



Year 11 Revision Planner

Mock Revision Topics



Contents

Business Studies GCSE

Business Studies Btec

Child Development

Computer Science

Drama

Economics

English

Food & Nutrition

French

Geography

German

History

ICT

Latin

Maths

Media

Music

PE

Product Design

RE

Science

Visual Arts

GCSE Business

AQA GCSE Business 9-1 Mocks Student Personal Learning Checklist (PLC)		
3.1 Business in the real world (Paper 1)	Confidence	
3.1.1 The purpose of business		
I can describe what is meant by the purpose of business		
I can explain what a business is and the reasons for starting a business		
I can identify the difference between goods and services.		
I can explain the difference between needs and wants		
I understand what is meant by the factors of production: land, labour, capital and enterprise		
I can define the term opportunity cost		
I can define the three sectors: primary, secondary and tertiary with examples		
I can define the term enterprise and entrepreneur		
I can explain the characteristics of an entrepreneur		
I can explain the objectives of an entrepreneur and why they would start their own business		
I can identify factors facing a business: changing business environment, technology, laws, environmental factors		
3.1.2 Business Ownership		
I can identify the different legal structures of business including sole traders, partnerships, LTD, PLC, Not for profit		
I can analyse the benefits and drawbacks of each legal structure		
I can explain the concept of limited liability and link it to the legal structures		
I can evaluate which legal structure would be most appropriate for a variety of business examples		
3.1.3 Setting Business aims and objectives		
I can describe the term aim and objectives		
I can identify business aims and objectives		
I can explain the role of objectives in running a business		
I understand how and why objectives set will differ between businesses		
I understand how and why objectives set will change as a business evolves		
I understand the success of a business can be measured in other ways than profit		
3.1.4 Stakeholders		
I can describe and identify several key stakeholders		
I can explain stakeholders main objectives from each perspective		
I understand the impact and influence stakeholders have on businesses and their objectives		
I understand how businesses may face conflict between stakeholders		
3.1.5 Business Location		
I can identify factors influencing where a business is located		
3.1.6 Business Planning		
I can describe the term business plan		
I can explain why businesses create plans		
I can identify the main sections of a business plan		
I can analyse the benefits and drawbacks of business planning		
I understand the difference between variable, fixed and total costs		
I understand the concepts of revenue, costs, profit and loss		
3.1.7 Expanding a Business		
I can discuss the advantages and disadvantages of methods of growth		
I understand the methods used by business when expanding through organic growth		
I understand the methods used by business when expanding through external growth		

GCSE Business

AQA GCSE Business 9-1 (Paper 1)	Confidence	
3.2 Influences on business		
3.2.1 Technology		
I can describe several approaches of firms using technology		
I can describe the term e-commerce		
I can explain how ICT influences business activity		
I can explain how e-commerce gives access to wider markets		
I can explain how digital communication is changing the way businesses communicate with stakeholders		
3.2.2 Ethical and environmental considerations		
I can describe the terms ethics and the environment		
I can identify and analyse where there may be a trade off between ethics and profit		
I can describe how ethical behaviour requires firms to act in a certain way		
I can give relevant examples of ways in which businesses can behave ethically		
I can explain the advantages and drawbacks of ethical behaviour		
I can explain how businesses and consumers need to accept greater environmental responsibility		
I can explain the costs and benefits of businesses behaving in this way		
I can identify and analyse where there may be a possible trade off between sustainability and profit		
3.2.3 The economic climate on businesses		
I can define what interest rates are		
I can explain how businesses might be affected by changes in the rate of interest		
I can explain how businesses might be affected by changes in levels of employment		
I can discuss how demand for products and services may change as incomes fluctuate		
3.2.4 Globalisation		
I can define the term globalisation with examples		
I can explain the benefits and drawbacks globalisation offers UK businesses		
I can define the term exchange rates		
I can explain the impact of exchange rates on profits and sales of businesses who import/export		
3.2.5 Legislation		
I can give examples of employment law including minimum wage/living wage and the equality act 2010		
I can describe the health and safety act 1974		
I can explain what consumer law is and trade descriptions		
I can assess the impact of legislation on businesses and the consequences of failing to follow it		
3.2.6 Competitive environment		
I understand the meaning of a market and competition		
I can analyse potential impacts of competition on businesses		
I can identify when businesses face minimal or no competition		
I understand the risks businesses face and the reasons why all businesses face uncertainty		
I understand the reason why entrepreneurs embark on running a business		
I understand the activities businesses can undertake to minimise risks		

GCSE Business

AQA GCSE Business 9-1 (Paper 1)	Confidence	
3.3 Business operations		
3.3.1 Production processes		
I can describe job and flow production methods and explain when each should be used appropriately		
I can describe the key terms lean production and JIT		
I can explain the benefits of lean production methods		
3.3.2 The role of procurement		
I can evaluate the use of managing stock using JIT		
I can describe the key term JIC		
I can explain the benefits of reduced costs and balance this against the cost of more frequent deliveries		
I can explain what is meant by economies of scale		
I can explain the benefits of having spare stock to satisfy demand		
I can describe the term buffer stock and the cost of holding this for a firm		
I can analyse the factors that affect the choice of supplier including: price, quality, reliability		
I can describe the term procurement and logistics		
I can explain the effect of procurement and logistics on a business		
I can identify the benefits of procurement and logistics and why these must be balanced against quality of service		
I can describe what a supply chain is		
I can explain the benefits of managing an effective supply chain		
I can identify approaches for cutting waste and unnecessary costs in the supply chain		
3.3.3 The concept of quality		
I can define the term quality		
I understand customer expectations when it comes to quality in terms of production of goods and services		
I can explain how businesses identify quality problems		
I can explain how businesses measure quality and the consequences of not getting quality right		
I can define TQM		
I can explain the advantages of using TQM		
I can identify the costs and benefits of maintaining quality for a business		
I can describe what is meant by outsourcing/ franchising and its potential impact on quality		
3.3.4 Good customer services		
I can describe approaches to good service including product knowledge, customer engagement and post sales service		
I can explain the importance of providing good service to customers		
I can analyse the techniques businesses use to provide good customer service		
I can explain the dangers of poor customer service		
I can explain how advances in ICT have allowed customer services to develop		

GCSE Business-Btec

BTEC Business Level 2 (Business Finance Revision Checklist)

Content	Formula	Confidence
Topic A.1 Understand the costs involved in business		
Understand and identify costs of a business, including: start-up costs operating (running) costs		
Understand, define and identify the differences between: fixed and variable costs, direct and indirect costs, total costs		
Calculate total costs (formula will not be given in the assessment)	Total Cost = Fixed +Variable	
Topic A.2 Understand how businesses make a profit		
Identify how businesses make money from selling their products or services		
Identify sources of revenue for a business		
Calculate revenue (formula will not be given in the assessment)	Revenue = Price x Qty	
Describe how businesses have to spend money (expenditure) in order to succeed		
identify types of expenditure (including overheads) businesses may have		
Understand that expenditure is anything a business pays out and overheads are the everyday running costs of a business		
understand that businesses must know how much money is coming in (revenue) and going out (expenditure), before they can work out whether the business has made a profit or loss		
<ul style="list-style-type: none"> • define: <ul style="list-style-type: none"> ○ profit – revenue is more than expenditure ○ loss – expenditure is more than revenue 		
• calculate profit (formula will not be given in the assessment)	Profit = Revenue - Expenses	

GCSE Business-Btec

BTEC Business Level 2 (Business Finance Revision Checklist)		
Content	Formula	Confidence
Topic B.2 Understand the tools businesses use to plan for success		
Cash flow forecasting		
Know the purpose of a cash flow forecast		
To identify the money that should be coming into a business (inflows) and the money going out of the business (outflows) over a period of time		
Be able to identify inflows and outflows		
Explain the purpose of a cash flow forecast, including that it identifies the flow of cash through a business over a period of time		
Understand the sources of cash coming into the business (inflows)		
Understand the sources and destination of cash leaving the business (outflows)		
Identify the impact of timings of inflows and outflows		
Understand the benefits of using a cash flow forecast		
Complete a cash flow forecast from given information		
Analyse a business' finances based on cash flow information and identify possible issues for the business from any cash surplus or deficit		
Mrs Fisher's Class Only – to also include B.2		
Purpose of budgeting		
Difference between budgeting and control		
Mrs Fisher's Class only – to also include C.1		
Define cost of sales		
Define and calculate gross profit		
Explain the impact of a positive /negative gross profit		
Define and calculate net profit		
Explain the impact of a positive /negative net profit		
Purpose of income statement		
Define and complete an income statement		
Purpose of a statement of financial position		
Mrs Fisher's Class only – to also include C2.		
Identify ways in which a small business can increase its profits		
Be able to analyse a business's financial statements and make suggestions as to how they could be more financially successful. Income statement Statement of financial position		
End/		

Child Development

Child Development specification revision self-assessment

Use the Child Development E-Book to revise.

Log in details: www.educationumbrella.com/cloud

Activation code: VGQC79 (Capital letters)

Topic	I have revised this	I know this	I am confident on this
The wide range of factors which affect the decision to have children-Finance, parents age, peer pressure			
Pre-conception health, Smoking, Alcohol, diet, medication & drugs, immunisation			
Roles and responsibilities of parenthood			
To recognise and evaluate methods of contraception, their efficiency and reliability			
The structure and function of male and female reproductive systems			
How reproduction takes place			
The signs and symptoms of pregnancy			
The roles of the different health professionals supporting the pregnant mother			
The importance of antenatal and parenting classes			
Routine checks carried out at an antenatal clinic, including scans			
Specialised diagnostic tests-Scans, Amniocentesis			
The choices available for delivery- Hospital, Home, Domino			
The stages of labour and the methods of delivery- forceps, Ventouse, Elective/ emergency caesarean			
pain relief for labour			
The postnatal checks of the new born baby -Apgar test			
Physical checks of a newborn baby			
Babies Reflexes			
The specific needs of the pre-term (premature) baby			
The postnatal provision available for the mother and baby and the postnatal needs of the family,			
Conditions for development			
The need for acceptable patterns of behaviour and approaches to discipline			
How immunity to disease and infection can be acquired			
How to recognise and treat common childhood ailments and diseases			
When to seek treatment by a doctor, and when emergency medical help should be sought			
Diet-related illnesses			
The needs of an ill child			
How to prepare a child for a stay in hospital			
How to create a safe, child-friendly environment			
Safety labelling			
To be aware of the most common childhood accidents			
Social safety			
Safety when choosing equipment for children from birth to five years			
Nutrition			

Computer Science

	Learning objective	Revised	
PAPER ONE	Algorithms and programming		
		Understand and use string, integer and real data types appropriately.	
		Understand how variable declaration and assignment can be used in programs.	
		Understand and be able to use addition, subtraction, multiplication and real division.	
		Understand and be able to perform input and output.	
		Use meaningful identifier names and know why it is important to use them.	
		Understand and explain the term algorithm.	
		Understand and be able to use selection (if, else, else if, case/switch if appropriate)	
		Understand and be able to use a range of relational operators.	
		Understand and be familiar with and able to use NOT, AND, OR.	
		Understand and be able to use nested selection structures.	
		Understand and be able to select suitable test data that covers normal (typical), boundary and erroneous data. Be able to justify the choice of test data.	
		Be able to understand pseudo-code and flowcharts.	
		Understand and be able to use definite iteration.	
		Understand and be able to use nested iteration.	
		Understand and be able to use indefinite iteration with conditions at start and end of loop.	
		Understand and be able to use random number generation.	
		Understand and be able to use some string handling techniques.	
		Understand and be able to write simple data validation routines.	
		Understand and be able to write simple authentication routines.	
		Understand and explain the term abstraction.	
		Understand the concept of data structures.	
		Use one-dimensional arrays (or equivalent) in the design of solutions to simple problems.	
		Understand that more than one algorithm can be used to solve the same problem.	
		Compare the efficiency of algorithms.	
		Understand and explain how linear and binary search algorithms work and compare them.	
		Understand and explain how bubble and merge sort algorithms work and compare them.	
		Use trace tables.	
		Understand and explain the term decomposition.	
		Describe the structured approach to programming.	
		Explain the advantages of the structured approach.	
		Understand the concept of subroutines and be able to use them in programs, including the use of local variables.	
		Explain the advantages of using subroutines in programs.	
Understand and be able to use Integer division, including remainders (MOD and DIV)			
Understand and be able to use a structured approach to programming, in particular focussing on the use of parameters and return values.			
Understand and be able to use a range of string handling operations.			
Understand and be able to use the char and Boolean data types.			
Understand and be able to read/write from/to a text file.			

