Key Stage 4 Art and design
Learning Journey

ASSESSMENTS

Yr 11 Feb- Exam Unit
The exam unit counts for 40% of the marks. You will be given a theme and a least 10 weeks to prepare a portfolio and a final piece. The final piece will be completed over two days in exam conditions at the end of the preparatory period. The theme is set by the board. We will guide you through the exam paper and show you how to develop ideas and responses to the theme. The portfolio must cover the four assessment objectives.

Why? This tests your ability to develop your ideas in a given period of time. You will be expected to meet deadlines and work with greater independence. The final piece will be produced in exam conditions

YEAR 11

Yr10 in to YR 11

Unit2 Reflections **ASSESSMENTS**

You will explore a single theme from YR 10 into YR11.This will allow you to work in depth with increasing independence. You will become more confident about the way that you want to work and the techniques and materials that you wish to explore. We will look at a wide range of techniques and media as you develop your ideas. You will start to identify the features of your own way of working as you become more familiar with artists' work and the language used to analyse your work and the work of other artists. Annotating your work will help you to understand your ideas and express your ideas both visually and verbally. You will produce a portfolio and at least two final pieces in response to the theme. The skills you learn on this project will be tested in the exam unit.

Why? Art and Design is about developing your understanding of visual language in order to develop ideas with increasing subtlety and confidence. This project/theme will allow you to do this. The skills you learn are central to careers in Art and Design where you will be expected to develop ideas and show resilience and creativity

Yr10 Art and Design is a coursework based subject. **ASSESSMENTS**
You will be expected to produce two units of coursework. This will account for 60% of your final mark.
Unit1 People, Places, Spaces.
The first project builds on the visual language skills and the personal responses that you have made in Key Stage 3. You will be expected to develop a project/portfolio in response to the theme. You will be supported through the initial stages as you increase your recording skills and learn how to research, explore and develop ideas. You will be shown how to create the portfolio and the final piece.

Why? This project will enable you to work in depth on your work and construct a coherent portfolio which covers the requirements of the exam board. The project allows you to gradually learn new techniques and to gain a firm understanding of how the visual elements can be understood and developed in your work. You will develop a personal response and be shown how to sustain and develop ideas in response to the theme.

Year 10

Year 10 GCSE Business Learning Journey

SUMMER TERM

ASSESSMENTS

1.5 Understanding the external influences on business

- Who business stakeholders are and their different objectives?
- How technology impacts on business: E-commerce, Social media
- Digital communication, Payment systems
- The impact of legislation on business: Consumer & Employer law
- The impact of the economic climate on businesses: Unemployment, Changing income, Inflation, Changes in exchange and interest rates, Government taxation

Unit 1 completed – Preparation for mocks

- Revision
- Practice papers
- Connectives
- Structuring the perfect paragraph
- Extended responses
- Mark schemes
- Examiners reports

SPRING TERM

1.4 Making the business effective

- What is limited and unlimited liability?
- What is a franchise?
- Types of business ownership
- Factors influencing business location
- What is the marketing mix is and the importance of each element

1.3 Putting a Business idea into practice

- Business revenues, fixed and variable costs & profits
- The importance of cash & cash flow
- Internal and external sources of finance
- Short term: overdraft, trade credit
- Long term: Personal savings, Venture capital, Share capital, Loans, Retained profit, Crowd funding

ASSESSMENTS

AUTUMN TERM

ASSESSMENTS

1.1 Enterprise & Entrepreneurship

- Risk: business failure, financial loss, lack of security
- Reward: business success, profit, independence
- The role of business enterprise and the purpose of business activity – produce goods or services – meet customer needs – add value
- Why and how new businesses come about
- Identifying and understanding customer needs
- [price, quality, choice, convenience]

1.2 Spotting a business opportunity

- The purpose, methods and use of market research
- Primary and secondary
- Qualitative and quantitative
- Use of social media.
- Good and bad points of market research
- How businesses use market segmentation to target customers
- Understanding the competitive environment

Y10

Year 11 GCSE Business Learning Journey

ASSESSMENTS

Revision and Preparation Theme 1 and Theme 2

External revision workshop

- Revision – back to Theme 1 - RP
- Practice papers
- Connectives
- Structuring the perfect paragraph
- Extended responses
- Mark schemes
- Examiners reports

Revision and preparation

To include timed papers

SUMMER TERM

SPRING TERM

2.5 Making human resource decisions

- Organisational structures
- Communication
- Ways of working
- Job roles and responsibilities
- How businesses recruit people
- Training, developing & motivating employees

2.4 Making financial decisions

- Procurement: working with suppliers
- The impact of logistics & supply
- Quality control & assurance
- Customer service and engagement
- The concept and business calculation of profit and margins
- Using and interpreting data to make informed business decisions
- The use and limitations of financial information

ASSESSMENTS

ASSESSMENTS

2.2 Making marketing decisions

- Using the marketing mix to make business decisions: Product
- Place
- Pricing
- Promotion

2.3 Making operational decisions

- Production processes (Job, Batch, Flow)
- The impact of different types of production process
- Impacts of technology on production
- Managing stock

2.1 Methods of growth

- Internal (organic) and External growth
- Public Limited Companies
- Sources of finance for growing and established businesses
- Globalisation: imports, exports, multinationals, locations
- Why business aims change
- Barriers to international trade
- Ethics, the environment and how they impact on business
- The role of pressure groups on business decision

AUTUMN TERM

Y11

Why do I study Child Development?

You will have the opportunity to hone a range of skills in every unit, but there will be a keen focus on a skill and/or quality in each unit. These are mapped using the symbols.

What transferrable skills will I gain?

	Communication *Listening and responding to others*
	Team Working *Working with others to solve problems*
	Interpersonal Skills *Understanding social 'norms' e.g. turn-taking*
	Analytical Skills *Applying logic to unpick and evaluate*
	Problem Solving *Finding and implementing solutions*

What qualities will I develop?

	Self-Reflective, Resilient and Adaptable *You will think about and change your own performance*
	Empathy and Compassion *Understand the feelings of others*
	Cultural Awareness *Values, beliefs and perceptions of our own and other cultures*
	Self Motivated *Understand the importance of working hard for your own gain*
	Curious and Inquisitive *Ask your own questions; find your own answers*

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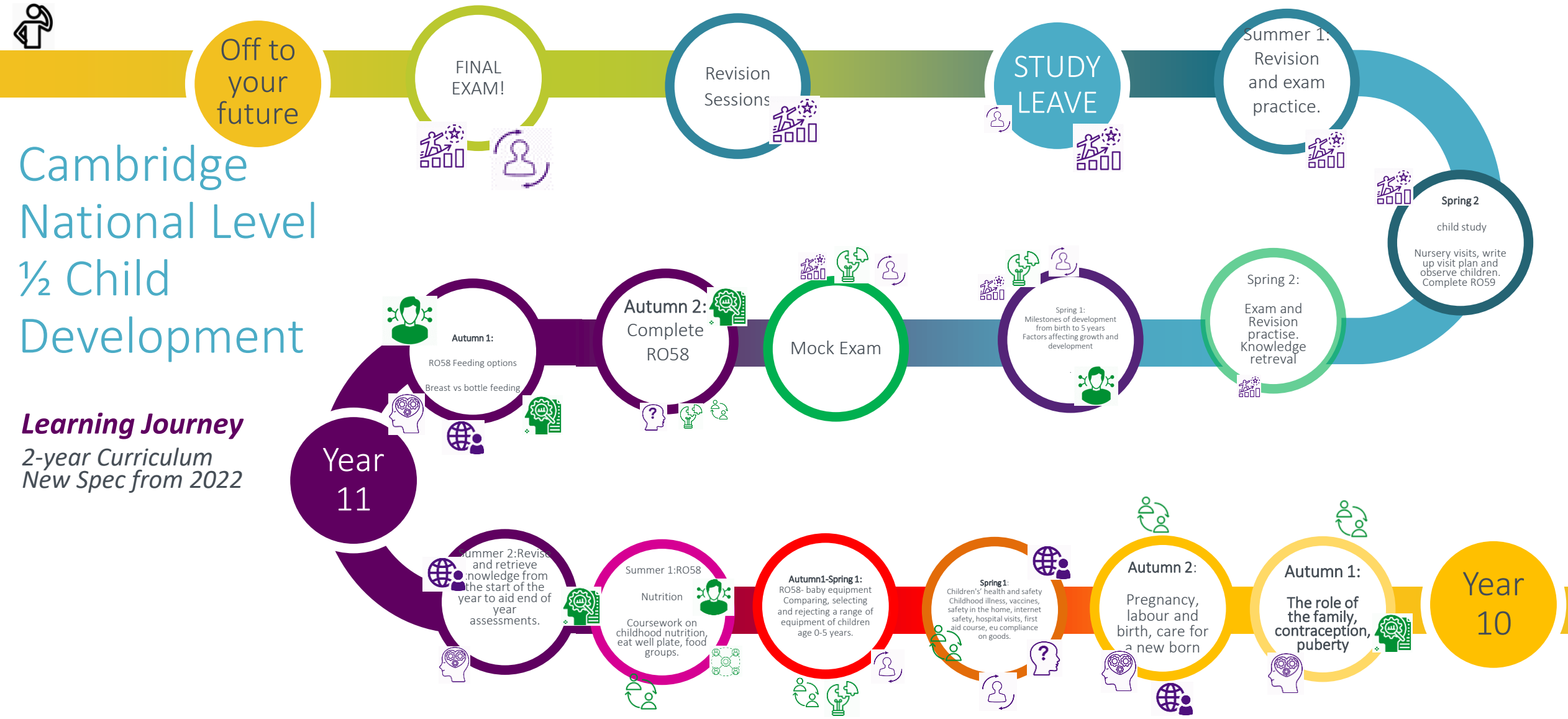
Cambridge National Level ½ Child Development

Learning Journey

2-year Curriculum
New Spec from 2022



Year 10 Computer Science Coding Learning Journey

Python Projects

Using all your python knowledge to have a go at planning and coding these python mini programs.

Written Assessment

Problem Solving

When given a problem sometimes it can feed daunting to tackle. Here you will learn how to deal with large problems

- Understand the terms Abstraction & Decomposition
- Be able to construct a flow diagram to break down problems

Functions & Procedures

Often when writing code it can be repetitive which a for loop can't repeat.

- Be able to recognise when to use a function/procedure
- Understand what is meant by the terms parameter & return
- Be able to use a function to reduce repeated code

Written Assessment

SUMMER TERM

Using Files

Python only remembers variables while the program is running, files help us store and retrieve information when we want to save it for later.

- Be able to understand how to save and open files.

Python & Data Types

Learn about the basic data types that are used in programming.

- Learn the different data types used in python
- Practice the basic programming constructs using the programming language python
  - If Statements
  - For/While Loops

Data Structures

Data structures store a collection of data types under one variable name

- Understand where to use arrays
- Be able to create and access information from arrays
- Be able to create and access information from 2d arrays

SQL

SQL is a language for accessing databases. We will cover the very basics of creating an SQL statement.

- Be able to understand how to construct an SQL statement

SPRING TERM

Boolean Logic

Logic gates help us to understand how simple actions like binary addition can be performed in a computer.

- Recap our knowledge of Logic Gates from Year 9
- Learn the new symbols that apply to logic gate
- To understand how logic gates are used in a computer

Written Assessment

Data Representation

All data is stored as 1s and 0s, how can all data that we use in every day life be stored as a combination of 1s and 0s?

- Be able to transfer between binary, denary and hexadecimal
- Be able to perform binary addition
- Be able to explain how certain data types are stored in binary
- Understand how data can be edited to allow it to be stored in less bits

AUTUMN TERM

Y10

Year 10 Computer Science Theory Learning Journey

System Security

This unit introduces you to the concept of system security. You will learn about the following:

- The threats posed to networks including: malware, phishing, brute force attacks, denial of service attacks, data interception and theft, the concept of SQL injection and poor network policy
- Identifying and preventing vulnerabilities including: penetration testing, network forensics, network policies, anti-malware software, firewalls, user access levels, passwords and encryption

Python

Any extra time in the course will be used to help develop your python skills.

