualifications

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
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Subject: BTEC National Extended Certificate in Sport Unit 3 - Learning Aim A

Previously you have learnt



Unit 1: Anatomy and Physiology: Demonstrating knowledge of body systems, structures, functions, characteristics, definitions and other additional factors affecting the body systems. Unit 2: Fitness Training and programming for Health, Sport and Well-being: Demonstrating knowledge and understanding of the effects of lifestyle choices on an individual's health and well-being

In this unit you will learn



A1: Scope and provision of the sports industry. Sport and recreation industry data, Geographical factors, Socio-economic factors, Season factors. A2: Careers and jobs in the sports industry: Key pathways, Sectors, Local/ National employers, sources of information on careers in sport A3: Professional training routes, legislation, skills in the sports industry: Career pathways. A4: Sources of continuing professional development (CPD), memberships of professional bodies, career progressions training, gaining knowledge.

Key Vocabulary and Terminology



Tier 2: Key pathways, Sectors, Career pathways, safeguarding – DBS,

Tier 3: Local and National employers, professional bodies

Further Learning



Birmingham 2022 Commonwealth games

Jobs in Sport

Careers in Sport

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship



Subject: Btec Sport Extended Certificate Unit 5 Fitness Testing

Previously you have learnt



- Reliability, Practicality and Validity of fitness testing in Level 2 Btec courses
- Matching fitness tests to components of fitness

In this unit you will learn



About the principles of fitness testing along with exploring different fitness tests for different components of fitness. You will then go on to learn how to evaluate and feedback your fitness test results.

Key Vocabulary and Terminology



Tier 2 safe administration; normative data, procedure; interpretation

Tier 3 practicality, validity, reliability, suitability

Further Learning

BTEC Nationals | Sport (2016) | Pearson qualifications

Hatton Character Qualities

Resilience	Open Mindedness	Creativity	Responsibility	Empathy
Self-Regulation	Courage	Commitment	Team Work	Leadership
Determination	Curiosity	Verbal Confidence	Social Intelligence	Citizenship