Computer Science

		Learning objective	Revised
PAPER ONE	Algorithms and programming	Understand and use two-dimensional arrays (or equivalent) in the design of solutions to simple problems.	
		Understand and be able to use nested iteration.	
		Understand and be able to use of constants.	
		Understand and be able to use records (or equivalent) in the design of solutions to simple problems.	
		Be able to write simple authentication routines.	
		Understand and be able to use a systematic approach to problem solving and algorithm creation representing those algorithms using pseudo-code and flowcharts.	
		Explain simple algorithms in terms of their inputs, processing and outputs.	
		Determine the purpose of simple algorithms.	
		Know that there are different levels of programming language: low-level, high-level and explain the main differences between them.	
		Know that machine code and assembly language are considered to be low-level languages and explain the differences between them.	
		Understand that ultimately all programming code written in high-level or assembly languages must be translated into machine code.	
		Understand that machine code is expressed in binary and is specific to a processor or family of processors.	
		Understand the advantages and disadvantages of low-level language programming compared with high-level language programming.	
		Understand that there are three common types of program translator: interpreter, compiler, assembler.	
		Explain the main differences between these three types of translator and understand when it would be appropriate to use each type of translator.	
PAPERS ONE AND TWO	Data representation	Explain why computers use binary.	
		Understand how binary can be used to represent whole numbers and be able to convert between binary and decimal and vice-versa.	
		Understand how hexadecimal can be used to represent whole numbers and be able to convert between decimal and hexadecimal and binary and hexadecimal.	
		Understand why hexadecimal is often used in computer science.	
		Know the units that are used to measure quantities of bytes.	
		Be able to add together up to three binary numbers.	
		Be able to perform logical shifts.	
		Understand character sets including ASCII and Unicode and the advantages of Unicode.	
		Understand how images can be represented as bitmaps, including key terms.	
		Be able to calculate file sizes.	
		Be able to convert between binary and image data for black and white images.	
		Understand analogue sound must be converted to digital form for storage.	
		Describe how sound is represented using sample rate and sample resolution.	
		Explain what data compression is, and why it is used.	
		Be able to explain how Huffman coding works and know how to use a tree to decompress data using Huffman coding and calculate how many bits are saved.	
Be able to compress/ decompress data using RLE.			
Construct truth tables for NOT, AND, OR gates,			
Construct truth tables for simple logic circuits and interpret them.			
Create simple logic circuit diagrams.			

Computer Science

		Learning objective	Revised
PAPERS ONE AND TWO	Computer Systems	Explain Von Neumann architecture.	
		Explain role of main memory, components of CPU, buses.	
		Understand and explain the fetch-execute cycle.	
		Understand difference between main memory and secondary storage and between RAM and ROM. Be able to explain volatile and non-volatile.	
		Explain the effect of clock speed, number of cores and cache size on processor performance.	
		Be aware of why secondary storage is needed and the different types of secondary storage.	
		Explain the operation of solid state, optical and magnetic storage.	
		Discuss their relative advantages.	
		Explain what cloud storage is and compare it to local storage.	
		Understand the term 'embedded system' and explain how an embedded system differs from a non-embedded system.	
		Define the terms hardware and software and understand the relationship between them.	
		Explain what is meant by systems software and application software and be able to give examples of them.	
		Understand the need for and functions of the OS and utility programs.	
		PAPER TWO	Computer Networks
Discuss the benefits and risks of computer networks.			
Understand that networks can be wired or wireless.			
Discuss the benefits and risks of wireless networks as opposed to wired networks.			
Describe the LAN, WAN and PAN types of computer network.			
Explain the star and bus physical network topologies.			
Define the term 'network protocol'.			
Explain the purpose and use of common network protocols including: Ethernet, Wi-Fi, TCP, UDP, IP, HTTP, HTTPS, FTP, SMTP, IMAP.			
Understand the need for, and importance of, network security.			
Explain the following methods of network security: authentication, encryption, firewall, MAC address filtering.			
Describe the 4 layer TCP/IP model.			
Understand that the HTTP, HTTPS, SMTP, IMAP and FTP protocols operate at the application layer.			
Understand that the TCP and UDP protocols operate at the transport layer.			
Understand that the IP protocol operates at the network layer			

Computer Science

		Learning objective	Revised
		PAPER TWO	Cyber security
Understand and be able to explain the following cyber security threats: social engineering techniques, malicious code, weak and default passwords, misconfigured access rights, removable media, unpatched and/or outdated software.			
Describe what social engineering is.			
Explain the following forms of social engineering: blagging, phishing, pharming, shouldering			
Define the term 'malware'.			
Describe the following forms of malware: computer virus, Trojan, spyware, ad-ware.			
Describe how social engineering can be protected against.			
Describe how malware can be protected against.			
Understand and be able to explain the following security measures biometric measures, password systems, CAPTCHA, using email confirmations, automatic software updates.			
Explain what penetration testing is and what it is used for.			
Ethical, legal and environmental	Understand and be able to explain the implications and ethical issues on society relating to the following:		
	Hacking, cracking, cloud storage, cyber security		
	Copyright of algorithms, theft of computer code.		
	Wireless networking and mobile technologies.		
	Wearable technology and computer based implants.		
	Role of the state – privacy vs safety.		

Drama

Year 11 Drama Checklist

You will have two parts to your mock exam, a theory and a practical. Be reminded that as a part of your practical you do have to submit your Pro-forma portfolio (a theory element).

The following is a breakdown of what is in each section of your mock exam:

Blood Bros.	Theory paper Qu 1-8
Frankenstein (National Theatre)	Theory paper Qu 9
DNA or “Curious” extracts	Practical lessons 3,4 & 5
Blood Bros mono or duologue	Practical lessons 1 & 2

You have also been given some OCR booklets, which have been spoken through, and you have a guide sheet on Doodle. The guide sheet advises you how to break up your time into smaller parcels and opening them one at a time – instead of leaving everything until the last minute and overwhelming yourselves!

Remember the biggest downfall for Drama candidates is time management.

Just as you enjoyed my Valentines present to each and every one of you! You can now enjoy my Diwali, Eid and Christmas gifts! I am all heart!!!!

Do look over “things” and make sure you have everything you need for your preparations. The first step is organising your materials and ensuring you have access to the computers etc.

Take step one now! Then you will have more time to ask questions or report there are difficulties before you start your revision and prep!

Do find time to ask questions.

Mr Griffiths

Economics

OCR GCSE Economics 9-1 Mock Personal Learning Checklist (PLC)	
Part 1 Introduction to economics (Paper 1 Micro)	Confidence
1.1 Main economic groups and factors of production	
explain the role of the main economic groups: consumers, producers and the government, including their interdependence	
explain the factors of production: land, labour, capital and enterprise, including how they might be combined	
1.2 The basic economic problem	
explain what is meant by scarce resources and unlimited wants	
explain the economic problem, including the questions of how resources should be allocated, what, for whom and how goods and services should be produced	
explain what is meant by opportunity cost	
evaluate the costs and benefits of economic choices, including the impact on economic, social and environmental sustainability	
OCR GCSE Economics 9-1	
Part 2 The role of markets and money (Paper 1 Micro)	Confidence
2.1 The role of markets	
explain what is meant by a market	
explain the features of the primary, secondary and tertiary sectors, including the difference between the production of products and services	
explain the difference between factor and product markets, including their interdependence	
evaluate the costs and benefits of specialisation and exchange in markets including for producers, workers, regions and countries	
2.2 Demand	
explain what is meant by demand	
draw and explain a demand curve using data, including individual and market demand	
draw shifts of, and movements along, the demand curve	
analyse the causes and consequences for consumers and producers, of shifts of, and movements along, the demand curve	
explain price elasticity of demand	
draw demand curves of different elasticity	
evaluate the importance of price elasticity of demand for consumers and producers	
2.3 Supply	
explain what is meant by supply	
draw and explain a supply curve using data, including individual and market supply	
draw shifts of, and movements along, the supply curve	
analyse the causes and consequences for consumers and producers, of shifts of, and movements along, the supply curve	
explain price elasticity of supply	
draw supply curves of different elasticity	
evaluate the importance of price elasticity of supply for consumers and producers	
2.4 Price	
explain price as a reflection of worth and its role in determining an efficient distribution of resources	
explain what is meant by equilibrium price and quantity	
draw and analyse the interaction of demand and supply	
explain the role of markets in the determination of price and the allocation of resources	
analyse how the market forces of demand and supply affect equilibrium price and quantity	

Economics

OCR GCSE Economics 9-1	
Part 2 The role of markets and money (Paper 1 Micro) continued	Confidence
2.5 Competition	
explain competition between producers in a market economy, including the reasons why producers compete	
analyse how competition affects price	
evaluate the economic impact of competition on producers and consumers	
explain the meaning of monopoly and oligopoly and how they differ from competitive markets	
2.6 Production	
explain the role of producers, including individuals, firms and the government	
evaluate the importance of production and productivity for the economy	
calculate and explain total cost, average cost, total revenue, average revenue, profit and loss	
evaluate the importance of cost, revenue, profit and loss for producers, including how costs and revenues affect profit and supply	
explain what is meant by economies of scale	
2.7 The labour market	
explain the role and operation of the labour market, including the interaction between workers and employers	
analyse the determination of wages through supply and demand, including factors affecting the supply and demand of labour	
explain and calculate gross and net pay, including deductions through income tax, national insurance and pension contributions	
2.8 The role of money and financial markets	
explain the role of money as a medium of exchange	
explain the role of the financial sector for the economy, including financial institutions such as banks, building societies and insurance companies	
evaluate the importance of the financial sector for consumers, producers and government	
analyse how different interest rates affect the levels of saving, borrowing and investment	
calculate the effect on savings and borrowings of changes in the rate of interest	
OCR GCSE Economics 9-1	
Part 3 Economic objectives and the role of government (Paper 2 - Macro)	Confidence
3.1 Economic growth	
explain what is meant by economic growth	
calculate and explain how economic growth is measured with reference to Gross Domestic Product (GDP) and GDP per capita	
analyse recent and historical GDP data	
analyse the determinants of economic growth, including investment, changes in technology, size of workforce, education and training, availability of natural resources and government policies	
evaluate the costs and benefits of economic growth, including the impact on economic, social and environmental sustainability	
3.2 Low unemployment	
explain what is meant by employment and unemployment	
explain how unemployment is measured using the Claimant Count	
calculate the unemployment rate	
analyse recent and historical unemployment figures	
explain the types of unemployment, including cyclical, frictional, seasonal and structural unemployment	
evaluate the causes and consequences of unemployment for individuals, regions and the government	

Economics

OCR GCSE Economics 9-1	
Part 3 Economic objectives and the role of government (Paper 2 - Macro) continued	Confidence
3.3 Fair distribution of income	
explain what is meant by the distribution of income, including different types of income and the difference between income and wealth	
calculate income and wealth	
evaluate the causes of differences in the distribution of income and wealth and the consequences for an economy	
3.4 Price stability	
explain what is meant by price stability and inflation, including the difference between real and nominal values	
explain how inflation is measured using the Consumer Price Index (CPI)	
calculate the effect of inflation on prices	
analyse recent and historical inflation figures	
evaluate the causes of inflation and the consequences for consumers, producers, savers and the government	
3.5 Fiscal policy	
explain purposes of government spending and sources of government revenue, including direct taxes and indirect taxes	
explain what is meant by a balanced government budget, budget surplus and budget deficit	
explain what is meant by fiscal policy and how it can be used to achieve economic objectives	
calculate and analyse how taxes and government spending can affect markets as well as the overall economy	
evaluate the costs, including opportunity cost, and the benefits of fiscal policy on the economy to achieve economic objectives	
evaluate economic consequences of measures to redistribute income and wealth, including progressive taxes	
3.6 Monetary policy	
explain what is meant by monetary policy and how it can be used to achieve economic objectives	
analyse how monetary policy can affect growth, employment and price stability	
evaluate the effects of monetary policy on consumer spending, borrowing, saving and investment	

Students have already been issued with a paper copy and also an e-copy has been availed on Doddle.