Written Assessment

SUMMER TERM

System software

This unit introduces you to the concept of system software. You will learn about the purpose and functionality of systems software including:

- User interface, memory management/multitasking, peripheral management and drivers, user management and file management
- Utility system software including: encryption software, defragmentation, data compression and the role and methods of backup.

Networks and Topologies

This unit introduces you to the concept of networks. You will learn about the following:

- Different types of networks including LAN (Local Area Network) and WAN (Wide Area Network)
- Factors that affect the performance of networks
- The different roles of computers in a client-server and a peer-to-peer network
- The hardware needed to connect stand-alone computers into a Local Area Network
- DNS (Domain Name Server), hosting and the cloud

Written Assessment

SPRING TERM

Memory & Storage

This unit introduces you to the concept of memory in computer systems, the different types and their uses. You will learn about the following:

- The different types of memory
- The attributes of these memory types
- What each type of memory is used for

System Architecture

This unit introduces you to the basic design of computer systems. You will learn about the following:

- What is the purpose of the CPU
- What is Von Neumann architecture
- What are the common CPU components and their function
- The fetch and execute instructions stored in memory
- How common characteristics of CPUs affect their performance
- What are Embedded systems

Written Assessment

AUTUMN TERM

Y10

Year 11 Computer Science Coding Learning Journey

GCSE Comp 1

GCSE Comp 2

Mock Papers

Revision

SUMMER TERM

Revision

Input and output

Inputs are used a lot in programming to take information from the user. You have to make sure that a user can't intentionally or accidentally break your code by typing in something they shouldn't.

- Understand the difference input validation and input sanitisation
- Be able to add input validation and sanitisation into our coding

Written Assessment

SPRING TERM

Ethical, legal, cultural and environmental concerns

This unit introduces you to the concept of ethical, legal, cultural and environmental concerns related to Computer Science. You will learn how to investigate and discuss Computer Science technologies while considering the following:

- How key stakeholders are affected by technologies
- Environmental impact of Computer Science
- Cultural implications of Computer Science
- Open source vs proprietary software
- Legislation relevant to Computer Science including: The Data Protection Act 1998, Computer Misuse Act 1990, Copyright Designs and Patents Act 1988, Creative Commons Licensing and the Freedom of Information Act 2000.

Written Assessment

AUTUMN TERM

Y11

Year 11 Computer Science Theory Learning Journey

GCSE Comp 1

GCSE Comp 2

Mock Papers

Revision

SUMMER TERM

Revision

SPRING TERM

Programming Languages

Throughout GCSE we have used python to write our code. Can a computer understand python? Are there other languages that we can use?

- Be able to explain the difference between a low level language and a high level language
- Be able to explain why translators are needed in computer science
- Be able to recognise

Algorithms

You will gain a greater understanding of the algorithms covered in year 9 as well as coding these algorithms

- You will recap knowledge from year 9 about Searching and Sorting Algorithms
- Apply this knowledge by coding these algorithms
- Learn about merge sort

Written Assessment

Written Assessment

AUTUMN TERM

Y11

Ks4 Learning Journey: GCSE Food Preparation and Nutrition

Level 3 Food Science and Nutrition

YEAR 12

EXAM

REVISE

Revision

NEA 2

- A - Researching
- B – Demonstrate technical skills
- C – Planning for the final menu
- D – Making the final dish
- E – Analysis and evaluation

Mock Exam Paper

NEA 1

- A – Research
- B - Investigation
- C – Analysis and evaluate

YEAR 11

- Nutritional needs and health
- Cooking of food and heat transfer
  - Convection
  - Conduction
- Principles of food safety
  - Preparing, cooking and serving food
  - Food labelling
  - Food production
  - Technological developments
  - Enzymic browning
  - Oxidation
  - Denaturation
- Food spoilage and contamination
- Influences of Food choice
  - International
  - Cultural
  - Moral
  - British
  - Food Miles
- Food processing and production

YEAR 10

- Environmental and sustainability
  - Sustainability
  - Food and the environment
- Fruits and Vegetables
  - Plasticity
  - Dextrinization
  - Coagulation
  - Gelatinisation
  - Gluten Formation
- Raising Agents
- Micronutrients
- Macronutrients

In most cases, learners will have completed a Year 9 Foundation course in Food Technology which develops a range of relevant skills and techniques

design * technology

AQA

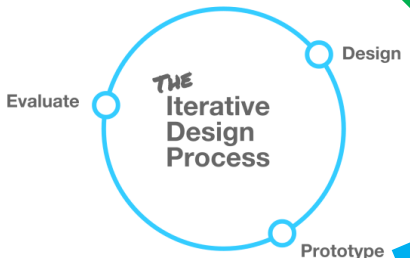
Ks4 Learning Journey: BTEC Product Design

BTEC Level 3 Extended Certificate in Art & Design

YEAR 12

Progression onto appropriate Level 3 BTEC courses

We use the Iterative design process based on a cyclic process of prototyping, testing, analysing, and refining your product. Based on the results of testing the most recent iteration (version) of your design, changes and refinements are made.



Externally Moderated

Art Techniques

Practical Assessment

Creativity

Component 2: Responding to a Brief

Pearson set assignment released in January of Year 11
Worth 40% of the course.

YEAR 11

Developing skills, techniques and processes

Practical Assessment

Design Task: To design and make an MP3 docking station.

Creativity

Developing skills, techniques and processes

CAD/drafting Assessment

Externally Moderated

Pearson set assignment released in November of Year 10
Worth 60% of the course.

Art Techniques

Practical Assessment

Creativity

Component 1: Creative Practice in Art & Design

Developing skills, techniques and processes

YEAR 10

In most cases, learners will have completed a Year 9 Foundation course in Product Design which develops a range of relevant skills and techniques

Self/Peer Assessment

You will keep a 'Reflection Journal' in which all your assessment for learning will be documented throughout the two year course.

Art Techniques

Design Task: Perfume packaging

design * technology

BTEC Approved Centre

Pearson BTEC Level 1/ Level 2 Tech Award in Art and Design Practice

DRAMA KS4 LEARNING JOURNEY

Autumn Term:
Beginning the course!

Learn dramatic techniques and styles.

See live performance and complete live theatre response.

The red box:
Evaluation of own and others' techniques and work.
Responses to Live Theatre in note form, going on to full essay.

Complete a practice practical devised performance, working in groups. In preparation for devised in the summer.

Spring Term:

Assignments:
- Live theatre essay practice.
- Blood Brothers question practice.
- Whole class feedback and individual feedback with green pen responses, used consistently throughout the term.

Live theatre continuation. Live theatre essay with be written, based on the live theatre production you go and see.

Continue to develop practical work. Create regular drama logs that reflect on this process of devised practice and performance.

Summer Term:

Rehearse the Devised ideas in groups and gain feedback from others and from teacher in order to develop.

Keep a full log of the process of development and outcome desired. Using correct terminology throughout

The red box:
Perform devised pieces with the influence of a practitioner of choice of the group.
Reflective notebook portfolios should now be detailed and full of ideas and inspirational materials which will be annotated.
Mock written exam with preparation beforehand.

End of Yr 10

Autumn Term: Start of Year 11

Read through set text Blood Brothers and perform in groups allocated to certain scenes.
Revisit Live Theatre and write up essay response

Introduction to The Crucible and choose extracts 1 and 2 for component 3 exam. Begin rehearsal.

The red box:
Portfolios read over and handed in for first time. Second hand in is due after winter holidays.
Essays on Blood Brothers as exam type question response.
Live theatre essays.
Rehearsals after school for The Crucible.

Spring Term:

Rehearse and perform.
Final practical examination.
Finish portfolios.

The red box:
Portfolios handed in and complete.
Examination with external examiner:
Performance of the Crucible.

Summer Term:

Preparation and revision for final exam.
Blood Brothers and Live Theatre.

End of Yr 11

Year 10 English Learning Journey

AUTUMN TERM

A Christmas Carol
The novella is an allegory in that it features events and characters with a clear, fixed symbolic meaning. In the novella, Scrooge represents all the values that are opposed to the idea of Christmas – greed, selfishness, and a lack of good will towards one fells man. The focus is therefore on ideas regarding social justice, redemption, relationships, conflict and identity. You will be assessed on your ability to understand Dickensian England, language analysis and explore the themes and purpose of the novella.

Homework: stop / check and extended writing (planning and essay writing.

ASSESSMENTS

Power and Conflict poems:
This year, you will develop knowledge and skills in reading, writing and critical thinking. Students will begin by completing the Power and Conflict Poetry that was started in Year 9. You will develop a continuing focus on the big ideas within the poems and aim to relate some / many of them in the world in which you live.

SPRING TERM

GCSE Language Paper 2
The specification will enable you to develop the skills you need to read, understand and analyse a wide range of different texts covering the 19th, 20th and 21st century time periods as well as to write clearly, coherently and accurately using a range of vocabulary and sentence structures. The emphasis on comparing texts links well with that of Power and Conflict poetry. The power to analyse, summarise and evaluate are skills for life as is the power to communicate persuasively, skilfully and evocatively

Unseen poetry
Unseen poetry will enable you to truly grasp the cross-over between skills and techniques that they use in different aspects of the English Language and Literature GCSEs, which will therefore really enhance the ability to succeed. A focus on the power of words, the poet's intentionality in terms of organisation and form really allows English to come alive. Key sills will be embedded: understanding, analysis, evaluation.

ASSESSMENTS

Macbeth
As Macbeth is one of Shakespeare's most enduring and emotionally intense plays which tackles themes of ambition, power and tyranny. Students will examine the eponymous character's journey into despair, which remains a timeless warning of unchecked power. You will focus in particular on the character, plot, themes and audience.

Homework for all units: stop / check and extended writing.

Assessment: termly assessments and End of Year Exams.

SUMMER TERM

Y10

Year 11 English Learning Journey

SUMMER TERM

ASSESSMENTS

Public Exams

Revision:

Language Paper 1 / 2

Literature Paper 1 / 2

Development of core analytical skills to evaluate texts for meaning using subject terminology, linguistic terms and judicious selection of evidence. Compose interesting and engaging creative narratives.

SPRING TERM

An Inspector Calls. Students will examine a morality play that denounces the callousness of capitalism and argues that a just society can only be achieved through a sense of social responsibility. Priestley's play revolves around a central mystery – the death of a young woman. Whereas a traditional detective story involves the narrowing down of suspects from several to one, An Inspector Calls inverts this process as, one by one, nearly all the characters in the play are found to be guilty. The mysterious inspector is one that respects and exercises social responsibility.

Mocks / Revision: An Inspector Calls / Language Paper 2

Students will develop and sustain interpretations of non-fiction texts and they will understand how writers use linguistic, structural and presentational devices to achieve their desired effects. Students will be able to present relevant information in a form that suits its purposes, ensuring that their text is legible and that spelling, punctuation and grammar are accurate, so that meaning is clear. They should be able to use a suitable structure and style of writing. Compositional skills should be used to develop ideas and communicate meaning to the reader. Students will develop a wide range of vocabulary and an effective style, organising and structuring sentences grammatically and whole texts coherently.

ASSESSMENTS

AUTUMN TERM

ASSESSMENTS

Autumn: End of Term Assessment.
Revision and Mocks

Language Paper 1, Sections A and B.

Literature Paper 1, A Christmas Carol and Macbeth

LANGUAGE PAPER 1– Explorations in Creative Reading and Writing

The specification will enable you to develop the skills they need to read, understand and analyse a wide range of different texts covering the 20th and 21st century time periods as well as to write clearly, coherently and accurately using a range of vocabulary and sentence structures. The power to analyse, summarise and evaluate are skills for life as is the power to communicate skilfully and evocatively.