English-Language

<p>Paper 1 FICTION 1 hour 45 minutes 4th June</p> <p>Question 1: <i>list four details</i> information retrieval [4 marks]</p> <p>Question 2: <i>close language analysis</i> (of a short section) [8 marks]</p> <p>Question 3: <i>analyse the structure</i> (of whole extract) [8 marks]</p> <p>Question 4: <i>evaluation- to what extent do you agree</i>(of a section) [20 marks]</p> <p>Question 5: <i>descriptive / narrative writing</i> <i>– crafting a piece of writing for impact</i> [40 marks]</p>	<p>Paper 1 Need to Know</p> <ol style="list-style-type: none"> 1. The main skill assessed in each question. 2. Which order you are going to tackle the questions in? Have a game plan, using your teacher’s advice. 3. Some descriptive and structural devices. 4. How to structure a narrative piece of writing e.g. how to start a story effectively.
<p>Paper 2 NON-FICTION 1 hour 45 minutes 7th June</p> <p>Question 1: <i>true or false</i> comprehension [4 marks]</p> <p>Question 2: <i>combine both sources and make inferences</i> [8 marks]</p> <p>Question 3: <i>close language analysis</i> [12 marks]</p> <p>Question 4: <i>compare the writers’ ideas, attitudes and methods</i> [16 marks]</p> <p>Question 5: <i>writing to express a viewpoint</i> [40 marks]</p>	<p>Paper 2 Need to Know</p> <ol style="list-style-type: none"> 1. The main skill assessed in each question. 2. Which order you are going to tackle the questions in? Have a game plan, using your teacher’s advice. 3. Some language devices- particularly rhetorical/ persuasive.

Improve your Skills

Reading is a really good way to improve your writing! Read fiction regularly to improve your narrative and descriptive writing for Paper 1- anything you enjoy reading is fine.

Read short stories and extracts of fiction and give yourself ten minutes to annotate anything interesting you notice about the writer’s choices – vocabulary, powerful imagery, sequence and structure. Search “Penguin Extracts” and use the Penguin website to find extracts from 19th, 20th and 21st century fiction. This helps with **Paper 1 skills**- both reading (Section A) and vocabulary for writing (Section B).

There are also lots of example extracts to read and analyse on: <https://www.writerswrite.com/books/excerpts>

Use the Literacy Shed website to find example pictures for **Paper 1 Question 5**. Pick an image and write a description inspired by it, trying to include a wide range of powerful vocabulary. You could use one of the story openers instead of an image as the first line. <https://www.literacyshed.com/story-starters.html>

Use the Guardian and the Independent online to read examples of opinion writing and writing to express a viewpoint for **Paper 2**. Read and annotate/analyse examples of opinion/comment pieces of journalism, label the devices you find and the impact they have and then write your own article expressing your views on the topic for **Paper 2 Question 5**.

Further Support

**ENGLISH CLINIC:
EVERY MONDAY
AFTER SCHOOL IN
THE ENGLISH
COMPUTER ROOM.**

English-Literature

<p>Paper 1 1 hour 45 minutes 15th May</p> <p>Section A: <i>Shakespeare – write about an extract in detail and make links to the whole play</i> [30 marks + 4 for accurate writing / SPaG]</p> <p>Section B: <i>19th century novel- write about an extract in detail and make links to the whole novel</i> [30 marks]</p>	<p>Paper 1 Need to Know</p> <p>Plot, key characters and themes of your Shakespeare play</p> <p>Plot, key characters and themes of your 19th century novel</p> <p>A range of quotations from both texts</p> <p>Important historical context for both texts</p>
<p>Paper 2 2 hours 15 minutes 23rd May</p> <p>Section A: <i>Modern Text- choice of two questions, one essay about the whole text, no extract</i> [30 marks + 4 for accurate writing / SPaG]</p> <p>Section B: <i>poetry anthology- one poem given, compare to one other from the anthology</i> [30 marks]</p> <p>Section C: <i>part 1- unseen poem</i> [24 marks] <i>part 2- compare the poem from part 1 to another unseen poem</i> [8 marks]</p>	<p>Paper 2 Need to Know</p> <p>Plot, key characters, important context and themes of your modern text</p> <p>A range of quotations from your modern text</p> <p>A few quotations from each poem</p> <p>Themes, structure, context and notable/interesting poetic devices for each poem- know several really well.</p> <p>Know which poems could be compared/linked and how</p> <p>Strategies for reading Unseen Poems</p>

Learning Quotations: Try to be as interactive as possible: group and rearrange them, display them, analyse them, ask friends and family to test you on them. Keep quotations to learn as short as possible- only the most interesting and useful words.

Improve your Knowledge of the Text: Use the detailed quizzes on Doodle to recap key textual knowledge. Go back over quizzes you have been set and improve your score.

Re-read significant moments and key extracts of your set texts- re-reading and annotating is a must-do!

Make mind maps for each key character and theme which include historical context, quotations, the writer's methods and important points. Use the 'blank page' method to see how much you can remember.

Going the Extra Mile: Read the wider reading and literary criticism articles from The British Library on Doodle entitled "Optional Wider Reading." Write down any useful words for discussing the text and interesting information or ideas.

Practising your Analytical Skills: Use the following website to practice reading and analysing Unseen Poetry: <https://www.poetryfoundation.org/>. Try spending 10 minutes analysing the poem of the day.

For your set texts, put a key quotation in the middle of a page and annotate it in as much detail as possible- subject specific terminology, links to elsewhere in the text, connotations, possible interpretations etc.

Improving your Essays: Find or write your own exam-style questions focused on the key themes, characters, ideas and extracts. Plan your answer- you could write part or all of the answer in timed conditions. Also, try redrafting your answers using teacher feedback.

Further Ideas and Support

These documents are available on Doodle if you haven't already got a copy:

10 ways to memorise a quotation

10 steps to read an unseen poem

Literature Revision Checklist

ENGLISH CLINIC: EVERY MONDAY AFTER SCHOOL IN THE ENGLISH COMPUTER ROOM.

Key Reminders

Know your texts really well

Have ideas and points to make about key moments, characters and themes

**Marks are available for historical context
You really need to know your quotations off by heart!**

Food & Nutrition: Mock revision topics

Year 11 - Skills students need to demonstrate when preparing ingredients and cooking and presenting dishes.			
Skill No	Skill group	Techniques	Achieved
1	Knife Skills	Fillet a chicken breast	
		Portion a chicken	
		Remove fat & rind from meat	
		Fillet Fish	
		Slice meat evenly	
		Bridge hold & claw grip	
2	Prepare fruit & veg	Peel, slice, dice fruit & vegetables into even sized pieces	
		Mash, shred, scissor snip, scoop, crush, grate, peel, segment	
		De-skin, de-seed, blanch, shape, pipe, blend, juice	
3	Prepare, combine & shape	Prepare garnishes	
		Roll, wrap, skewer, mix, coat, layer meat, fish & veg	
4	Tenderise & marinade	Shape & bind wet mixtures	
		Show how acids denature proteins by using a marinade	
5	Select & adjust cooking	Show how marinades add flavour & moisture	
		Adjust cooking processes and times to suit dish	
6	Weigh & measure	Weigh out solids & liquids accurately	
7	Preparation of equipment	Grease, line and flour evenly	
8	Use of equipment	Blender	
		Food processor, mixer	
		Microwave oven	
9	Water cooking	Steaming	
		Blanching	
		Poaching	
10	Dry heat cooking	Dry fry	
		Pan or shallow fry	
		Stir-fry	
11	Grill	Char	
		Toast & grill	
12	Oven	Bake	
		Roast	
		Casserole	
13	Sauces	Braise	
		Roux	
		All in one	
		Infused sauce - Veloute/bechamel	
		Reduction sauce	
14	Set a mixture (gelation)	Emulsion sauce	
		Use starch to set mixtures - custard/cheesecake	
15	Set a mixture (coagulation)	Use protein to set mixture - quiche/choux	
16	Raising agents	Eggs (collodial foam)	
		Chemical - SR flour, baking powder, bicarbonate of soda	
		Steam - choux buns	
17	Dough	Shortening - pastry	
		Gluten formation - bread	
		Fermentation - proving	
18	Shaping & finishing	Rolling out accurately	
		Pasta machine	
		Lining flan dish	
		Creating layers - puff pastry/palmiers	
		Proving/resting	
		Glaze & finishing	
		Piping choux	
		Homemade pasta	
		Flat breads, rolls, pizza	
19	Test readiness	Temperature probe	
		Knife/skewer	
		Check if bite is correct	
		Check colour	
		Sounds cooked - bread	
20	Judge sensory properties	Taste & season during cooking	
		Alter taste & aroma	
		Change texture & flavour (browning, dextrinization, glaze, crumb)	
		Garnishing & decorative techniques	
		Portion & present	

Food & Nutrition

Mock revision topics

Term 1			
Food Commodities			
Bread			
Fruit & Vegetables			
Cereals & sauces			
Provenance & processing			
Chicken			
Fish			
Term 2 & 3			
Nutrition and healthy eating			
Carbohydrates			
Vitamins & Minerals			
Protein			
Fats			
Macronutrients & micronutrients			
Nutritional values (sources/deficiencies)			
Food Allergies & intolerances			
Term 1 & 2 & 3			
Health, Safety and Hygiene			
Food hygiene			
COSHH			
HACCP (Hazard Analysis Critical Control Points)			
Types of bacteria			
Key temperatures			
First Aid			
Year 11 Term 1 Legislation			
Role of the environmental health officer (EHO)			
Food hygiene regulations			
HASAWA (Health and Safety at Work Act)			
Risk Assessment			
Fire Prevention			
The Health and Safety Executive (HSE)			
Food Science			
Chemical & physical structure			
Enzymic browning			
Effects of heat			
Denaturation & coagulation			
Good bacteria			
Dietary considerations			
Bone health			
Milk alternatives			
Heart health			
Portion control and costing			
Why portion control is essential			
Equipment used in portion control			
Costing- food costs, overheads, staff wages, profit,			
Specialist equipment			
Hand equipment			
Power equipment			
Methods of cooking			
Communication and record keeping			
Environmental issues			
Reduce, recycle, reuse- the Three Rs			
Food packaging			
Types of packaging			
What's on the food label			
Food Assessments			

French

Green= you feel confident about a wide range of vocabulary for this topic and you have practiced reading, listening and writing tasks from your revision guides with success

Amber= you know some vocabulary and you have practiced at least one skill for this topic

Red= You haven't revised this topic

AQA Personalised Learning Checklist-French

Here is a checklist of all the GCSE topics. Indicate your level of knowledge with Green (secure), Amber (nearly there), Red (insecure) at the key points below.