Y11

Year 10 French Learning Journey

Fortnightly Vocab tests

Formative extended writing

ASSESSMENTS

Translation

Holidays
Sightseeing/tourism
Holiday activities
Ideal holidays
Booking hotels
Ordering in a restaurant
Travel and transport
Buying souvenirs
Holiday disasters

Local area, holiday and travel: My town
Where you live
Weather
Transport
My town/village/ region
Directions
Making plans
Community projects

SUMMER TERM

Fortnightly Vocab tests

Formative extended writing

SPRING TERM

Identity and culture: Daily and cultural life
Sport
Durations of activities
Internet activities
Books and reading
TV programs
Actors and films

Identity and cultural life
Food and meals
Shopping for clothes
Daily life/routine
Food for special occasions
Special occasions/events/celebrations
Festivals and traditions

ASSESSMENTS

Writing

Translation EN→FR

Speaking picture task

Listening

Formative extended writing

Fortnightly Vocab tests

AUTUMN TERM

ASSESSMENTS

Reading

Writing

Translation FR→EN

Speaking role-play

Role models
Sport
Music
Technology
Films
TV

Identity and culture: Who am I?
Family and Friends – descriptions / relationships
Qualities of a good friend
Arranging going out
A night out
When I was younger

Fortnightly Vocab tests

Y10

Year 11 French Learning Journey

Fortnightly Vocab tests

Formative extended writing

ASSESSMENTS

Translation

International and global dimension
What is important in life
Global problems
Protecting the environment
Ethical shopping
Volunteering projects
Big sporting events
Big musical events

SUMMER TERM

Fortnightly Vocab tests

Formative extended writing

SPRING TERM

Grammar
Genders
Conditional tense
Perfect infinitive
Subjunctive
En + present participle
Direct and indirect object pronouns
Prepositions after verbs

Future aspirations, study and work
Jobs and work preferences
Career choices
Plans, hopes and wishes
The importance of languages
Applying for a job

ASSESSMENTS

Writing

Translation

Speaking

Reading

Listening

Formative extended writing

Fortnightly Vocab tests

AUTUMN TERM

ASSESSMENTS

Reading

Writing

Translation

Speaking

Listening

Grammar
Present tense
Perfect tense
Future tense
Definite and indefinite articles
Comparatives / Superlatives
Impersonal verbs
Imperative

School
School subjects
School timetable
Describing school
Comparing UK and France school systems
School rules
How to succeed at school
School exchanges

Fortnightly Vocab tests

Y11

GCSE Geography Learning Journey

Y10

	Content	Assessment
AUTUMN TERM **Component 1 –** **Topic:** Hazardous Earth  **Connections:** < Y7 Volcanoes & Earthquakes, Changing Climate, Y8 Extreme Weather, Y9 Ice > KS5 Tectonics, Physical Systems & Sustainability	**Enquiry Questions:** 1. Why do the causes and impacts of tectonic activity and management of **tectonic hazards** vary with location? (started in year 9) 2. How are **extreme weather** events increasingly hazardous for people? 3. How does the world's **climate** system function, why does it change and how can this be hazardous for people? **Place Knowledge:** Haiti, New Zealand, USA, Philippines	• Practice tests - Formative SAQs and 8 mark essays • MS forms quizzes & retrieval quizzes • Revision notes • End of term assessment graded 9-1
	WTP: To understand a big-picture overview of the key **tectonic and climatological processes** that shape the world and create hazardous situations for people. **Physical processes** and the **impacts** that are created are studied, as well as how different people **respond** to the resulting hazard depending on their level of **economic development**.	
SPRING TERM **Topic:** Development Dynamics  **Connections:** < Y7 Development, Y8 Ghana, Population, Y9 World Trade > KS5 Globalisation, Superpowers	**Enquiry Questions:** 1. What is the scale of global inequality and how can it be reduced? 2. How is ONE of the world's emerging countries managing to develop? **Place Knowledge:** India	• Practice tests - Formative SAQs and 8 mark essays • MS forms quizzes & retrieval quizzes • Revision notes • End of term assessment graded 9-1
	WTP: To understand why some countries are doing well and why others are making limited progress, thus creating **global inequality**. In order to close the **development gap**, a number of strategies can be used. However, the impact of development should also be considered, such as the **costs** that come with **emerging nations'** progress (environmental implications, or the increasing gap to those left behind). An in depth study of **India** shows how a specific country can develop, and the consequences of this development for people, the environment, and the country's changing relationship with the wider world.	
Component 1 – **Topic:** Challenges of an Urbanising World  **Connections:** < Y7 Sport, Y8 Population, Y9 World Trade, Y10 Development > Y11 UK's Evolving Landscape KS5 Globalisation, Regeneration, Superpowers, Migration	**Enquiry Questions:** 1. What are the causes and challenges of rapid urban change? 2. Why does quality of life vary so much within ONE megacity in an emerging country? **Place Knowledge:** Rio de Janeiro, Brazil	• Practice tests - Formative SAQs and 8 mark essays • MS forms quizzes & retrieval quizzes • Revision notes • End of term assessment graded 9-1
	WTP: To understand **urbanisation** trends since 1980 in the developed, emerging and developing world, and also by global region. **Economic activity** (industrialisation, economic sectors, formal/informal economy) and **migration** (national and international) have caused varying urbanisation trends across the world. This explains how and why cities and their **land use** change over time. A particular focus is on understanding the changes taking place in a **rapidly growing/developing megacity** in the emerging world. This creates both **challenges and opportunities** for people, varying quality of life, and requires various strategies for achieving **sustainability**.	
SUMMER TERM **Component 3 –** **Topic:** People and Environment Issues  **Connections:** < Y7 Changing Climate, Y8 Ecosystems, Y9 Resources, Development, Climate > KS5 Physical Systems & Sustainability	**Enquiry Questions:** 1. People and the **Biosphere** - Why is the biosphere so important to human wellbeing and how do humans use and modify it to obtain resources? 2. **Forests** Under Threat - What are the threats to forest biomes and how can they be reduced? 3. Consuming **Energy Resources** - How can the growing demand for energy by met without serious environmental consequences? **Place Knowledge:** Amazon Rainforest, Taiga Forest, Arctic, Alaska, London, Norway, Canada	• Practice tests - Formative SAQs and 8/12 mark essays • MS forms quizzes • Revision notes • End of term assessment graded 9-1
	WTP: to get an overview of the **biosphere**, and to understand why it is so important to **human wellbeing** and to understand how humans use and modify it to obtain **resources**. The characteristics of the **ecosystems** (especially tropical rainforests and the taiga **forests**), are increasingly being threatened by humans and we must conserve and **sustainably manage** these different ecosystems. An understanding of **renewable and non-renewable energy** shows the impacts on the biosphere and forests in particular, in addition to examining its supply and demand globally and differences in access which can lead to energy security issues.	

GCSE Geography Learning Journey

Y11

AUTUMN TERM

	Content	Assessment
Component 3 – People and Environment Issues	Finishing yr 10 component 3 topic – Biospheres, Forests and Consuming Resources. Component 3 DME Exam Technique **Place Knowledge:** Resource rich and Tropical rainforest and Taiga locations e.g. Norway, Amazon (Peru), Indonesia, Canada.	• 8 marker • 12 + 4 marker • End of topic assessment grades 9-1
Component 2 **Topic:** The UK's Evolving Human Landscape  **Connections:** < Y7 Sport, Y8 Coasts, Y9 World Trade, Y10 Development and Urban > KS5 Globalisation, Regeneration, Migration	**Enquiry Questions:** 1. Why are places and people changing in the UK? 2. How is ONE major UK city changing? **Place Knowledge:** London	• Exam practice - Formative SAQs and 8 mark essays • MS forms quizzes • Revision notes • End of term assessment graded 9-1
	WTP: To understand the changing and varied **human landscape** of the UK, including social economic and political processes that influence it. The theory of the core-periphery model helps to understand the varying **quality of life** across the country, and explains why government and EU **policies** have attempted to reduce it. Dynamic urban places are shaped by **migration** patterns and the changing **demographics** of the UK in terms of its ethnic and cultural **diversity**. To examine the decline in primary and secondary sectors and how this has changed the **industrial structure** of rural and urban areas in the UK towards tertiary and quaternary employment. To understand the impacts of **globalisation**, free trade policies and TNCs on the UK economy.	
Component 2 – **Topic:** The UK's Evolving Physical Landscape  **SPRING TERM** **Connections:** < Y7 Rivers, Y8 Coasts, Y9 Ice, Y10 Climate > KS5 Dynamic Landscapes Water	**Enquiry Questions:** 1. Why does the **physical landscape** of the UK vary from place to place? 2. Why is there a variety of distinctive **coastal landscapes** in the UK and what are the processes that shape them? 3. What are the challenges for coastal landscapes and communities and why is there conflict about how to manage them? 4. Why is there a variety of **river landscapes** in the UK and what are the processes that shape them? 5. What are the challenges for river landscapes, people and property and how can they be managed? **Place Knowledge:** UK	• Exam practice - Formative SAQs and 8 mark essays • MS forms quizzes • Revision notes • End of term assessment graded 9-1
THROUGHOUT	**WTP:** To understand how the varied physical landscapes in the UK result from **geology**, geomorphic processes and human activity over time. This topic requires you to explore the processes that have formed the distinctive landscapes of the UK and how humans increasingly have to **manage flood risks**, both at the coast and near rivers. The interaction of **human and physical processes** present challenges along coastlines and rivers and there are a variety of **management** options.	
Component 2 – **Topic:** Geographical Investigations (Fieldwork)  **Connections:** < KS3 Fieldwork, Y10 Evolving Physical Landscapes, Human Landscapes > KS5 Independent Investigation	**Enquiry Questions:** 1. Investigating river processes and pressures - Investigating how and why drainage basin and channel characteristics influence flood risk for people and property along a river in the UK. 2. Investigating dynamic urban areas - Investigate how and why quality of life varies within urban areas. **Place Knowledge:** Stratford & Epping Forest	• Exam practice - Formative SAQs and 8 mark essays • MS forms quizzes • Revision notes • End of term assessment graded 9-1
	WTP: The experience of fieldwork will help you to develop new geographical insight into two contrasting environments (river / urban areas). Collecting geographical data first-hand is an important skill geographers use to learn more about the world around them. Going on to present and analyse this data allows you to draw evidenced conclusions when supported by reliable secondary data sources.	

History Learning Journey Year 10-11

GCSE exam

SUMMER TERM

ASSESSMENTS

Reading

Writing

Paper 2: Superpower relations 1943-1991

Assessment: Paper 2 on consequences and significance, narrative accounts
Key topics:
Origins and development of the Cold War
The Berlin Crisis of 1948 and the Hungarian Uprising of 1956
Three Cold War Crisis – increased tensions during the Berlin Crisis of 1961, the Cuban Crisis and the Prague Spring of 1968
The end of the Cold War – Détente, Reagan and Gorbachev and the fall of the Soviet Union and the Eastern Block

WTP: In depth study to understand international relations after the Second Cold War

SPRING TERM

Paper 3: Russia and the Soviet Union

Assessment: Paper 1 Source skills and historical interpretations
Key topics:
The revolutions of 1917- discontent under the tsar and the February revolution and abdication; the Provisional Government – its success and failures, the October Revolution and Bolshevik coup d'etat
The Bolsheviks in power – the Russian Civil War and Bolshevik decrees & the Red Terror
Stalin's rise to power and his dictatorship – the leadership struggle against Trotsky, industrialisation & collectivisation; the Purges and life in the Soviet Union

WTP: In depth study of understanding Russian 20th century history of revolutions, socialism & communism

ASSESSMENTS

Reading

Writing

AUTUMN TERM

Paper 1: Crime and Punishment through time c.1000 – present with Whitechapel case study

Assessment: Paper 1 Section A source skills & Section B evaluating change and continuity
Key topics:
Key features of crime, punishment and policing in the Middle Ages, followed by the Early Modern Period changes as a result of the Reformation and the English Civil War
Key changes brought by the Industrial Period
Key changes of the Modern Period as a result of changing technology and science as well as modern attitudes

WTP: Thematic study of change and continuity through history.