The topics in red italic are topics you haven't yet covered

	Pre mock	Jan	March	May
Identity and Culture				
Family				
Friends				
Marriage/partnership				
Social Media				
How you use the Internet				
Socialising- arranging to go out				
Celebrations				
Customs and Festivals in French speaking countries				
Hobbies and interests				
Reading				
Music				
Sports				
Types of film				
Television programmes				
Food and eating out				
Local, national, international and global areas of interest				
House and home				
Town				
Region				
<i>Volunteering</i>				
<i>Charity work</i>				
<i>Healthy/unhealthy living</i>				
<i>Poverty/homelessness</i>				
<i>Environment</i>				
Holidays				
Transport				
Weather				
Eating out				
Sports events				
Music events				
Shopping for food				
Shopping for clothes				

History

History Paper 1: The British sector of the Western Front, 1914-18: injuries, treatment and the trenches.

	Before revision/ WTM	After revision/ WTM
The British sector of Western front and the theatre of war in Flanders and northern France: the Ypres salient, the Somme, Arras and Cambrai.		
The trench system - its construction and organisation, including frontline and support trenches. The use of mines at Hill 60 near Ypres and the expansion of tunnels, caves and quarries at Arras. Significance for medical treatment of the nature of the terrain and problems of the transport and communications infrastructure.		
Conditions requiring medical treatment on the Western Front, including problems of ill health arising from the trench environment. The nature of wounds from rifles and explosives. The problem of shrapnel, wound infection and increased numbers of head injuries. The effects of gas attacks.		
The work of the RAMC and FANY. The system of transport: stretcher bearers, horse and motor ambulances.		
The stages of treatment areas: aid post and field ambulance, dressing station, casualty clearing station, base hospital. The underground hospital at Arras.		
The significance of the Western Front for experiments in surgery and medicine: new techniques in the treatment of wounds and infection, the Thomas splint, the use of mobile x-ray units the creation of a blood bank for the Battle of Cambrai.		
The historical context of medicine in the early twentieth century: the understanding of infection and move towards aseptic surgery; the development of x-rays; blood transfusions and developments in the storage of blood.		
Knowledge of national sources relevant to the period and issue, e.g. army records, national newspapers, government reports, medical articles.		
Knowledge of local sources relevant to the period and issue, e.g. personal accounts, photographs, hospital records, army statistics.		
Recognition of the strengths and weaknesses of different types of source for specific enquiries.		
Framing of questions relevant to the pursuit of a specific enquiry.		
Selection of appropriate sources for specific investigations.		

History

Edexcel History Medicine in Britain, c1250-present.			Before revision/ WTM	After Revision/ WTM
c1250 - c1500: Medicine in medieval England	Ideas about the cause of disease and illness	Supernatural and religious explanations of the cause of disease		
		Rational explanations: the Theory of the Four Humours		
		Rational explanations: the Miasma Theory		
		The continuing influence in England of Hippocrates and Galen		
	Approaches to prevention and treatment	Approaches to prevention and treatment: religious actions		
		Approaches to prevention and treatment: bloodletting and purging		
		Approaches to prevention and treatment: purifying the air		
Approaches to prevention and treatment: use of remedies				
CASE STUDY	New and traditional approaches to hospital care in the C13th			
	The role of the physician, apothecary and barber surgeon in treatment and care			
c1500 - c1700: The Medical Renaissance in England	Ideas about the cause of disease and illness	Continuity and change in explanations of the cause of disease and illness		
		A scientific approach, including the work of Thomas Sydenham in improving diagnosis		
		The influence of the Printing Press		
	Approaches to prevention and treatment	The work of the Royal Society on the transmission of ideas		
		Continuity in approaches to prevention, treatment and care in the community and in hospitals.		
	CASE STUDIES	Change in care and treatment: improvements in medical training and the influence in England of the work of Vesalius.		
		William Harvey and the discovery of the circulation of the blood		
c1700 - c1900: Medicine in C18th and C19th Britain	Ideas about the cause of disease & illness	Dealing with the Black Death, 1348-49; approaches to treatment and attempts to prevent its spread.		
		Continuity and change in explanations of the cause of disease and illness		
	Approaches to prevention and treatment	The influence in Britain of Pasteur's Germ Theory and Koch's work on microbes		
		The extent of change in care and treatment: improvements in hospital care and the influence of Nightingale		
		The impact of anaesthetics and antiseptics on surgery		
		New approaches to prevention: the development and use of vaccinations		
	CASE STUDIES	New approaches to prevention: the Public Health Act 1875		
Jenner and the development of vaccination				
c1900 - present: Medicine in modern Britain	Ideas about the cause of disease and illness	Fighting Cholera in London, 1854; attempts to prevent its spread; the significance of Snow and the Broad Street pump		
		Advances in understanding the causes of illness and disease: the influence of genetics		
		Advances in understanding the causes of illness and disease: the influence of lifestyle factors		
	Approaches to prevention and treatment	Improvements in diagnosis: the impact of the availability of blood tests, scans and monitors		
		The extent of change in care and treatment. The impact of the NHS; improved access to care.		
		The extent of change in care and treatment. The impact of science and technology; advances in medicines, including magic bullets and antibiotics.		
		The extent of change in care and treatment. The impact of science and technology; high-tech medical and surgical treatment in hospitals.		
CASE STUDIES	New approaches to prevention: mass vaccinations and government lifestyle campaigns.			
	Fleming, Florey and Chain's development of penicillin.			
	The fight against lung cancer in the C21st: the use of science and technology in diagnosis and treatment; government action.			

History

Edexcel 1-9 Early Elizabethan England 1558-88 Paper 2

		Before revision/ WTM	After revision/ WTM
Unit 1: Queen, government and religion, 1558-69	What was Elizabethan society like in 1558?		
	The accession of Elizabeth I		
	What problems did Elizabeth have? Legitimacy, gender, marriage, character and strength		
	What challenges did Elizabeth face? French threat and financial weaknesses		
	What was the religious settlement		
	How was the religious settlement viewed by the Puritans and Catholics		
	How extensive were religious threats? Puritan and Catholic threat		
	Who was Mary, Queen of Scots and why was she kept in captivity in England?		
	Why was Mary Queen of Scots executed? Causes and consequence		
Unit 2: Challenges at Home and Abroad 1569-88	How did the Northern Earls challenge Elizabeth? Causes and consequence		
	Ridolfi Plot - background, aims and outcome		
	Throckmorton Plot - background, aims and outcome		
	Babington Plot - background, aims and outcomes		
	Walsingham and spies		
	Relations with England and Spain before 1585		
	Causes of the war between England and Spain		
	The Spanish Armada 1588 - background, plans, results		
Reasons for England's victory and the end of the Spanish threat			
Unit 3: Elizabethan society in the Age of Exploration, 1558-88	How did society change? Home, school, university, sport, leisure, hobbies		
	Problem of the poor - Long and Short term reasons		
	How were attitudes towards to poor changing?		
	How successful was the exploratory commission? new technology		
	Drake's circumnavigation - reasons and successes		
	Walter Raleigh - who was he and the reasons for the colonisation of Virginia		
Failure of Virginia			

History

Superpower Relations 1941-91 Paper 2	Before revisi- on / WTM	After Revisi- on/ WTM
What were the Ideological differences between East and West before and during WWII? Nazi Soviet Pact, Communism, Capitalism, Stalin, VE Day		
Tehran Conference		
Potsdam Conference		
Yalta Conference		
Long Telegram		
Novikov Telegram		
Iron Curtain Speech		
Truman Doctrine		
Marshall Plan, 1947		
How did the Soviets create a buffer zone? The Warsaw uprising and Czechoslovakia		
How did the Soviets respond to Marshall aid? Comecon, Cominform		
Why did Berlin become a source of tension? Blockade, airlift		
How did Berlin increase tensions? NATO, Federal Republic of Germany, DDR, A-bomb		
How did the arms race create increased tension? Eisenhower, Kruschchev, Hydrogen bomb, IC-BM's, Warsaw Pact		
What happened in the Hungarian uprising?		
What was the response to the uprising?		
Why was Berlin in crisis in 1958? refugee problem, Berlin Ultimatum, summit meetings of 1959-61		
Why was the construction of Berlin Wall a significant event?		
How important was the Wall for US-Soviet relations? JFK visits Berlin 1963		
Why did Czechoslovakia oppose Soviet control? Prague Spring		
How did The Soviets handle the uprising? Brezhnev Doctrine		
How did the World react to the uprising?		
What was The USA role in Cuba pre-revolution?		
How did the Soviets develop relations with Cuba? Cuban Revolution and refusal of USA to recognise Castro's government		
How did The Bay of Pigs create increased tension between USA-USSR?		
How was a nuclear war avoided in 1962?		
What were the consequences of the Cuban Missile Crisis? Hotline, Limited Test Ban Treaty, Outer Space Treaty and Nuclear non-proliferation Treaty		
What was Détente?		
SALT 1 and SALT 2		
Helsinki Accords		
How effective was the period of Détente in reducing tension?		
What was Raegan's approach to The Soviet Union? Strategic Defence Programme, 2nd Cold War		
How did Gorbachev change the relationship between USSR-USA? New thinking, INF treaty, peaceful coexistence		
Why did Afghanistan become a flashpoint of the Cold War?		
Why was the Olympic games a flashpoint of The Cold War? Moscow and LA		
What was Carter's view on the Cold War?		
How did Gorbachev bring an end to The Cold War?		
How significant was the collapse of The Berlin Wall?		
How did the Soviet bloc collapse? Warsaw Pact breakdown		

Geography

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Mock exams fortnight	
Date	01/10/2018	08/10/2018	15/10/2018	22/10/2018	29/10/2018	05/11/2018	12/11/2018	19/11/2018	26/11/2018
Topic to revise	Tectonic Hazards	Weather Hazards	Climate change	Coasts	Rivers	Physical Fieldwork	Human fieldwork	During this two week period you will only have time for brief revision in preparation for the next exam	
Q Practice	Exam Practice					Exam Practice			
Being taught in lesson	Ecosystems	Rainforests	Rainforests	Rainforest	Hot Deserts	Hot Deserts	Hot deserts		

Paper 1: 1 hour 30 mins—Living with the Physical Environment

PLC Knowledge Checker Living in the Physical Environment		CGP Revision Guide (green)	CGP Exam Practice Workbook (white)	Red- Weak	Amber - some revision	Green- confident
Can you.....						
<u>Natural hazards</u>						
Group different types of natural hazards		p2				
Explain factors affecting hazard risk		p2				
<u>Tectonic hazards</u>						
Describe and explain the distribution of earthquakes and volcanoes		p4	p4 & 5			
Explain the processes involved in plate movement; Constructive		p3	p4 & 5			
Explain the processes involved in plate movement; Destructive		p3	p4 & 5			
Explain the processes involved in plate movement; conservative		p3	p4 & 5			
Assess and compare the impacts & responses of an earthquake in two contrasting areas of the world (LIC/HIC)		p5	P6 & 7			
Explain the causes, impacts and response of an earthquake in a HIC Christchurch						
Explain the causes, impacts and response of an earthquake in a LIC Haiti						
Explain why people choose to live in tectonically active areas		p8	p8			
Examine how countries are reducing the risk of tectonic hazards via planning, predicting and preparing		p8	P6&7			

Geography

PLC Knowledge Checker Living in the Physical Environment Can you.....	Revision Guide CGP	Exam Practice Workbook CGP	Red- Weak	Amber - some revision	Green- confident
<u>Weather hazards</u>					
Describe and explain the global atmospheric circulation	p9	p9			
Describe the distribution of tropical storms	p10	p10			
Explain how tropical storms are formed	p10	p10			
Examine the structure of a tropical storm and their associated features	p10	p10			
Assess the causes and impacts of a named tropical storm	p11	p11&12			
Examine how countries are reducing the effects of tropical storms	p12	p11&12			
Know the different types of weather hazards in the UK	p13	p13			
Assess the causes and impacts of a named extreme weather event in the UK Somerset Level					
<u>Floods</u>					
<u>Climate change</u>					
Evaluate the evidence for climate change	15	p15			
Explain the natural causes of climate change	p16	p15			
Explain the human causes of climate change	p16	p15			
Explain the effects of climate change	p17	P16			
Examine how the impacts of climate change can be managed via adaptation and mitigation	p18	p17			
<u>Ecosystems</u>					
Define what an ecosystem is and know their key components	p20	p18			
Explain changes to an ecosystem can have a knock on effect on its features	p20	p18			
Describe and explain the distribution of global ecosystems	p21	p19			
<u>Tropical rainforests</u>					
Describe and explain the physical characteristics of tropical rainforests: Climate, soils and vegetation	p22	p20&21			
Describe how plants and animals have adapted to living in the TRF	p23	p21			
Examine the causes of deforestation	p24	p22			
Evaluate the impacts deforestation with a named case study Malaysia					
Know the importance of TRF and ways in which they can be managed effectively	p26&27	p23			
Explain how TRF can be managed sustainably with key examples	p26&27	p23&24			
<u>Hot deserts</u>					
Describe and explain the global distribution of hot deserts	p28	p25			
Describe and explain the physical characteristics of hot deserts: Climate, soils and vegetation (and examine their interaction).	p28&29	p25&26			
Assess the opportunities for developments in hot deserts with a named example Thar Desert		p27			
Evaluate the challenges faced when developing in a hot desert with a named example Thar Desert		p27			
Describe and explain the causes of desertification	p31	p28			
Examine how countries are reducing the risk desertification	p31	p28			

Geography

PLC Knowledge Checker Living in the Physical Environment Can you.....	Revision Guide CGP	Exam Practice Workbook CGP	Red- Weak	Amber - some revision	Green- confident
<u>UK Physical landscapes</u>					
Explain the different relief across the UK	p37				
Read a cross section of contour lines on an OS map	p118				
<u>Coastal landscapes in the UK</u>					
Describe and explain the characteristics of both constructive and destructive waves	p38				
Explain the different types of sub aerial processes (weathering and mass movement)	p38	p33			
Describe the different types of erosion	p39	p34&35			
Identify and explain how a variety of erosional landforms are created	p39	p34&35			
Describe the processes of transportation e.g. longshore drift and deposition	p40&41	p36&37			
Identify and explain how a variety of depositional landforms are created	p40&41	p36&37			
Know a named case study and explain how different processes and factors have influenced the coast Swanage, Dorset	p43				
Assess how coasts can be managed using hard engineering techniques	p44	p38			
Assess how coasts can be managed using soft engineering techniques	p44	p38			
Explain the effectiveness of a managed retreat	p44	p38			
Evaluate the management of a named coastline. Swanage, Dorset					
<u>River landscapes in the UK</u>					
Recognise the difference in long and cross river profile and how the river changes downstream	p47	p39			
Describe and explain the different processes of erosion, transportation and deposition	p47&48	p40			
Describe and explain the formation of key erosional features (waterfall and gorges)	p49	p41			
Describe and explain the formation of key middle course features (meanders and ox bow lakes)	p50	p42			
Describe and explain the formation of key lower course features (floodplains & estuaries)	p51	p43			
Identify river landforms using OS maps	p52				
Examine the changes of a named river from source to mouth. River Clyde, Scotland	p53				
Explain the physical and human causes of flooding	p54	p44			
Read and analyse the difference in storm hydrographs and lag times (urban and rural)	p54	p44			
Assess how rivers can be managed using hard engineering techniques	p55	p45			
Assess how rivers can be managed using soft engineering techniques	p55	p45			
Assess how a named area has been impacted by flooding and the solutions put in place to limit the risk. Sommer Set Levels					

Geography

PLC Knowledge Checker-November Mock

Paper 3 45 minutes-Geographical Applications-Section B Fieldwork

	Revised?	Red - Weak	Amber - some revision	Green - confident
For both your physical and human investigations				
Why is the question suitable for a geographical enquiry				
Methods of data collection, types of data and why you collected it				
Risks involved and how they could be managed				
How you presented this data and why				
Know what your results showed				
Know what conclusion you drew from your data				
Evaluate the strengths and limitations of your investigation and know how you would improve it. (reliability and accuracy)				
You should be able to complete various graphs				
Be able to calculate the mean, mode, median and range of a data set				
Calculate the interquartile range				
Calculate percentages				
Be able to rank a list of data				
Read a map using 4 & 6 figure grid references, measure distances				
Give the advantages and disadvantages of different types of data presentation (graphs/photos/maps etc)				

German

Green= you feel confident about a wide range of vocabulary for this topic and you have practised reading, listening and writing tasks from your revision guides with success

Amber= you know some vocabulary and you have practised at least one skill for this topic

Red= You haven't revised this topic

AQA Personalised Learning Checklist - German

Here is a checklist of all the GCSE topics. Indicate your level of knowledge with Green (secure), Amber (nearly there), Red (insecure) at the key points below.

The topics in red italic are topics you haven't yet covered

	Pre mock	Jan	March	May
Identity and Culture				
Family				
Friends				
Marriage/partnership				
Social Media				
How you use the Internet				
Socialising- arranging to go out				
Celebrations				
Customs and Festivals in German speaking countries				
Hobbies and interests				
Reading				
Music				
Sports				
Types of film				
Television programmes				
Food and eating out				
Local, national, international and global areas of interest				
House and home				
Town				
Region				
<i>Volunteering</i>				
<i>Charity work</i>				
<i>Healthy/unhealthy living</i>				
<i>Poverty/homelessness</i>				
<i>Environment</i>				
Holidays				
Transport				
Weather				
Eating out				
Sports events				
Music events				
Shopping for food				
Shopping for clothes				

ICT

Learning objective	Revised
Understand the tools and techniques that can be used to initiate and plan solutions	
1.1 Phases of the project life cycle and the tasks carried out in each phase	
1.2 Interaction and iteration between the phases of the project life cycle	
1.3 The inputs and outputs of each stage of the project life cycle	
1.4 Initial project considerations	
Understand the factors to be considered when collecting and processing data and storing data/information	
4.4 Prevention Measures	
4.5 Current legislation, its implications and applications	
Understand the tools and techniques that can be used to initiate and plan solutions	
1.5 Planning tools and the software types used to develop project plans	
Understand how data and information can be collected, stored and used	
3.1 Data types	
3.2 Information	
Understand the different methods of processing data and presenting information	
6.1 Selection and justification of the appropriate tools and techniques and formats to process data to meet the defined objectives in a given context	
6.2 Purpose and suitability of presenting methods	
6.3 The resources required for presenting information and data and the appropriateness of the use of these in context	
Understand how data and information can be collected, stored and used	
3.3 Methods used to collect and store data and information, and the appropriateness of the use of these in a given context	
3.4 Storage and the appropriateness of the use of these in context	
3.5 Use of data in a given context including Big Data	
Understand the factors to be considered when collecting and processing data and storing data/information	
4.1 Types of threats	
4.2 The vulnerabilities –which can be exploited in a cyber-security attack	
4.3 The impacts of a cyber-security attack	
4.4 (DETAILED) Prevention methods	
Understand the factors to be considered when collecting and processing data and storing data/information	
4.5 Current relevant IT legislation, at time of delivery, its implications and applications	
4.6 The importance of validity, reliability and bias when collecting and using data and information	

Latin

Paper 1: Latin Language 50% of GCSE, 1hr 30 exam	Before revision / WTM	After Revision/ WTM
Nouns in all cases and declensions		
Adjectives comparative and superlative		
Irregular comparatives/superlatives - bonus, malus, magnus, parvus multus, multi		
Adverbs - ending in "e" or in "iter"		
Personal Pronouns ego, tu, nos, and vos, se		
Pronoun is, ea, id (he, she it)		
Pronoun hic, ille (this and that)		
Pronoun ipse (self)		
Relative pronoun - qui, quae, quod (who, which)		
Prepositions (see the DVL)		
Conjunctions (see the DVL)		
Present tense (o/m, s, t, mus, tis, nt)		
Imperfect tense (bam, bas, bat etc)		
Perfect tense (I, isti, it etc)		
Pluperfect tense (eram, eras, erat etc)		
Future tense (bo, bis, bit or am, es, et)		
Irregular verbs - sum, possum, eo, volo, nolo, fero		
Present passive (tur, ntur)		
Imperfect passive (batur, bantur)		
Perfect passive (portatus est, portati sunt)		
Deponent verbs (conor, e/pro/in/re- gredior, loquor, morior, sequor)		
Direct commands (take off the re from the infinitive)		
Negative commands - noli + infinitive		
Direct questions (quis, ubi, quid, quo, qualis, quo modo, quantus, nonne (yes), num (not))		
Numbers - 1-10, 100, and 1000		
Present participle (ns, nt)		
Perfect passive participle (ends like a noun, but is a verb) "having been ...ed"		
Perfect active participle (will only come from your 8 deponent verbs) "having ...ed"		
Indirect Statement (accusative and infinitive). Translate it "that"		
Imperfect subjunctive (infinitive plus present tense ending)		
Pluperfect subjunctive (issem, isses, isset etc)		
Purpose clause (ut + subjunctive), "in order to..."		
Indirect commands (an order word, with ut + subjunctive)		
Result clause (ut + subjunctive) "so much that...". Look for tam, tot, adeo, talis, tantus		
cum + abl = with, cum + subjunctive = when/since		
Indirect questions (question word + subjunctive)		
Vocab		

Maths-Foundation

These materials reference resources from the new 'Hegarty Maths' website to which all students have a login.