ASSESSMENTS

Reading

Writing

Paper 2: Early Elizabethan England 1558-1588

Assessment: Paper 2 on key features, causation & significance
Key topics:
Elizabeth II and challenges to her early rule – government, religion and legitimacy
Elizabeth II and challenges to her rule home and abroad – the Religious Settlement and Catholic Plots, the invasion of the Armada
Elizabethan society

WTP: In depth study of evaluating Elizabeth's success

Y10

Year 9 Spanish Learning Journey

SUMMER TERM

ASSESSMENTS

Listening

Reading

Writing

INTRODUCTION TO GCSE

Daily routine – This unit introduces "reflexive verbs" and recaps the formation of the present tense, which you should have mastered by now.
Environmental problems – You will no doubt have strong opinions to voice over this topic! This revisits modal verbs (covered in the 1st term in the context of school regulations).
Hispanoamérica – You will gain cultural capital by learning about Spanish-speaking countries in Latin America. This unit will be delivered mainly in English and will provide you with the opportunity to research on a topic of your choice related to a Latin American country.

FUTURE ASPIRATIONS (continued)

Talking about jobs – Discussing professions in the masculine and feminine form.
Past jobs - You will revisit all previously-learnt vocabulary and will be expected to form accurate sentences in the present tense (describing your current job), the preterite tense (describing a past job) and the near future tense (talking about a future career).

SPRING TERM

HEALTH

Body parts – You will learn "me duele/ me duelen", which follow a similar pattern to "me gusta/ me gustan", encountered in the Autumn term.
At the pharmacy – Describe common ailments and symptoms using the verbs "tener" and "estar". Use the phrase "tienes que", which works as a modal verb.
Healthy diet- Frequency expressions are revised when discussing your eating habits.
How to lead a healthy life – You will revise the near future tense in order to detail how you are going to lead a healthier lifestyle.
Resolutions for the future – You will be expected to form accurate sentences in the present tense (describing you current state of health) and the near future tense (making resolutions).

FUTURE ASPIRATIONS

Pocket money – Helping with house chores, irregular verbs "hacer" and "poner" and how to talk about how you spend your pocket money.
Future career aspirations – You will describe your skills, aptitudes and future career aspirations using "me gustaría" + infinitive.
Using languages at work – Why learning MFL? You will be given the opportunity to see languages being used in a variety of jobs. You'll be encouraged to think about your future plans with the use of the future tense.

ASSESSMENTS

Listening

Speaking

Writing

Translation EN → SP

AUTUMN TERM

ASSESSMENTS

Reading

Writing

Translation SP → EN

Grammar

SCHOOL

A typical day in school- Describe your school and the activities you do at break. You will be introduced to some common question words. Asking (and understanding) questions is one of the skills required for the GCSE speaking exam.
Subjects - Talk about your choice of subject for next year using the near future tense.
School rules – Modal verb "deber" is introduced here. You will become familiar with the notion that infinitives always follow modal verbs.
What happened in school yesterday- while remaining on the topic of school, in this unit you will describe past events using the preterite tense.

MEDIA

My Computer - This unit starts with vocabulary related to computer use. It is essential for you to become familiar with the latest technological terminology.
TV and films– Both leisure activities will lead to revising the concept of adjectival agreement and also the use of "me gusta" + singular and "me gustan" + plural. You will also learn how to form comparative sentences, which reinforces the notion of adjectival agreement.
Music – This leisure activity is introduced now, as it's related to the use of computers/ phones. The next grammar point covered is the near future tense, which you will have learnt earlier on at KS3 but needs to be mastered.
A concert – Following on from the topic of music, this unit describes a past concert. It revises the preterite of regular verbs and irregular "ser" and "ir.

Y9

YEAR 10 - IVRIT GCSE Learning Journey

SUMMER TERM

ASSESSMENTS

Listening

Reading

Writing

Theme 2 –Social issues and Equality
Learning about cyber bullying, violence, racism and homelessness and how to overcome these social issues through equal rights.

Theme 2 – Global Issues
Develop understanding of environmental issues and different items that are able to be recycled (eg. Bottles, plastic and glass). Refer back to advantages and disadvantages of local area (e.g. too many cars which causes pollution). Give solutions such as introducing more public transport/making it more frequent

SPRING TERM

Theme 2 - Healthy/unhealthy living Categorising food groups & drinks under healthy and unhealthy which will lead onto using past tense . Health and Services Visiting the doctor. Youth & Alcohol/smoking. Health services such as hospitals, pharmacy, firefighters volunteering/ charity work.

Theme 2 – LOCAL, NATIONAL,INTERNATIONAL & GLOBAL AREAS OF INTEREST
Home, town, neighborhood & region - you will develop knowledge of describing where you live/ neighbourhood/describing different places in town. This will lead onto describing your own home and what it looks like inside . Use of tenses to compare before vs now or now vs future. Renting/buying houses. Using expressions of quantity.

ASSESSMENTS

Reading

Speaking

Translation EN → Iv

AUTUMN TERM

ASSESSMENTS

Listening

Writing

Translation Iv → EN

Grammar

Theme 1 Free time / leisure activities - Discussion of hobbies such a sport, dance, music and art. Healthy/unhealthy living Categorising food groups & drinks under healthy and unhealthy which will lead onto using past tense .

Theme 1 -IDENTITY AND CULTURE

1) Me, my Family and Friends – you will develop knowledge of describing yourselves and your relationships with family and friends including how to describe both physical appearance/ personality.

2) Technology in everyday life-

Y10

YEAR 11 - IVRIT

Learning Journey

SUMMER TERM

ASSESSMENTS

Listening

Reading

Writing

Education post-16 -Jobs/career choices/ambitions - Be able to articulate how what they have chosen to study will impact on future career/university/ college options. Be able to express how their own skill sets/ personalities are suited to different professions. Talking about future studies, job preferences and applying for a job.

Language Development:

- More complex two verb structures (Intend / want to / have the right to) לבחור/ להפסיק ללמוד...
  - Express reasons using modalsfor a job/ cv /nterview
  - More complex two verb structures (Intend / want to / have the right to)
  - Transfer כדאי/חובה/צריך... + infinitives to school rules context

SPRING TERM

Life at school/college. Be able to discuss and write about different school options, different stages in their education and the different subjects they have chosen to study. This leads on to the study of why schools have rules and how these are applied; for example, school uniform and Comparing schools in UK and Israel.

Language Development:

- Consolidation of tenses / Sequencing words, expressions and phrases - Before / after / while…/ Weather expressions- Comparatives and superlative
- Developing greater complexity in spoken and written accounts of past events or experiences – focus on more complex questions words such as אילו/ היכן
- *Register of language – formal versus informal letter*

ASSESSMENTS

Reading

Speaking

Translation EN → Iv

AUTUMN TERM

ASSESSMENTS

Listening

Writing

Translation Iv → EN

Grammar

Theme 2
Global Issues

Develop understanding of environmental issues and different items that are able to be recycled (eg. Bottles, plastic and glass). Refer back to advantages and disadvantages of local area (e.g. too many cars which causes pollution). Give solutions such as introducing more public transport/making it more frequent.

Travel & tourism Describing holiday destinations and be able to describe what you did in your holidays /Talking about holiday preferences /activities. Be able to book a holiday including making flight/hotel arrangements. Building on expressing opinions and more formalised writing a letter (of complaint). Be able to connect this topic with activities studied in the topic of free time and with whom .

Customs & festivals in Modern Hebrew speaking countries- We will focus on typical customs as they occur through the Jewish yearly cycle. You will be able to express Jewish traditions and relate it to your family

Y11

Key Stage 4 Religious Studies Learning Journey

YEAR 11

Year 11 - Thematic Studies (Judaism only) and Christian responses to religious, philosophical & ethical issues

Why we Study it: The study of religious, philosophical and ethical issues in any religion gives us an insight into how followers think and form their opinion based on the beliefs and teachings of their faith along with demonstrating how the Jewish faith applies Torah teachings to modern day issues. In addition, the AQA examining board requires you to understand Christian beliefs on a number of issues in each theme.

Theme A - Relationships & Families: Jewish teachings about sexuality, sexual relationships before and outside marriage, contraception, Jewish teachings about marriage & divorce and gender equality.

Theme B - Religion & Life: Jewish beliefs about the origins of the universe & human life, use and abuse of the animals, the environment, abortion and euthanasia.

Theme D - Religion, Peace & Conflict: Jewish teachings about peace, justice and reconciliation, violent protest and terrorism, war, nuclear weapons and pacifism.

Theme E - Religion, Crime & Punishment: Jewish beliefs about crime and punishment, reasons for crime

YEAR 10

ASSESSMENTS

Year 10 - Beliefs and Teachings of Judaism & Islam

Why we study it: These are the basics of any religion. When studying different faiths it is essential to understand what the followers are taught and what they believe through texts and founders of the religion.

What we study for Judaism: Beliefs about the nature of Gd, the Covenants and the mitzvoth (commandments), Life after death, The nature and role of The Messiah, The Promised land, Key moral principles, sanctity of life and free will.

What we study for Islam: Beliefs about Allah (Gd), the prophethood, The Qur'an, the Imamate in Shia Islam,angels, life after death, the prophets Ibrahim and Muhammed.

Year 10 - Practices in Judaism & Islam

Why we study it: To explore why followers of a religion do what they do. By studying the practices and rituals of any religion, we learn about the foundations of faith and how followers live their life according to it.

What we study for Judaism The importance of the synagogue and worship, daily prayer, Shabbat in the home and synagogue, lifecycle ceremonies, Dietary laws and festivals.

What we study for Islam: The 'Five Pillars' of Islam, daily prayer, fasting during Ramadan, giving charity, pilgrimage, Jihad and festivals

What we study at KS4:

Beliefs and Teachings of Judaism & Islam Practices in Judaism & Islam

Thematic Studies: Religious, Philosophical and Ethical Issues in Judaism Only

Theme A - Relationships & Families

Theme B - Religion & Life

Theme D - Religion, Peace & Conflict

Theme E - Religion, Crime & Punishment Christian responses to the religious, philosophical and ethical issues above

Year 10 Foundation Mathematics Learning Journey

SUMMER TERM

ASSESSMENTS

Careers in Term 3

Construction Analyst
Aeronautical engineers
Scientists

7. Pythagoras

You will be able to calculate missing lengths of right-angled triangles in this topic and explore dimensions of triangles in 3D. Who was Pythagoras? Some of the important real-life uses of the Pythagorean theorem are as follows:

- construction and architecture.
- two-dimensional navigation to find the shortest distance.
- surveying the steepness of the slopes of mountains or hills.

8. Sequences

Here you will learn how to recognise and express rules for linear and quadratic sequences in words and algebraically.

As well as being important in Mathematics; number patterns can also help in the study of nature and geometric patterns.

9. Constructions, Loci, Plans and Elevations, Scale Drawings

We will learn how to construct shapes and angles using a compass and a straight edge. This skill is used in the construction industry for the planning and designs of buildings. Drawings have to be accurate and to scale.

You will learn how to construct (draw) an angle bisector, a line bisector, a perpendicular from a point and define a locus from a point

SPRING TERM

4. Perimeter, Area and Volume

You will learn about how to find the perimeter and area of several 2D shapes. Decorators or gardeners use these skills.
You will learn to calculate the volume and surface area of 3D shapes including prisms, cones, pyramids and spheres.

5. Solving Equations: Linear, Inequalities & Quadratics

Linear Equations
Solving equations is an essential problem solving skill. Equations are used to find out how much gravel , sand, cement and water are needed for the volume of concrete
Inequalities
You are going to learn how to solve a linear inequality and learn how represent the solution on a number line.
Quadratic equations
You will learn how to solve quadratic equations using factorizing.