Geometry and measures

Foundation Skills List

Topics	Clip Number	R	A	G
Geometric notation	456			
Points and lines	821			
Properties of 2D shapes	822, 823, 824, 825, 826, 827, 828			
Angle on a line	477, 478			
Complementary angles	815			
Angles around a point	812, 813, 814, 479, 480			
Angles on parallel lines	481, 482, 483			
Angles in a triangle	484, 485, 486, 487			
Angles in polygons	560, 561, 562, 563, 564			
Translations	637, 638			
Reflections	639, 640, 641			
Enlargements	642, 643			
Rotations	648, 649			
Describing transformations	650, 651, 652, 653, 654			
Congruence	680, 681			
Properties of 3D shapes	829, 830, 831, 832			
Nets of 3D shapes	833, 834, 835, 836			
Metric units	691			
Units of measure: Length	692, 693, 694			
Units of measure: Mass	695, 696, 697			
Units of measure: Volume/capacity	698, 699, 702, 703, 704			
Units of measure: Time	709, 710, 711			
Units of measure: Area	700, 701			
Imperial units	705, 706			
Currency conversion	707, 708			
Conversion graphs	712, 713			
Compound units: Speed	716, 717, 718, 719, 720, 724			
Angles: Recognising and Estimating	455, 457			
Angles: Measuring and Drawing	458, 459, 460, 461			
Bearings	492, 493, 494, 495			
Calculating perimeter	549, 550, 551, 552			
Calculating area	554, 555, 556, 557, 558, 559			
Circles	592			
Circumference	534, 535, 536			
Circle area	539, 540, 541			
Surface area	584, 585, 586			
Volume of cuboids	568, 569			
Volume of prisms and cylinders	570, 571, 572, 573, 574, 575			
Similar shapes	608, 609, 610, 611			

Probability

Foundation Skills List

Topics	Clip Number	R	A	G
Probability scale	349, 350			
Probability of single events	351, 352, 353, 354			
Experimental probability	355, 356			
Multiple event probability	358, 359, 360			
Listing elements in a set	370, 371			
Venn diagrams	372, 373, 374, 375, 376, 377, 378, 379, 380			
Probability from Venn diagrams	383, 384			
Frequency trees	368, 369			
Listing systematically	670			

Statistics

Topics	Clip Number	R	A	G
Collecting data, frequency tables	401, 402, 403			
Two-way tables	422, 423, 424			
Bar charts	425			
Pictograms	426			
Pie charts	427, 428, 429			
Stem and leaf diagrams	430, 431, 432, 433			
Mode	404, 415			
Mean	405, 406, 407, 408, 417			
Median	409, 416			
Range	410, 414			
Choosing averages	413			
Averages problems	419, 420			
Scatter graphs	453, 454			

Number

Topics	Clip Number	R	A	G
Ordering positive integers	13, 14			
Ordering negative integers	37			
Ordering decimals	45, 46			
Ordering fractions	60			
Addition and subtraction of positive integers	18, 19, 20			
Multiplication and division of positive integers	21, 22, 23, 144, 145			
Addition and subtraction of negative integers	38, 39, 40, 41			
Multiplication and division of negative numbers	42, 43			
Addition and subtraction of decimals	47			
Multiplication and division of decimals	48, 49, 50, 51, 135, 136			
Addition and subtraction of fractions	65, 66			
Multiplication and division of fractions	67, 68, 69, 70, 71, 72			
Place value: multiplying and dividing by 10	15, 16			
Order of operations	24, 44, 120, 150			
Prime numbers, prime factorisation	28, 29, 30			
Factors, multiples, HCF and LCM	27, 31, 32, 33, 34, 35, 36			
Powers and roots	99, 100, 101			
Using standard form	121, 122, 123, 124			
Calculating with standard form	125, 126, 127, 128			
Converting decimals to/from fractions	52, 53, 73, 74, 149			
Converting percentages to/from fractions	75, 76, 82, 149			
Converting percentages to/from decimals	55, 83			
Simplifying fractions	59, 61			
Mixed numbers and improper fractions	63, 64			
Fractions of amounts	62, 77			
Increasing/decreasing by fractions	78, 79			
Fraction problems	80			
Percentages of amounts	84, 85, 86, 87			
Percentage increase/decrease	88, 89, 90			
Percentage change	97			
Reverse percentages	96			
Simple interest	93			
Percentage problems	98			
Rounding	17, 56, 134			
Rounding to significant figures	130			
Estimating answers	129, 131, 132, 133			
Working with money	747, 748, 749, 750, 751			
Money problems	752, 753, 754			
Financial statements	757			
Income and rates of pay	755, 756			
Profit and loss	759, 760, 761, 762			
Best buys	763, 764, 765, 766, 767			

Algebra

Topics	Clip Number	R	A	G
Algebraic expressions	151, 152, 153			
Collecting like terms	156, 157			
Multiplying and dividing algebra	158, 159			
Substitution	155, 780, 781			
Algebra terminology	154			
Expanding brackets	160, 161			
Factorising expressions	167, 168, 169, 170, 171			
Index laws	173, 174			
Changing the subject	280, 281, 282, 283, 284			
Coordinates	199			
Midpoints	200			
Plotting straight line graphs	205, 206, 207			
Gradient	201, 202			
Distance-time graphs	Coming soon			
Sketch quadratic graphs	251, 257			
Linear equations	176, 177, 178, 179, 180, 181, 182, 183, 188, 189			
Linear equations on graphs	217			
Quadratic expressions	222			
Linear sequences	196, 197, 198			
Other sequences	261			

Ratio and proportion

Topics	Clip Number	R	A	G
Scale diagrams	864, 865, 866, 867, 868, 869			
Simplifying ratios	328, 329, 331			
Dividing in a ratio	332, 333, 334			
Fractions and ratio	330			
Direct proportion	339, 340, 341, 343			
Inverse proportion	342, 346			
Proportion graphs	348			
Recipes	739, 740, 741, 742			

Maths-Foundation

These materials reference resources from the new 'Hegarty Maths' website to which all students have a login.

Number

Topics	Clip Number	R	A	G
Calculating with roots and indices	102, 103, 104, 105, 106, 107			
Converting recurring decimals to fractions	54			
Repeated percentage change	91, 92			
Compound interest and depreciation	94, 95			
Upper and lower bounds	137, 138, 139			
Error intervals	774, 775, 776			
Financial statements	758			
Best buys	768, 769, 771, 772			

Algebra

Topics	Clip Number	R	A	G
Substitution	782, 783, 278			
Manipulating algebraic expressions	175			
Changing the subject	285, 286, 287			
Identities	154			
Expanding double brackets	162, 163, 164, 165			
Factorising quadratics	221, 223, 224			
Gradient	203, 204			
Equation of a straight line	208, 209, 210, 211, 212, 213			
Equation of a straight line: Parallel lines	214			
Quadratic graphs	252, 253, 254, 255			
Cubic graphs	298, 299			
Reciprocal graphs	300, 301			
Linear equations in one variable	184, 185, 186			
Quadratic equations	230, 234			
Simultaneous equations	190, 191, 192, 193, 194, 195			
Simultaneous equations on graphs	218, 219, 220			
Representing linear inequalities	265, 266, 267, 268			
Solving linear inequalities	269, 270, 271, 272			
Writing algebraic expressions and equations	151, 152, 153, 155, 188			
Fibonacci sequences	263			
Geometric sequences	264			
Quadratic sequences	247			

Ratio and proportion

Topics	Clip Number	R	A	G
Ratio problems	335, 336, 337, 338			
Scale drawings	870, 871			
Direct proportion	344, 345			
Inverse proportion	347			
Proportion graphs	348			

Geometry and measures

Topics	Clip Number	R	A	G
Angle problems	488, 489, 490, 491			
Angles in polygons	565			
Constructions	660, 661, 662, 663, 664, 665, 666, 667, 668, 669			
Locl	674, 675, 676, 677, 678, 679			
Congruence criteria	682, 683			
Enlargements	644, 645			
Plans and elevations of 3D shapes	837, 838, 839, 840, 841, 842, 843, 844			
Conversion problems	714, 715			
Compound units: Speed	721, 722, 723			
Compound units: Density	725, 726, 727, 728, 729, 731			
Compound units: Pressure	734, 735, 736, 737			
Other compound units	738			
Bearings	496			
Circumference	537, 538			
Circle area	542, 543			
Surface area	587, 588, 589, 590, 591			
Volume	576, 577, 579, 580, 581, 582			
Arc length	544, 545			
Sector area	546, 547			
Pythagoras' theorem	497, 498, 499, 501, 502			
Trigonometry	508, 509, 510, 511, 512, 513, 514, 515			
Similar shapes	612, 613, 614			
Vectors	622, 623, 624, 625, 626			

Probability

Topics	Clip Number	R	A	G
Experimental probability	357			
Independent events and probability trees	361, 362, 363			

Statistics

Topics	Clip Number	R	A	G
Types of data	392, 393			
Sampling	394, 395, 396, 397, 398			
Surveys	399, 400			
Time series	450, 451, 452			
Scatter graphs	453, 454			

Maths-Higher

These materials reference resources from the new 'Hegarty Maths' website to which all students have a login.

Geometry and measures

Topics	Clip Number	R	A	G
Congruence proofs	684, 685, 686, 687, 688, 689, 690			
Enlargements	646, 647			
Invariance	655			
Describe combined transformations	656, 657			
Circle theorems: Angles inside a circle	593, 594, 595, 596, 597			
Circle theorems: Tangents and chords	598, 599, 600, 601, 602			
Circle theorems multi-step	603, 604, 605, 606			
Prove circle theorems	816, 817, 818, 819, 820			
Compound units: Density problem solving	730, 732, 733			
Volume of frustums	578			
Volume: Problem solving	583			
Similar Shapes: Area	615, 616, 617			
Similar Shapes: Volume	618, 619, 620, 621			
Pythagoras' Theorem: Problem solving	503, 504			
Right-angled trigonometry: Non-calculator	306, 845, 846, 847, 848, 849, 850, 851, 852, 853			
Right-angled trigonometry: Problem solving	513, 514			
3D Pythagoras	505, 506, 507			
3D trigonometry	854, 855, 856, 857, 858, 859, 860, 861, 862, 863			
Sine rule for area	517, 518, 519			
Sine rule	521, 522, 523, 524, 525			
Cosine rule	527, 528, 529, 530			
Non-right-angled trigonometry: Problem solving	532, 533			
Bearings: Sine and cosine rule	531			
Vectors: Magnitude	627			
Vectors: Geometry problems	628, 629, 630, 631, 632, 633, 634, 635, 636			

Probability

Topics	Clip Number	R	A	G
Product rule for counting	671, 672, 673			
Conditional probability	364, 365, 366, 367, 389, 390			
Probability from Venn diagrams	385, 386, 387, 388, 391			

*WJEC (Wales) board only

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Statistics

Topics	Clip Number	R	A	G
Quartiles and interquartile range	411, 412			
Mean from grouped frequency tables	418			
Averages problems	421			
Cumulative frequency diagrams	437, 438, 439			
Box plots	434, 435, 436, 440			
Frequency polygons	441			
Histograms	442, 443, 444, 445, 446, 447, 448, 449			

Maths-Higher

These materials reference resources from the new 'Hegarty Maths' website to which all students have a login.

Number

Topics	Clip Number	R	A	G
Calculating with roots and fractional indices	108, 109, 110			
Surd: Definition and estimating	111, 112			
Surd: Simplifying, multiplying and dividing	113, 114, 115			
Surd: Expanding brackets	116, 117			
Surd: Rationalising the denominator	118, 119			
Best buys	770			
Error intervals	777			

Algebra

Topics	Clip Number	R	A	G
Substitution	784, 785, 786, 787			
Substitution: Equations of motion	788, 789			
Substitution: Important formulae	279			
Expanding triple brackets	166			
Expressions with algebraic fractions	172			
Linear equations with algebraic fractions	187			
Factorising quadratic expressions: ax^2+bx+c	225, 226, 227, 228			
Quadratic expressions: Algebraic fractions	229			
Quadratic expressions: Completing the square	235, 236, 237			
Quadratic equations: Factorising	231, 232, 233			
Quadratic equations: Quadratic formula	241, 242			
Quadratic equations: Completing the square	238, 239			
Quadratic equations: Algebraic fractions	244			
Quadratic equations in context	245			
Simultaneous equations: Quadratic/linear	246			
Manipulating powers	790, 791, 792, 793, 794, 795			
Exponential equations	796, 797, 798, 799			
Equation of a straight line: Perpendicular lines	215, 216			
Quadratic graphs: Turning points and discriminant	256, 243, 258			
Simultaneous equations on graphs: Quadratic/linear	259, 260			
Exponential graphs	302, 800, 801, 802, 803			
Exponential growth problems	804, 805, 806, 807			
Exponential decay problems	808, 809, 810, 811			
Trigonometric graphs	303, 304, 305, 306			
Graph transformations	307, 308, 309, 310, 311, 312, 313			

Algebra (continued)

Topics	Clip Number	R	A	G
Distance-time graphs	Coming soon			
Velocity-time graphs	Coming soon			
Financial graphs	Coming soon			
Rate of change graphs	Coming soon			
Estimating gradient from a curve	Coming soon			
Estimating area under a curve	Coming soon			
Equation of a circle	778, 779, 314, 315, 316, 317			
Circles and straight lines	318, 319, 320			
Linear inequalities as graph regions	273, 274, 275, 276			
Quadratic inequalities	277			
Function notation	288, 289			
Domain and range of functions	290, 291, 292			
Composite functions	293, 294			
Inverse functions	295, 296			
Functions: Problem solving	297			
Other sequences: Recurrence relations	262			
Quadratic sequences	247, 248, 249, 250			
Trial and improvement*	321			
Iteration and numerical methods	322, 323			
Proof and counter-examples	324			
Direct algebraic proof	325, 326, 327			

Ratio, proportion and rates of change

Topics	Clip Number	R	A	G
Algebraic direct proportion	344, 345			
Algebraic inverse proportion	347			

Media

Effective revision for GCSE Media Mock exam

There is a lot of content to remember.

Component 2 only will be tested in the November mock

Students will need to revise contents of their booklets and notes for each unit specifically on:

For Section A Television (moving image extract from set text IT crowd)

Representation of characters in the IT crowd

Industry production processes for the IT crowd

They will need to give specific examples from the set texts to support points they make so it is important to memorise key detail.

For Section B Music

Music website conventions (Katy Perry & Bruno Mars)

Context & content of Michael Jackson video

Again students will need to give examples from the set texts to support points they make.

Mind maps, flash cards mnemonics can all be useful tools to aid memory.

Music

This information is expanded in the **GCSE Music Mock Revision Handout**.

Area of Study 2 Concerto Through Time	Instrument Recognition	Identifying the solo woodwind instrument: Flute, Clarinet or Oboe
		Identifying the solo string instrument: Violin or Cello
		Identifying the solo brass instrument: Trumpet or French Horn
		Identifying the progression of the orchestra from Baroque to Classical to Romantic
	Relationship Between Soloist and Orchestra	Comparing 'Question and Answer' to 'Imitation'.
		Texture: Homophonic (Melody and Accompaniment) and Polyphonic.
		Describing melody and counter-melody.
		Describing the relationship when both seem to be playing the same.
	Periods of Music	3 musical characteristics of BAROQUE and a suitable composer
		3 musical characteristics of CLASSICAL and a suitable composer
3 musical characteristics of ROMANTIC and a suitable composer		
Suitable Venue: CONCERT HALL		
Area of Study 3: Rhythms of the World	Bhangra	Key Instruments from traditional roots
		Impact of modern technology
		Vocal techniques and language
		One example artist
		Characteristic rhythms (chaal).
Area of Study 4: Film Music	Instrument Recognition	See AoS 2
	Elements of Music	Describing Dynamics
		Describing Tempo
		Describing Harmony
		Describing Melody
		Describing Texture
Composers	Hans Zimmer / John Williams	
Types of Film Music	What would you expect to hear for each category of film?	
Area of Study 5: Conventions of Pop	Identifying Vocal Techniques	Falsetto, vibrato, belting, slide
		melisma, syllabic, direction of pitch, movement in step and leaps
	Accompaniment	Identifying Instruments
		Describing how they are played
	Piano	Piano techniques when accompanying a solo singer
	Guitar	Identifying the correct type of guitar
		Playing techniques common in rock music
	Drums	Hearing the separate part of the drum kit
Techniques, such as roll, fill, 4 to the floor kick		

PE-Paper 1

1. Skeletal System

Topic area	Learners must:
Location of major bones 	<ul style="list-style-type: none"> know the name and location of the following bones in the human body: <ul style="list-style-type: none"> cranium vertebrae ribs sternum clavicle scapula pelvis humerus ulna radius carpals metacarpals phalanges femur patella tibia fibula tarsals metatarsals.
Functions of the skeleton 	<ul style="list-style-type: none"> understand and be able to apply examples of how the skeleton provides or allows: <ul style="list-style-type: none"> support posture protection movement blood cell production storage of minerals.
Types of synovial joint	<ul style="list-style-type: none"> know the definition of a synovial joint know the following hinge joints: <ul style="list-style-type: none"> knee – articulating bones – femur, tibia elbow – articulating bones – humerus, radius, ulna know the following ball and socket joints: <ul style="list-style-type: none"> shoulder – articulating bones – humerus, scapula hip – articulating bones – pelvis, femur.

2. Muscular System

Topic area	Learners must:
Location of major muscle groups 	<ul style="list-style-type: none"> know the name and location of the following muscle groups in the human body and be able to apply their use to examples from physical activity/sport: <ul style="list-style-type: none"> deltoid trapezius latissimus dorsi pectorals biceps triceps abdominals quadriceps hamstrings gluteals gastrocnemius.
The roles of muscle in movement 	<ul style="list-style-type: none"> know the definitions and roles of the following and be able to apply them to examples from physical activity/sport: <ul style="list-style-type: none"> agonist antagonist fixator – antagonistic muscle action.

3. Movement Analysis

Topic area	Learners must:
Lever systems 	<ul style="list-style-type: none"> know the three classes of lever and their use in physical activity and sport: <ul style="list-style-type: none"> 1st class <ul style="list-style-type: none"> – neck 2nd class <ul style="list-style-type: none"> – ankle 3rd class <ul style="list-style-type: none"> – elbow know the definition of mechanical advantage.
Planes of movement and axes of rotation 	<ul style="list-style-type: none"> know the location of the planes of movement in the body and their application to physical activity and sport: <ul style="list-style-type: none"> frontal transverse sagittal know the location of the axes of rotation in the body and their application to physical activity and sport: <ul style="list-style-type: none"> frontal transverse longitudinal.

Topic area	Learners must:
Types of movement at hinge joints and ball and socket joints 	<ul style="list-style-type: none"> know the types of movement at hinge joints and be able to apply them to examples from physical activity/sport: <ul style="list-style-type: none"> flexion extension know the types of movement at ball and socket joints and be able to apply them to examples from physical activity/sport: <ul style="list-style-type: none"> flexion extension rotation abduction adduction circumduction.
Other components of joints	<ul style="list-style-type: none"> know the roles of: <ul style="list-style-type: none"> ligament cartilage tendons.

PE-Paper 1

4. CV and Respiratory System

Topic area	Learners must:
Structure and function of the cardiovascular system	<ul style="list-style-type: none"> know the double-circulatory system (systemic and pulmonary) know the different types of blood vessel: <ul style="list-style-type: none"> arteries capillaries veins understand the pathway of blood through the heart: <ul style="list-style-type: none"> atria ventricles bicuspid, tricuspid and semilunar valves septum and major blood vessels: <ul style="list-style-type: none"> aorta pulmonary artery vena cava pulmonary vein know the definitions of: <ul style="list-style-type: none"> heart rate stroke volume cardiac output know the role of red blood cells.
Structure and function of the respiratory system	<ul style="list-style-type: none"> understand the pathway of air through the respiratory system: <ul style="list-style-type: none"> mouth nose trachea bronchi bronchiole alveoli know the role of respiratory muscles in breathing: <ul style="list-style-type: none"> diaphragm intercostals know the definitions of: <ul style="list-style-type: none"> breathing rate tidal volume minute ventilation understand about alveoli as the site of gas exchange.
Aerobic and anaerobic exercise	<ul style="list-style-type: none"> know the definitions of: <ul style="list-style-type: none"> aerobic exercise anaerobic exercise be able to apply practical examples of aerobic and anaerobic activities in relation to intensity and duration.

5. Effects of Exercise on Body

Topic area	Learners must:
Short-term effects of exercise	<ul style="list-style-type: none"> understand the short-term effects of exercise on: <ul style="list-style-type: none"> muscle temperature heart rate, stroke volume, cardiac output redistribution of blood flow during exercise respiratory rate, tidal volume, minute ventilation oxygen to the working muscles lactic acid production be able to apply the effects to examples from physical activity/sport be able to collect and use data relating to short-term effects of exercise.
Long-term (training) effects of exercise	<ul style="list-style-type: none"> understand the long-term effects of exercise on: <ul style="list-style-type: none"> bone density hypertrophy of muscle muscular strength muscular endurance resistance to fatigue hypertrophy of the heart resting heart rate and resting stroke volume cardiac output rate of recovery aerobic capacity respiratory muscles tidal volume and minute volume during exercise capillarisation be able to apply the effects to examples from physical activity/sport be able to collect and use data relating to long-term effects of exercise.

6. Components of fitness

Topic area	Learners must
Components of fitness	<p>Know the following components of fitness:</p> <ul style="list-style-type: none"> cardiovascular endurance/stamina <ul style="list-style-type: none"> know the definition of cardiovascular endurance/stamina be able to apply practical examples where this component is particularly important in physical activity and sport know suitable tests for this component, including: <ul style="list-style-type: none"> Cooper 12 minute run/walk test multi-stage fitness test muscular endurance <ul style="list-style-type: none"> know the definition of muscular endurance be able to apply practical examples where this component is particularly important in physical activity and sport know suitable tests for this component, including: <ul style="list-style-type: none"> press-up test sit-up test speed <ul style="list-style-type: none"> know the definition of speed be able to apply practical examples where this component is particularly important in physical activity and sport know suitable tests for this component, including: <ul style="list-style-type: none"> 30m sprint test strength <ul style="list-style-type: none"> know the definition of strength be able to apply practical examples of where this component is particularly important in physical activity and sport know suitable tests for this component, including: <ul style="list-style-type: none"> grip strength dynamometer test 1 Repetition Maximum (RM)

Topic area	Learners must
Components of fitness cont.	<ul style="list-style-type: none"> power <ul style="list-style-type: none"> know the definition of power be able to apply practical examples of where this component is particularly important in physical activity and sport know suitable tests for this component, including: <ul style="list-style-type: none"> 'standing jump' or 'vertical jump' tests flexibility <ul style="list-style-type: none"> know the definition of flexibility be able to apply practical examples of where this component is particularly important in physical activity and sport know suitable tests for this component, including: <ul style="list-style-type: none"> 'sit and reach' test agility <ul style="list-style-type: none"> know the definition of agility be able to apply practical examples of where this component is particularly important in physical activity and sport know suitable tests for this component, including: <ul style="list-style-type: none"> Illinois agility test balance <ul style="list-style-type: none"> know the definition of balance be able to apply practical examples of where this component is particularly important in physical activity and sport know suitable tests for this component, including: <ul style="list-style-type: none"> 'stork stand' test co-ordination <ul style="list-style-type: none"> know the definition of co-ordination be able to apply practical examples of where this component is particularly important in physical activity and sport know suitable tests for this component, including: <ul style="list-style-type: none"> 'wall throw' test reaction time <ul style="list-style-type: none"> know the definition of reaction time be able to apply practical examples of where this component is particularly important in physical activity and sport know suitable tests for this component, including: <ul style="list-style-type: none"> reaction time ruler test be able to collect and use data relating to the components of fitness.