6. Statistics

You will learn about averages and identifying outliers, how to collect unbiased data for a sample, draw statistical diagrams and interpret them correctly including cumulative frequency graphs and histograms.

These are seen daily in newspapers, magazines and in the news.

We are exposed to averages all of the time. For example, in the news, sports, in business and budgeting.

ASSESSMENTS

Careers in Term 2

Logistics
Statisticians
Risk analysers
Traffic control
Civil Engineering
Designers
Builders
Production
Designers
Environmental scientists

AUTUMN TERM

ASSESSMENTS

Careers in Term 1

Investment Bankers
Economists
Civil engineers
Builders
Scientists
Risk analysers
Data analysers
Architects
Graphic designers
Meteorologists

3. FDP, Ratio & Proportion, Compound Measures, Surds

Fractions and Percentages
These are used lots of areas such as in the payroll department, profit and loss in a company, stocks and shares, tax calculations, the housing market and many more.
Compound interest is really important and can help you choose the best bank deals. Depreciation can show how much value a car can lose over the years.
Ratio and Proportion
This is a very important skill. Chefs will use ratio and proportion in recipes to cook in large quantities, builders will use ratio when making cement, decorators will use ratio when mixing paint colours.
Compound Measures
You will learn use compound measures such as speed, rates of pay, unit pricing, density and pressure

2. Algebra Skills

Simplifying, expanding and factorising, rearranging
Skills such as simplifying, collecting like terms, expanding brackets and factorising will enable you to improve your problem solving. You will learn how to rearrange formula.
Quadratics and Functions
Here you are going to learn how to expand two or more binomials and factorise quadratic expressions. We will now extend our algebraic skills even further as we learn the notation of functions. This will allow us greater flexibility in studying more advanced mathematical concepts.
Formulae
You are going to learn how to use and construct formulae form Mathematics and other subjects. Whether you realize it or not, we use algebraic formulas to plan our schedule and do our tasks simply. Examples include managing money, preparing food, figuring out distance, time and cost for travel and many more.

1. Integers and Decimals

Factors, Multiples, LCM, HCF
Prime factor decompositions will help complete Venn diagrams to find LCM and HCF.

Standard Form, Indices
Numbers in standard form are written with powers of 10. They are used to write and calculate with very small numbers. You will also be looking and negative and fractional powers.

Bounds
Engineers and scientists work to a much greater degree of accuracy when solving real world problems. Here you will learn how to use bounds to solve real world problems in context.

10H

Year 10 Higher Mathematics Learning Journey

AUTUMN TERM

1. Integers and Decimals

Factors, Multiples, LCM, HCF
Prime factor decompositions will help complete Venn diagrams to find LCM and HCF.
Standard Form, Indices
Numbers in standard form are written with powers of 10. They are used to write and calculate with very small numbers. You will also be looking and negative and fractional powers.
Bounds
Engineers and scientists work to a much greater degree of accuracy when solving real world problems. Here you will learn how to use bounds to solve real world problems in context.
Systematic listing strategies
These strategies and the product rule for counting are used to find the number of combinations on a lock or the number of possible combinations of meals in a restaurant. Other applications of counting include secure passwords, horse racing outcomes, and college scheduling choices.

2. Algebra Skills

Simplifying, expanding and factorising, rearranging
Skills such as simplifying, collecting like terms, expanding brackets and factorising will enable you to improve your problem solving. You will learn how to rearrange formula.
Quadratics and Functions
Here you are going to learn how to expand two or more binomials and factorise quadratic expressions. We will now extend our algebraic skills even further as we learn the notation of functions. This will allow us greater flexibility in studying more advanced mathematical concepts.
Formulae
You are going to learn how to use and construct formulae form Mathematics and other subjects. Whether you realize it or not, we use algebraic formulas to plan our schedule and do our tasks simply. Examples include managing money, preparing food, figuring out distance, time and cost for travel and many more.

3. FDP, Ratio & Proportion, Compound Measures, Surds

Fractions and Percentages
These are used lots of areas such as in the payroll department, profit and loss in a company, stocks and shares, tax calculations, the housing market and many more.
Compound interest is really important and can help you choose the best bank deals. Depreciation can show how much value a car can lose over the years.

Ratio and Proportion
This is a very important skill. Chefs will use ratio and proportion in recipes to cook in large quantities, builders will use ratio when making cement, decorators will use ratio when mixing paint colours.

Surds
You will learn how to simplify surds, rationalise denominators and expand brackets with surds.

ASSESSMENTS

Careers in Term 1

Investment Bankers
Economists
Civil engineers
Builders
Scientists
Risk analysers
Data analysers
Architects
Graphic designers
Meteorologists

SPRING TERM

4. Perimeter, Area and Volume

You will learn about how to find the perimeter and area of several 2D shapes. Decorators or gardeners use these skills.
You will learn to calculate the volume and surface area of 3D shapes including prisms, cones, pyramids and spheres.

5. Solving Equations: Linear, Inequalities & Quadratics

Solving equations is an essential problem solving skill. Equations are used to find out how much gravel , sand, cement and water are needed for the volume of concrete
Inequalities
You are going to learn how to solve a linear inequality and learn how represent the solution on a number line. You will also learn how to find a region on a graph that obeys a linear inequality in two variables.
Quadratic equations and Iteration
You will learn how to solve quadratic equations including quadratic inequalities. Through studying Iteration, we develop our understanding that repeating a process several times can bring us closer and closer to an actual answer, and we explore when it is an appropriate method.

6. Statistics

You will learn about averages and identifying outliers, how to collect unbiased data for a sample, draw statistical diagrams and interpret them correctly including cumulative frequency graphs and histograms.

These are seen daily in newspapers, magazines and in the news.

We are exposed to averages all of the time. For example, in the news, sports, in business and budgeting.

ASSESSMENTS

Careers in Term 2

Logistics
Statisticians
Risk analysers
Traffic control
Civil Engineering
Designers
Builders
Production
Designers
Environmental scientists

SUMMER TERM

7. Pythagoras & Right-Angled Trigonometry

Pythagoras
You will be able to calculate missing lengths of right-angled triangles in this topic and explore dimensions of triangles in 3D. Who was Pythagoras?
Trigonometry
You will learn about trigonometric ratios, sine, cosine and tangent functions and be able to calculate missing angles and lengths in right-angled triangles.

8. Sequences

Sequences
Here you will learn how to recognise and express rules for linear and quadratic sequences in words and algebraically.

As well as being important in Mathematics; number patterns can also help in the study of nature and geometric patterns.

9. Constructions, Loci, Plans and Elevations, Scale Drawings

We will learn how to construct shapes and angles using a compass and a straight edge. This skill is used in the construction industry for the planning and designs of buildings. Drawings have to be accurate and to scale.

You will learn how to construct (draw) an angle bisector, a line bisector, a perpendicular from a point and define a locus from a point

ASSESSMENTS

Careers in Term 3

Construction Analyst
Aeronautical engineers
Scientists

10H

Year 10 Accelerated Maths Learning Journey

AUTUMN TERM

Number

Number: Accuracy of Limits, Percentages, Powers and Surds

This unit extends your knowledge of fractions and decimals to the study of irrational numbers, reciprocals indices (powers) and surds. You will understand the difference between rational and irrational numbers. Indices and standard form are used extensively in Science and computer programming for writing very large or very small numbers. Eg a googol is a 1 followed by 100 zeros can be written like this 10^{100}. They also help us to calculate and manipulate these types of numbers which would otherwise not be practical to do on paper. Surds help you to write numbers in exact forms eg $\sqrt{8} = 2\sqrt{2}$ which would otherwise have lost accuracy due to rounding. You will rationalise denominators and use them in problem solving. Percentages are used extensively in finance/banking and include profit/loss, sales/business.

Algebra, Geometry

Quadratic Equations, Algebraic Fractions, Functions, Statistics

You will revise and extend your knowledge of the properties and uses of quadratic graphs. Yu will manipulate algebraic fractions and find inverse and range of a function. These skills are essential to the successful study of maths in A Levels and to do calculations in a real-life context. **Volumes and Surface Areas**

You will find volumes and surface areas of more complex prisms, in addition to pyramids, cones, spheres., frustum. These will allow you to do various 'real-life' problem solving questions and provide opportunity for developing your problem solving skills.

Linear & Quadratic Inequalities

Involves graphing and solving inequalities a concept which leads into linear programming.

Statistics

By drawing, interpreting, analysing and representing data is various forms, you will be better able to understand and appreciate your society and the world that you live in. Helps with the understanding of population density . Used extensively in research in a wide cross-section of careers to collect and process data. For example, in politics, economics, medicine, law, psychology and the sciences.

ASSESSMENTS

Careers in Term 1

Data analyst
Scientist
Physicist
Computer scientist
Engineer
Architecture

SPRING TERM

Geometry

Simple Trigonometry & Bearings

Use Pythagoras' theorem and trigonometric ratios to solve problems. This area of maths is used in construction of buildings, bridges and other large structures. Bearings are used essentially in plane and boat navigation

Angles in Polygons & Circle Theorem

This unit will help to better understand angles which can be formed within circles which feature in many human activities, including sports, pottery, clock and wheels. Engineers use it to help create safe and functional gears, pulleys. It also used in the creative industry and gives meaning to various art forms.

Sequences

Here you will learn how to recognise and express rules for linear and quadratic sequences in words and algebraically. As well as being important in Mathematics; number patterns can also help in the study of nature and geometric patterns.

Geometry, Vectors

Construction & Loci; Plans & Elevations

Town planners and building contractors use skills developed in these topics extensively to create safety, beauty and in our homes and wider community, eg in determining locations for train lines.

Congruence & Similarity

Linked with ratio and proportionality. Used in the creation of prototypes and models in many industries eg, fashion, foods, photography, architects, engineers and other designers.

Vector Geometry

Pilots use vectors as they consider the speed and direction of the wind when planning to land. Vectors are an integral part of the computerised landing system. Meteorologists use it to map out weather patterns. Used in the science of aerodynamics, in particular, the design of an aircraft. Links translations of shapes.

ASSESSMENTS

Careers in Term 2

Investment banking
Statistician
Architect, Designers
Engineers
Digital marketing
Builders,
Researcher

SUMMER TERM

Geometry

Further Graphs

Graphs are found in newspapers, on the internet and in textbooks for most subjects. They give visual representations of the relationships between variables and can be used to compare data and give information in a unique, yet comprehensive way. Distance-time, velocity-time, cubic, reciprocal relations, exponential growth, depth of a container can all be calculated using graphs.

Further Trigonometry

This topic widens your knowledge of measuring angles and bearings. It is used extensively in triangulation to calculate position and distance in real-life. Sine waves pattern occurs often in nature, including wind waves, sound waves, and light waves, so used in Music, Physics, Geography.

Algebra, Geometry

ASSESSMENTS

Transformations of Graphs

Closely linked to transformations of shapes, but has an algebraic swing. V… crucial to understand other topics and relations at advanced GCSE and A L…

Coordinate & Circle Geometry

Equation of a circle and gradient to circles are studied here and create links to graphs in statistics, algebra and measurement. Forms a good foundation … some aspects of A Level maths.

Probability: Combined Events + Choices & Outcomes

Decisions of everyday life are often based on chances, which is studied in probability. You will also study probabilities of outcomes which are dependent on the outcome of other events.

Algebraic Proofs

Here we use very advanced mathematical reasoning using algebra for logical arguments and finding counter examples to prove and disprove assumptions.

Careers in Term 3

Pilot, computer scientists, Meteorologist, software designers

10 X

Year 11 Higher Maths Learning Journey

SUMMER TERM

ASSESSMENTS

Careers in Term 2

Computer analyst;
Programming
Actuary
Statistician

14. Trigonometry

The geometry content we focus on in this unit looks at angles between two lines, a line and a plane or two planes. We move into 3-Dimensional geometry and the use of further trigonometry for problem solving. Applications are commonly found in engineering and nautical professions.

In this unit we focus on the use Pythagoras's theorem and trigonometry. Trigonometry is used in every aspect of engineering and also essential for architects and surveyors. Space exploration and motion/positioning of satellites would not be possible without trigonometry. Mobile telephones, video games and computers make much use of this area of mathematics.

15. Probability

Probability

What is the probability you will throw heads on a fair coin or a 6 on a fair die? In this topic, you will be exploring experiments like these as well as learning key probability terminology.
As well as learning about theoretical and experimental probability, you will also learn how to use two way tables and Venn diagrams to solve probability questions.

Term 3

GCSE Exams

SPRING TERM

12. Simultaneous Equations and Proportion.

Simultaneous equations and proportion

Now we begin to work on common skills that are required at A level and extend into degree level in mathematics, computer science, engineering and many other courses. Simultaneous equations and inequalities involving multiple variables are used in solving real-life problems. Given a variety of constraints, cost can be minimised and profit can be maximised, along with other optimisation situations. Proofs become hugely important in understanding how it is essential to order a process using the right grammatical form; something which extends to any language.

13. Angles and Angles on Polygons

Angles

Knowing angle facts can help when designing the plan of a kitchen or a safety ramp for wheelchair access for example. These angle facts are the basics for topics such as sectors, trigonometry and circle theorems.

We will look at angles in polygons, angles around a point and more complex real life angle problems.
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ASSESSMENTS

Careers in Term 2

Surveyors, Pensions; Aeronautic and Mechanical Engineers; Builders; Pilots; Actuary; Software engineering

AUTUMN TERM

ASSESSMENTS

Careers in Term 1

Data analyst;
Economists;
Scientist;
Computer scientist.

11. Transformations, Similarity, Congruence and Vectors

Transformations

Rotations, reflections, translations and enlargements are often seen in product design or engineering and architectural drawings and creating patterns.

Similarity and congruence

Similar triangles are used in real life to find the heights of tall objects. In this area you will learn how to calculate missing sides of similar shapes.

Vectors

Vectors show magnitude and direction. We can describe where a shape has moved to using these.

10. Graphs

Linear Graphs

You will learn how to find equations of linear graphs give two points, given a point and a gradient, etc.

Non-linear graphs

You will learn about quadratic, cubic and reciprocal graphs. You will also learn about the equation of a circle.

9. Constructions Plans and Elevations and Scale Drawings

You will learn how to construct triangles and other polygons, using compasses, protractors and rulers. You will also learn how to draw2D versions of 3D objects, from a plan view, and other views.

Scale Drawings are often used by architects and others, to visualise projects during their builds.

11 H

Year 11 Higher Maths Learning Journey

SUMMER TERM

ASSESSMENTS

Careers in Term 2

Computer analyst;
Programming
Actuary
Statistician

14. Bearings and Further Trigonometry

The geometry content we focus on in this unit looks at angles between two lines, a line and a plane or two planes. We move into 3-Dimensional geometry and the use of further trigonometry for problem solving. Applications are commonly found in engineering and nautical professions.

In this unit we focus on the use Pythagoras's theorem and trigonometry and circle theorems. What will be new too is the introduction of trigonometric equations and identities. Trigonometry is used in every aspect of engineering and also essential for architects and surveyors. Space exploration and motion/positioning of satellites would not be possible without trigonometry. Mobile telephones, video games and computers make much use of this area of mathematics.

15. Probability

Probability

What is the probability you will throw heads on a fair coin or a 6 on a fair die? In this topic, you will be exploring experiments like these as well as learning key probability terminology.
As well as learning about theoretical and experimental probability, you will also learn how to use two way tables and Venn diagrams to solve probability questions.

Term 3

GCSE Exams

SPRING TERM

12. Simultaneous Equations and Proportion.

Simultaneous equations and proportion

Now we begin to work on common skills that are required at A level and extend into degree level in mathematics, computer science, engineering and many other courses. Simultaneous equations and inequalities involving multiple variables are used in solving real-life problems. Given a variety of constraints, cost can be minimised and profit can be maximised, along with other optimisation situations. Proofs become hugely important in understanding how it is essential to order a process using the right grammatical form; something which extends to any language.

13. Angles and Angles on Polygons and Circle Theorems

Angles

Knowing angle facts can help when designing the plan of a kitchen or a safety ramp for wheelchair access for example. These angle facts are the basics for topics such as sectors, trigonometry and circle theorems.

Circle theorems

You will learn about basic circle theorem. Circles feature in many sorts of human activity, from pottery to clocks to wheels. Studying circle theory can help you understand how they can interact – vital knowledge for engineers who use gears and pulleys.
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ASSESSMENTS

Careers in Term 2

Surveyors, Pensions; Aeronautic and Mechanical Engineers; Builders; Pilots; Actuary; Software engineering

AUTUMN TERM

ASSESSMENTS

Careers in Term 1

Data analyst;
Economists;
Scientist;
Computer scientist.

11. Transformations, Similarity, Congruence and Vectors

Transformations

Rotations, reflections, translations and enlargements are often seen in product design or engineering and architectural drawings and creating patterns.

Similarity and congruence

Similar triangles are used in real life to find the heights of tall objects. In this area you will learn how to calculate missing sides of similar shapes.

Vectors

Vectors show magnitude and direction. We can describe where a shape has moved to using these.

10. Graphs Including Inequalities

Linear Graphs

You will learn how to find equations of linear graphs give two points, given a point and a gradient, etc.

Non-linear graphs

You will learn about quadratic, cubic and reciprocal graphs. You will also learn about the equation of a circle.

Inequalities

You will also learn how to form and solve inequalities.

9. Constructions Plans and Elevations and Scale Drawings

You will learn how to construct triangles and other polygons, using compasses, protractors and rulers. You will also learn how to draw2D versions of 3D objects, from a plan view, and other views.

Scale Drawings are often used by architects and others, to visualise projects during their builds.

11 H

Year 11 Accelerated Maths Learning Journey

SUMMER TERM

ASSESSMENTS

Careers in Term 3

Computer analyst; Programming

Matrices

Unit 10 - Matrices

Matrices allow us to have a systematic way to carry out calculations and produce transformations. It combines different knowledge learnt through the course. Simultaneous equations and transformations of shapes will be the main focus.

Matrices are used in discrete mathematics to represent networks for a variety of situations such as water or traffic flow, or a railway network. They can also be used to solve problems which require costs to be minimised, or profits to be maximised. Matrices have application in most scientific fields, including quantum mechanics, electromagnetism. Computer programmers also make use of matrices when coding graphics.

GCSE and Level 2 Revision

SPRING TERM

Geometry

Unit 6 - Coordinate geometry

This unit is where we begin to form links between coordinates, their equations and properties. We can use information to find the rate of change of a straight line, midpoints and divide a line in a given ratio. You will also be introduced to equations of circles. All of this coordinate geometry is useful for engineers, designers and architects for producing accurate drawings.

Unit 7 - Geometry I

In this unit we focus on the use Pythagoras's theorem and trigonometry and circle theorems. What will be new too is the introduction of trigonometric equations and identities. Trigonometry is used in every aspect of engineering and also essential for architects and surveyors. Space exploration and motion/positioning of satellites would not be possible without trigonometry. Mobile telephones, video games and computers make much use of this area of mathematics.

Geometry and Calculus

Unit 8 - Geometry II

The geometry content we focus on in this unit looks at angles between two lines, a line and a plane or two planes. We move into 3-Dimensional geometry and the use of further trigonometry for problem solving. Applications are commonly found in engineering and nautical professions.

Unit 9 - Calculus

Calculus is a term we use to describe the process of integration and differentiation. Differentiation is used to find rates of change for functions that are not linear. You will derive standard differentials and be able to then apply to the knowledge you have gained in coordinate geometry and areas of algebra that you have been exposed to in the first term. Differentiation is used in the study of motion. It can also be used to solve problems with growth and decay. Video gaming uses a particular form of differential equations which can also be used in the design of aircrafts and cars, the study of blood flow, designs of power stations and the analysis of many other things which can be found in monetary/socio-economic industries

ASSESSMENTS

Careers in Term 2

Surveyors, Pensions; Aeronautic and Mechanical Engineers; Builders; Pilots; Actuary; Software engineering

AUTUMN TERM

ASSESSMENTS

Careers in Term 1

Data analyst; Economists; Statistician; Scientist; Weather analyst; Computer scientist.

Unit 4 - Algebra III

This unit is an introduction to areas of the curriculum that you will be introduced to for the first time. Functions are explored and we begin to use the formal vocabulary and notation used to describe a function and its properties. It is essential for you to become familiar with how functions and inverse functions are defined as it plays a huge part across the content in algebra, coordinate geometry and calculus. All of these skills are intertwined and used in many fields implicitly, for example in scientific experiments.

Unit 5 - Algebra IV

Now we begin to work on common skills that are required at A level and extend into degree level in mathematics, computer science, engineering and many other courses. Simultaneous equations and inequalities involving multiple variables are used in solving real-life problems. Given a variety of constraints, cost can be minimised and profit can be maximised, along with other optimisation situations. Proofs become hugely important in understanding how it is essential to order a process using the right grammatical form; something which extends to any language.

Unit 1 – Algebraic proof

Algebraic proof is the foundation of deriving theorems or functions, First principles of algebraic concepts need to be understood in order for the process of carrying out a proof

Unit 2 - Number and Algebra I

This unit starts with key number skills. These skills are implicitly tested throughout the Further Maths qualification; being able to convert between units, apply proportional reasoning and know how to use fractions, decimals and percentages in real life problems. These skills are used in algebra where we move onto next. One area that will be new is the 'Binomial expansion' which has many applications in the real world like the distribution of IP addresses. Economists use it in helping make predictions for the future behaviour of markets

Unit 3 - Algebra II

Technical and higher order algebra skills are extended in this unit. The ability to manipulate algebraic expressions and solve equations is fundamental to much of Pure Mathematics. Transition will be from basic ideas learnt into efficient use of fractions and a cohesive use of the language of algebra. You will be able to then apply these skills in other areas of the course.

11 X

KS4: GCSE Music Learning Journey

Year 11

KEY SKILLS:

1. Performing
2. Composing
3. Listening & Appraising

SPRING & SUMMER TERMS:
Theme: Unfamiliar Listening - retrieval of appraisal skills.
AoS 1 – 4: Revision.
Mock Papers: Rhinegold listening pack, Previous exam paper (2018).
Performance: Solo & Ensemble (1 March deadline - tbc).
Composition: Final coursework x 2 (1 April deadline - tbc).

AUTUMN TERM:
Theme: Unfamiliar Listening – retrieval of appraisal skills.
AoS4: Fusions – focus on analysis.
Performance: Solo and Ensemble.
Composition: Brief set by Edexcel (1 Sept release) – focus on all compositional skills.
Mock Y11: Previous year's exam paper (2019).
Link to previous learning: develop skills of analysis, performing and composing.

11

SPRING TERM:
Theme: Unfamiliar Listening – retrieval of appraisal skills.
AoS 2: Vocal Music – focus on analysis.
Performance: Solo.
Composition: Song – focus on lyrics, structure and accompaniment.
Link to previous learning: develop skills of analysis, performing and composing.

SUMMER TERM:
Theme: Unfamiliar Listening – retrieval of appraisal skills.
AoS 3: Music for Stage and Screen – focus on analysis.
Performance: Solo & Ensemble.
Composition: 'Film/Musical' Brief – focus on contrast, variety and development of ideas.
Mock Y10: Specification paper.
Link to previous learning: develop skills of analysis, performing and composing

KEY SKILLS:

1. Performing
2. Composing
3. Listening & Appraising

Year 10

AUTUMN TERM
Theme: Elements of Music / Basic Theory.
AoS 1: Instrumental Music – focus on analysis.
Performance: Solo.
Composition: Ternary Form – focus on melody and harmony.
Link to previous learning: develop K/S/U at KS3.

AIMS:
Follow the sequence of the SoW as set by the exam board builds and develops students' existing skills, knowledge and understanding from the familiar to the unfamiliar / Develops students as confident and informed performers, creative and skilled composers, critical appraisers and understanding listeners / Provide the key context of musical elements, musical contexts and musical language through the AoS and set works / Link different aspects of skills, knowledge and understanding throughout the course to create depth and breadth of musical understanding.

KEY SKILLS:

1. Performing
2. Composing
3. Listening & Appraising

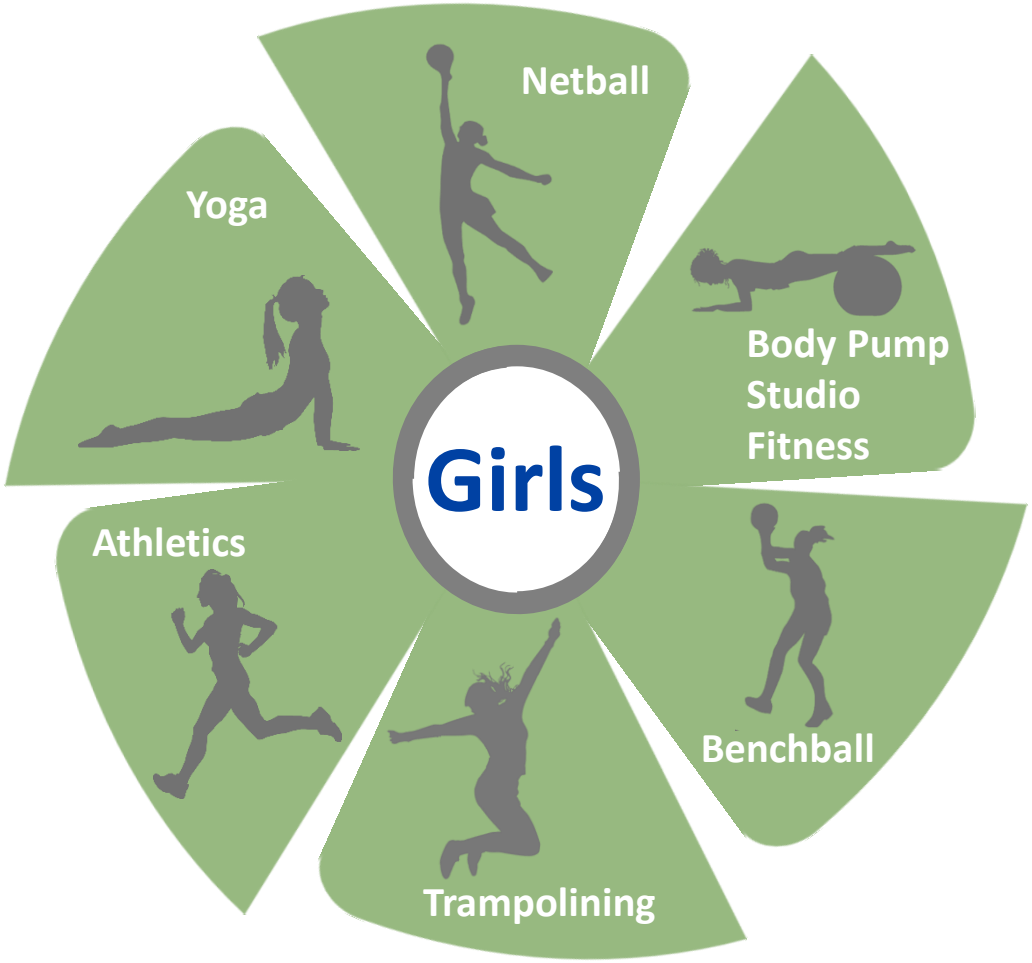
10

Year 10 & 11 Core Physical Education

KS4

Core PE

Take on sports and activities, as voted for and selected by JFS students, that you can take with you for the rest of your life. Be able to succesfuly use a gym, join a sports club, have experience in varied activities and have the confidence to stay healthy and active for years to come.



GCSE Physical Education

Paper 1	Paper 2	Practical	PEP
30%	30%	30%	10%

- Y11 Spring
- Y11 Spring
- Y11 Autumn
- Y11 Autumn
- Y10 Summer
- Y10 Spring
- Y10 Spring
- Y10 Autumn
- Y10 Autumn

Paper 2 - Socio-Cultural Influences

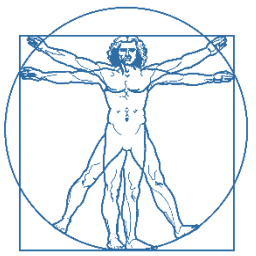
Societal groups, barriers to participation, commercialisation, ethics.

Paper 2 - Sport Psychology

Classification of skill, goal setting, mental preparation, guidance and feedback.

Paper 2 - Health, Fitness and Wellbeing

Health, fitness, diet, nutrition, effects of activity.



Paper 1 - Movement Analysis

Levers, mechanical advantage, planes and axes.

Coursework (PEP)

Personal Exercise Program

Plan, complete and evaluate a personalized 6 week training program

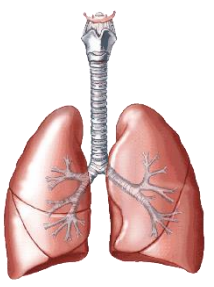
Paper 1 - Physical Training

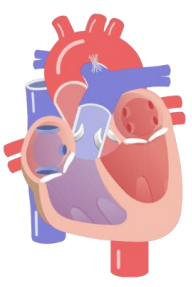
Health, fitness, injuries, methods of training, fitness tests, components of fitness.

Paper 1 - Anatomy and Physiology

Respiratory Systems

Structure and function of the lungs, long terms effects of exercise.





Paper 1 - Anatomy and Physiology

Cardiovascular Systems

Structure and function of the heart, long terms effects of exercise.

Paper 1 - Anatomy and Physiology

Musculo-Skeletal Systems

Bones, muscles, joints, soft tissues, movements, muscle fibres, effects of exercise.

GCSE Dance

Written Paper	NEA / Practical
40%	60%

- Y11 Spring
- Y11 Autumn
- Y11 Autumn
- Y10 Summer
- Y10 Summer
- Y10 Spring
- Y10 Spring
- Y10 Autumn
- Y10 Autumn

Artificial Things

Apply knowledge to describe, explain, discuss, analyse and evaluate all aspects of the piece.

Final Choreography Task Assessment

Workshop the question, identify draws, preparation.

Infra

Review set phrases and duets. Implement physical, technical and expressive skills.

Section A – Within Her Eyes

Identify, describe, explain, analyse and evaluate. Contact skills.

Section A – Emancipation of Expressionism

Similarities of professional works, hypothetical choreography, applying to written work.

Section C - Shadows

Features of the piece. Identify, describe, explain, analyse and evaluate. Comparing professional works.

Section B – Reflection & Performance Skills

Video analysis, application of performance skills. Freeflow duet/trios.

Section C – A Linha Curva

Features of the piece. Identify, describe, explain, analyse and evaluate. Developing movement

Safe Practice / Technique

Health and safety, execution. Physical, technical expressive and mental skills. Contemporary techniques

GCSE Photography Learning Journey

ASSESSMENT

10 hour controlled assessment, for Component 2

Externally Set Assignment

The component 2 brief is set by the exam board which will make up the other 40% of your final mark.

- Choose one of the AQA set briefs
- Develop a portfolio of work in response to the brief
- 10 hour controlled assessment to refine and present final images

Year 11

Life

The summer term continues exploring photography through the topic of Life using a variety of techniques and processes to develop the work further.

- Developing photographic studies
- Using other media
- Present final work

Still Life / Life (finalised)

The start of year 11 is where we develop work from your best portfolios to submit as component 1 coursework - 60% of your mark.

- Through photographic shoots explore a deeper understanding of the work
- Finalise portfolio work
- Present final work

ASSESSMENTS

Assessment of Component 1

ASSESSMENTS

Continuous feedback and assessment of portfolio work

Year 10

Still Life

In the middle of the autumn term the second project is the broad theme of Still Life where you will further your skills and understanding.

- Investigate this topic through photographer's work
- Create and refine photographic work/ideas
- Present a meaningful response

Introduction

During the subject introduction you will master a range of digital techniques while exploring photography in relation to different topics.

- Develop understanding and techniques in the use of a camera
- Develop techniques in editing digital photographs.
- Understanding the work of others and presenting your own work

GCSE

Year 10 Combined Science Learning Journey

SUMMER TERM

CB6 Photosynthesis You will learn: more about photosynthesis and how different factors affect its rate. Life on Earth depends on plants, and you will learn how they affect our environment.
CC8 Acids and Alkalis Learn why some are safe and some are dangerous. Apply ideas about ions to explain solutions.
CP-5 Waves and the electromagnetic spectrum You will learn to compare light vs sound waves, refraction, and how telecommunications work. Dangers of ultraviolet rays and radiotherapy help students to make good choices e.g. in use of suncream.

CB5 Health and Disease Learn how we define health; about some pathogens and the diseases they cause; how the spread of pathogens can be reduced or prevented by behaviour and medicine.
CC9-11 Calculations and electrolytic processes Concentrations and calculations involving masses are how chemists react substances in the correct quantities to make a product. Electrolysis is used in the extraction and purification of metals.

ASSESSMENTS
- CB5, CB6
- CC9-11
- CP4-5
- Year 10 mock exam

SPRING TERM

CB3 genetics. You will learn about yourself, and about the first few steps in the formation of human body; about the structure of DNA; about mutations and how genes cause genetic variation.

CP3 Energy You will learn the types of energy, and how renewable and non-renewables energy resources work. This is relevant to consumer choices, from the energy we use in our homes and type of car we drive.

CB4 Natural Selection In this unit you will learn: about Darwin's theory of evolution by natural selection - this gives students ability to be reflective about their own beliefs, religious or otherwise, that inform their perspective on life and their interest in and respect for different people's values;
CC8 Acids and Alkalis Learn why some are safe and some are dangerous. Apply ideas about ions to explain solutions.

ASSESSMENTS
CB3, CB4 , CC8 CP3 Term 1& 2 ssessment

AUTUMN TERM

CB2 Cells and Control Learn about mitosis and its importance in growth, repair and asexual reproduction - this has links to ethical issues in relationship to cloning; how cells become specialised, and the importance of stem cells.
CP 1-2 Forces ad Motion Newton's laws will be used to explain why objects move, and this will be applied to transport and sport.
CC5-7 Bonding This topic underpins Chemistry. You will learn how ionic compounds are formed and will also build on the concepts of intermolecular forces, covalent bonding and bond strength. This explains the properties of materials in our lives.

CB1 Biology Key Concepts You will learn about the importance of enzymes in nutrition, growth and development - this allows students to understand how body functions and can link to eating habits ;
CC1-2 States of Matter (retrieval from Y9)
CC3-4 Atomic structure and the periodic table You will learn the structure of the atom at various points in KS3 and what information the periodic table gives us about each element. This allows students to build on this crucial information when looking at bonding and reactivity of groups in the periodic tab

ASSESSMENTS
- CB1,
- CB2
- CC5-7,
- CC3-4
- CP1-2
- Term 1 assessment

Y10

Year 10 Triple Science Learning Journey

SUMMER TERM

SB6 Photosynthesis You will learn: more about photosynthesis and how different factors affect its rate. Life on Earth depends on plants, and you will learn how they affect our environment.
SC17-19 Rates of Reaction You will look at the energy changes that explain why reactions happen. This allows chemists to think about the optimum conditions for chemical reactions, an essential step in any industrial process.
SP7 Astronomy Learn to explain the evidence for the competing theories for the formation of our Universe. An exciting area of Science relevant to technology and the future of space travel.

ASSESSMENTS
- SB5, SB6
- SC9-11,13,
- SC17-19
- SP6, SP7
- **Year 10 mockS**

SB5 Health and Disease Learn how we define health; about some pathogens and the diseases they cause; how the spread of pathogens can be reduced or prevented by behaviour and medicine.
SC10-11,13 Calculations and electrolytic processes Electrolysis is used in the extraction and purification of metals.
SP6 Radioactivity Learn to explain the hazards and uses of radioactivity, and what the future holds in terms of using fission and fusion to generate electricity.

Careers in Term 3
- ❑ Microbiologist
- ❑ Immunologist
- ❑ Botanist
- ❑ Energy Engineer
- ❑ Chemist

SPRING TERM

SB3 genetics. You will learn about yourself, and about the first few steps in the formation of human body; about the structure of DNA; about mutations and how genes cause genetic variation.
SP-5 Waves and the electromagnetic spectrum You will learn to compare light vs sound waves, refraction, and how telecommunications work. Dangers of ultraviolet rays and radiotherapy help students to make good choices e.g. in use of suncream.

SB4 Natural Selection In this unit you will learn: about Darwin's theory of evolution by natural selection - this gives students ability to be reflective about their own beliefs, religious or otherwise, that inform their perspective on life.
SC8 Acids and Alkalis Learn why some are safe and some are dangerous. Apply ideas about ions to explain solutions.
SC9 calculation involving masses Concentrations and calculations involving masses are how chemists react substances in the correct quantities to make a product.

ASSESSMENTS
- SB3, SB4
- SC8
- SP4, SP5,

Careers Term 2
- ❑ Geneticist
- ❑ Evolutionary biologist
- ❑ Phlebotomist
- ❑ Forensic scientist
- ❑ Aerospace engineer
- ❑ Automotive engineer

AUTUMN TERM

SB2 Cells and Control Learn about mitosis and its importance in growth, repair and asexual reproduction - this has links to ethical issues in relationship to cloning; how cells become specialised, and the importance of stem cells.
SC5-7 Bonding This topic underpins Chemistry. You will learn how ionic compounds are formed and will also build on the concepts of intermolecular forces, covalent bonding and bond strength. This explains the properties of materials in our lives.
SP3 Energy You will learn the types of energy, and how renewable and non-renewables energy resources work. This is relevant to consumer choices, from the energy we use in our

ASSESSMENTS
- SB1, SB2,
- SC3-4. SC5-7
- SP1-2, SP3

SB1 Biology Key Concepts You will learn about the importance of enzymes in nutrition, growth and development - this allows students to understand how body functions and can link to eating habits ;
SC1-2 States of Matter retrieval from Y9
SC3-4 Atomic structure and the periodic table You will learn the structure of the atom at various points in KS3 and what information the periodic table gives us about each element. This allows students to build on this crucial information when looking at bonding and reactivity of groups in the periodic table
SP 1-2 Forces and Motion Newton's laws will be used to explain why objects move, and this will be applied to transport and sport.

Careers Term 1
- ❑ Radiologist
- ❑ Seismologist
- ❑ Electronic Engineer
- ❑ Water treatment worker
- ❑ Atomic Physicist

Y10

Year 11 Combined Science Learning Journey

This is when you will review earlier topics by quizzing, practice tests, and past papers before going on study leave

SUMMER TERM

SPRING TERM

CB9 Ecology
You will learn how ecosystems are organised, how organisms depend on each other and human impact on biodiversity. This is an important subject in direct relationship with climate change and ecosystem destruction as a result of human activity.
CC16-17 Fuels and Earth's atmosphere This topic is the foundation of organic chemistry, and you will learn the different types of fuels and how their combustion affects our atmosphere. This will inform choices you will make in the future for the energy sources you use.

CP12-13 Particles, force and Matter
This topic teaches the physics of matter. Students will learn why things bend, stretch, float and sink which has many everyday applications e.g. springs. Effect of temperature on matter is relevant in the kitchen and central heating systems

CP6 Radioactivity Learn to explain the hazards and uses of radioactivity, and what the future holds in terms of using fission and fusion to generate electricity.

ASSESSMENTS
- CB9
- CC16-17,
- CP12-13,
- CP6,

Careers Term 2

- ❑ Ecologist
- ❑ Geologist
- ❑ Nuclear Engineer
- ❑ Heating and Ventilation Engineer
- ❑ Radiographer

AUTUMN TERM

CB8 Exchange and Transport in animals You will learn how the lungs, heart, blood vessels and blood are adapted for their functions, and how this can inform sporting performance.
CC12-15 Energy in chemical reactions
Students look at the energy changes that drive reactions. This allows students to think about the optimum conditions for chemical reactions, an essential step in any industrial process.
CP10-11 Magnetism motors and induction
A great deal of modern technology depends on these significant concepts. This will inform students' future choices about energy efficient homes.

CB7 Co-ordination and Control
You will learn how hormones are used in the body, including in menstruation and contraception. Understanding homeostasis in the body helps you to lead a healthier lifestyle.
CP9 Electricity
You will learn to explain circuits in terms of current, voltage and resistance. This will help you understand how modern technology works, as well as electrical safety in our homes ,such as fuses and earth wires.

Assessments
- CB7, CB8
- CC12-15
- CP9,
- CP10-11

Careers Term 1

- ❑ OB/GYN
- ❑ Endocrinologist
- ❑ Electrician
- ❑ Chemical Engineer

Y11

Year 11 Triple Science Learning Journey

SUMMER TERM

This is when you will review earlier topics by quizzing, practice tests, and past papers before going on study leave

SPRING TERM

SB9 Ecology
You will learn how ecosystems are organised, how organisms depend on each other and human impact on biodiversity. This is an important subject in direct relationship with climate change and ecosystem destruction as a result of human activity.

SC22-26 Hydrocarbons and qualitative analysis
This allows students to think about the concepts they experience in everyday life; whether it be the manufacture of cosmetics, the development of pharmaceuticals or the creation of everyday items such as teflon or nylon. Especially relevant for students thinking of careers in medicine, pharmaceuticals or chemical engineering.

SP14-15 Particles, force and Matter
Students will learn why things bend, stretch, float and sink which has many everyday applications e.g. springs. Effect of temperature on matter is relevant in the kitchen and central heating systems.

SC20-21 Fuels and Earth's atmosphere This topic is the foundation of organic chemistry, and you will learn the different types of fuels and how their combustion affects our atmosphere. This will inform choices you will make in the future for the energy sources you use.

Assessments
- SC20-21
- SC22-24
- SC25-26
- SB9
- SP14-15

Careers Term 2
- ❑ Ecologist
- ❑ Geologist
- ❑ Nuclear Engineer
- ❑ Heating and Ventilation Engineer
- ❑ Radiographer
- ❑ Pharmacist

AUTUMN TERM

SB8 Exchange and Transport in animals You will learn how the lungs, heart, blood vessels and blood are adapted for their functions, and how this can inform sporting performance.

CC14-16&12 Energy in chemical reactions
Students look at the energy changes that drive reactions. This allows students to think about the optimum conditions for chemical reactions, an essential step in any industrial process.

SP12-13 Magnetism motors and induction
A great deal of modern technology depends on these significant concepts. This will inform students' future choices about energy efficient homes

SB7 Co-ordination and Control You will learn how hormones are used in the body, including in menstruation and contraception. Understanding homeostasis in the body helps you to lead a healthier lifestyle.

SP10-11 Electricity You will learn to explain circuits and static electricity in terms of current, voltage and resistance. This will help you understand how modern technology works, as well as electrical safety in our homes ,such as fuses and earth wires.

Assessments
- SB7,
- SB8
- SC14-16
- SP10-11,
- SP12-13

Careers Term 1
- ❑ OB/GYN
- ❑ Endocrinologist
- ❑ Electrician
- ❑ Chemical Engineer

Y11

Year 10 Spanish Learning Journey

Regular vocab tests + formative writing tasks

ASSESSMENTS

Speaking

Listening

Reading

Writing

CITIES

My region - Talking about the features of a region, using "se puede" + infinitive.
Plans - Describing what to do on a tourist visit, using the future tense.
Shopping – Shopping for clothes and presents; exchanging an item using demonstrative adjectives
Pros and cons of living in a city – Describing problems in a town; ways to improve life in a town using the conditional tense

CULTURAL LIFE

Leisure - Describing what you usually do using "soler" + infinitive..
Sports - Talking about sports using the imperfect tense.
Trending - Describing what is trending topic, using the perfect tense.
Role models - Describing inspirational role models, using a range of past tenses.

SUMMER TERM

Regular vocab tests + formative writing tasks

SPRING TERM

SCHOOL (II)

School rules – Describing what you are (not) allowed to do in school; problems at your school
A school exchange – Describing plans for a school exchange using the near future tense
Extra-curricular activities – Describing the clubs on offer at my school, which ones I attend, any recent success

WHO AM I?

Physical & personality description - Describing what you look like and what you are like, your appearance and your character/ personality.
Describing others - Describing in detail other people, using "tener" (to have) and the verb "ser" (to be).
Family - Socialising and describing people using present tense and adjective agreement.
Social networks - Talking about technological ways of socialising
Making arrangements - Introducing plans for social time, using present continuous tense.
Reading preferences – Describing different types of books; traditional books vs ebooks
Relationships – Talking about family & friends using reflexive verbs.

ASSESSMENTS

Listening

Speaking

Writing

Translation EN → SP

Regular vocab tests + formative writing tasks

AUTUMN TERM

ASSESSMENTS

Reading

Writing

Translation SP → EN

SCHOOL (I)

Subjects - Describing your subjects using high level opinion structures.
Uniform - Describing school uniform using powerful adjectives.
Teachers - Talking about subjects and teachers preference using comparative and superlative structures.
My school – Describing the facilities at my school

HOLIDAYS

Summer holidays - free time activities using the present tense.
Holidays preferences - Expressing your preferences using opinions to refer to different people.
Past holidays - Describing past holidays using both the preterite and the imperfect tense.
Accommodation and problems - Giving an account of past holidays using the formal pronoun "usted" (you) and three tenses together.

Regular vocab tests + formative writing tasks

Y10

Year 11 Spanish Learning Journey

Vocab test + writing task every 3 weeks

EXAM PRACTICE

- Preparation for speaking assessment: role plays, picture-based discussions, general conversation questions
- Listening past paper practice; watch out for common distractors
- Reading past paper practice
- Writing practice; developing and expanding your written work to access the highest marks

GLOBAL AND ENVIRONMENTAL ISSUES (II)

- Discussing the pros and cons of international sporting events using the pluperfect tense
- Talking about natural disasters

SUMMER TERM

Vocab test + writing task every 3 weeks

SPRING TERM

GLOBAL AND ENVIRONMENTAL ISSUES (I)

- Describing diet-related problems and healthy eating; problems with addiction
- Describing major environmental issues and how to protect the planet using the present subjunctive

JOBS (II)

- Describing my work experience
- Talking about the importance of learning languages
- Applying for a summer job
- Describing plans for a gap year
- Describing future ambitions

ASSESSMENTS

Writing

Translation EN → SP

Listening

Vocab test + writing task every 3 weeks

AUTUMN TERM

CITIES (II)

- Describing a visit in the past recognizing and using idioms

MY ROUTINE (I)

- Describing my routine
- Describing mealtimes
- Talking about illnesses and injuries; asking for help at the pharmacy
- Talking about typical foods using the passive

MY ROUTINE (II)

- Comparing different festivals in the Spanish- speaking world
- Describing a special day using reflexive verbs in the preterite
- Ordering at a restaurant
- Describing a music festival

JOBS (I)

Discussing job preferences

Describing house chores and how you earn pocket money

ASSESSMENTS

Reading

Writing

Translation SP → EN

Speaking

Vocab test + writing task every 3 weeks

Y11