PE-Paper 1

7. Applying the Principles of Training

Topic area	Learners must:
Principles of training 	<ul style="list-style-type: none"> • know the following definitions of principles of training and be able to apply them to personal exercise/training programmes: <ul style="list-style-type: none"> ○ specificity ○ overload ○ progression ○ reversibility.
Optimising training 	<ul style="list-style-type: none"> • know the definition of the elements of FITT (Frequency, Intensity, Time, Type) and be able to apply these elements to personal exercise/training programmes • know different types of training, definitions and examples of: <ul style="list-style-type: none"> ○ continuous ○ fartlek ○ interval <ul style="list-style-type: none"> – circuit training – weight training – plyometrics – HIIT (High Intensity Interval Training). • understand the key components of a warm up and be able to apply examples: <ul style="list-style-type: none"> ○ pulse raising ○ mobility ○ stretching ○ dynamic movements ○ skill rehearsal • know the physical benefits of a warm up, including effects on: <ul style="list-style-type: none"> ○ warming up muscles/preparing the body for physical activity ○ body temperature ○ heart rate ○ flexibility of muscles and joints ○ pliability of ligaments and tendons ○ blood flow and oxygen to muscles ○ the speed of muscle contraction • understand the key components of a cool down and be able to apply examples: <ul style="list-style-type: none"> ○ low intensity exercise ○ stretching • know the physical benefits of a cool down, including: <ul style="list-style-type: none"> ○ helps the body's transition back to a resting state ○ gradually lowers heart rate ○ gradually lowers temperature ○ circulates blood and oxygen ○ gradually reduces breathing rate ○ increases removal of waste products such as lactic acid ○ reduces the risk of muscle soreness and stiffness ○ aids recovery by stretching muscles.

8. Preventing Injury

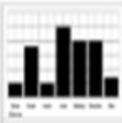
Topic area	Learners must:
Prevention of injury 	<ul style="list-style-type: none"> • understand how the risk of injury in physical activity and sport can be minimised and be able to apply examples, including: <ul style="list-style-type: none"> ○ personal protective equipment ○ correct clothing/footwear ○ appropriate level of competition ○ lifting and carrying equipment safely ○ use of warm up and cool down • know potential hazards in a range of physical activity and sport settings and be able to apply examples, including: <ul style="list-style-type: none"> ○ sports hall ○ fitness centre ○ playing field ○ artificial outdoor areas ○ swimming pool.

PE-Paper 2

Paper 2 – Red Book – Socio-Cultural Issues and Sports Psychology

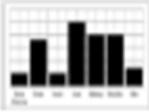
Please note – Nov 2018 Mock examination will test Sports Psychology.

Socio-Cultural Influences and Health, Fitness and Well –Being has not been delivered yet in Year 11.

Topic area	Learners must:
Characteristics of skilful movement 	<ul style="list-style-type: none"> • know the definition of motor skills • understand and be able to apply examples of the characteristics of skilful movement: <ul style="list-style-type: none"> ○ efficiency ○ pre-determined ○ co-ordinated ○ fluent ○ aesthetic.
Classification of skills 	<ul style="list-style-type: none"> • know continua used in the classification of skills, including: <ul style="list-style-type: none"> ○ simple to complex skills (difficulty continuum) ○ open to closed skills (environmental continuum) • be able to apply practical examples of skills for each continuum along with justification of their placement on both continua.
Goal setting  	<ul style="list-style-type: none"> • understand and be able to apply examples of the use of goal setting: <ul style="list-style-type: none"> ○ for exercise/training adherence ○ to motivate performers ○ to improve and/or optimise performance • understand the SMART principle of goal setting with practical examples (Specific, Measurable, Achievable, Recorded, Timed) • be able to apply the SMART principle to improve and/or optimise performance.
Mental preparation 	<ul style="list-style-type: none"> • know mental preparation techniques and be able to apply practical examples to their use: <ul style="list-style-type: none"> ○ imagery ○ mental rehearsal ○ selective attention ○ positive thinking.
Types of guidance 	<ul style="list-style-type: none"> • understand types of guidance, their advantages and disadvantages, and be able to apply practical examples to their use: <ul style="list-style-type: none"> ○ visual ○ verbal ○ manual ○ mechanical.
Types of feedback 	<ul style="list-style-type: none"> • understand types of feedback and be able to apply practical examples to their use: <ul style="list-style-type: none"> ○ intrinsic ○ extrinsic ○ knowledge of performance ○ knowledge of results ○ positive ○ negative.

PE-Paper 2

We will add approximately 10 marks on Health, Fitness and Well-being in Paper 2. We believe this topic is not simply subject specific and students may access marks from this topic.

Topic area	Learners must:
Health, fitness and well-being 	<ul style="list-style-type: none"> • know what is meant by health, fitness and well-being • understand the different health benefits of physical activity and consequences of a sedentary lifestyle: <ul style="list-style-type: none"> ○ physical: <ul style="list-style-type: none"> – injury – coronary heart disease (CHD) – blood pressure – bone density – obesity – Type 2 diabetes – posture – fitness ○ emotional: <ul style="list-style-type: none"> – self-esteem/confidence – stress management – image

Topic area	Learners must:
Health, fitness and well-being cont. 	<ul style="list-style-type: none"> ○ social: <ul style="list-style-type: none"> – friendship – belonging to a group – loneliness • be able to apply the above to different age groups • be able to respond to data about health, fitness and well-being
Diet and nutrition 	<ul style="list-style-type: none"> • know the definition of a balanced diet • know the components of a balanced diet <ul style="list-style-type: none"> ○ carbohydrates ○ proteins ○ fats ○ minerals ○ vitamins ○ fibre ○ water and hydration • understand the effect of diet and hydration on energy use in physical activity • be able to apply practical examples from physical activity and sport to diet and hydration.

RE

The exam will be 1 hour 3/4 and students must complete all four topics and all questions on each topic.

Christian Beliefs

- The Nature of God:
- God as omnipotent, loving and just, and the problem of evil and suffering
- The Oneness of God and the Trinity: Father, Son and Holy Spirit.
- Different Christian beliefs about creation including the role of Word and Spirit (John 1:1-3 and Genesis 1:1-3).
- Different Christian beliefs about the afterlife and their importance, including: resurrection and life after death; judgement, heaven and hell. Jesus Christ and salvation

Beliefs and teachings about:

The incarnation and Jesus as the Son of God , the crucifixion, resurrection and ascension
sin, including original sin, the means of salvation, including law, grace and Spirit
The role of Christ in salvation including the idea of atonement.

Christian Practices

- Different forms of worship liturgical, non-liturgical and informal, including the use of the Bible
- Private worship. Prayer and its significance, including the Lord's Prayer, set prayers and informal prayer.
- The role and meaning of the sacraments: the meaning of sacrament
the sacrament of Baptism and its significance for Christians; infant and believers' baptism;
- The sacrament of Holy Communion/Eucharist and its significance for Christians, including
Different ways in which it is celebrated and different interpretations of its meaning.
- The role and importance of pilgrimage and celebrations including: Christian pilgrimage: Lourdes and Iona. The celebrations of Christmas and Easter,
The role of the church in the local and worldwide community
- The role of the Church in the local community, including food banks and street pastors.
- The place of mission, evangelism and Church growth. The importance of the worldwide Church including: working for reconciliation and how Christian churches respond to persecution
- The work of churches and attempts to overcome poverty : Catholic Agency For Overseas Development (CAFOD), Christian Aid, Tearfund.

Product Design

OCR Design & Technology Theory - In depth Principles	Covered? Y/N	R	A	G
Chapter 9 - Timber (112-155)				
Common hardwoods				
Common softwoods				
Common manufactured boards				
Sources and origins of timber				
Ecological impact of timber				
Recycling timber and eco materials				
Common forms of timber				
Standard components				
Marking, cutting and drilling				
Filing, chiselling and planing				
Wood turning, routing and sanding				
Wood joints				
Steam bending and laminating				
Structural integrity				
Knock down fittings				
Making iterative models out of timber				
Wood finishes				
CAD, CNC and 3D printing				
Scales of production				
Cost and availability				
Environmental and safety concerns				
Chapter 10 - Metals (156-191)				
Metal properties				
Ferrous, non-ferrous and alloys				
Sources and origins of metals				
Extraction and conversion of metals				
Ecological, social and ethical issues				
Lifecycle and recycling of metals				
Sizes and stock forms of metal				
Marking, shaping and cutting				
Drilling, turning and milling				
Joining methods				
Structural integrity				
Making iterative models out of metal				
Metal finishes				
Digital design tools				
Scales of production				
Cost and availability				
Tolerances and minimising waste				

Product Design

OCR Design & Technology Theory - Core Principles	Covered? Y/N	R	A	G
Chapter 1 - Identifying requirements (2-13)				
Primary users and stakeholders				
Human factors				
Social, cultural, moral and economic considerations				
Inclusive design				
Ergonomics				
Anthropometrics				
Aesthetics				
Proportion and symmetry				
Fashion, trends and taste				
Chapter 2 - Learning from existing products and practice (14-21)				
Exploring and critiquing existing designs (existing product analysis)				
Disassembly				
Fashion, trends, taste and style				
Marketing and branding				
Impact on society				
Environment and lifecycle assessment				
Influence of new technologies to inform design decisions				
Ethics, environment and product enhancement				
Chapter 3 - Implications of wider issues (22-29)				
Artificial intelligence				
Biometrics				
Virtual reality				
Drones				
Impact on the environment				
Planned obsolescence				
Sustainability				
Circular economy				
Cradle to cradle				
Kinetic, thermal and chemical energy				
Renewable energy				
Non-renewable energy				
Environmental initiatives				
Fairtrade				
Social and ethical awareness				
Global sustainable development				

Product Design

Chapter 4 - Design thinking and communication (30-37)				
2D and 3D sketching				
Perspective drawing				
Isometric drawing				
Oblique drawing				
Circles and ellipses				
Sketch modelling				
Exploded drawings				
Mathematical modelling				
Flowcharts				
Schematic diagrams				
Biomimicry				
Design fixation				
User-centred design				
Systems thinking				
Collaboration				
Chapter 5 - Material considerations (38-59)				
Paper				
Card, cardboard and corrugated cardboard				
Board sheets				
Laminated layers				
Foam board				
Hardwoods				
Softwoods				
Manufactured boards				
Ferrous and non-ferrous metals				
Alloys				
Thermo and thermosetting polymers				
Natural and synthetic fibres				
Blended fibres				
Woven, non-woven and knitted fabrics				
Modern and smart materials				
Composite materials				
Technical textiles				
Characteristic properties of materials e.g. strength, thermal conductivity and flammability				
Chapter 6 - Mechanical devices and electronic systems (60-73)				
Rotary motion				
Linear motion				
Oscillating and reciprocating motions				
Lever				
Cams and gears				
Pulleys and belts				
Lever and linkages				
Electronic systems				
Chapter 7 - New and emerging technologies (74-80)				
Economies of scale				
Disruptive technologies				
Stereo lithography				
Laser sintering				
3D printing				
Robotics and virtual reality				
Maker movement				

RE

Relationships and Families

- Human sexuality including: heterosexual and homosexual relationships. Sexual relationships before and outside of marriage. Contraception and family planning.
- The nature and purpose of marriage. Divorce, including reasons for divorce, and remarrying.
- The nature of families, including the role of parents and children extended families and the nuclear family. The purpose of families, including: procreation stability and the protection of children educating children in a faith. Families and gender equality
- Contemporary family issues including: same-sex parents polygamy. The roles of men and women. Gender equality. Gender prejudice and discrimination, including examples.

Islam Beliefs

The six articles of faith in Sunni Islam and five roots of Usul ad-Din in Shi'a Islam, including key similarities and differences. Tawhid (the Oneness of God), Qur'an Surah 112.

The nature of God: omnipotence, beneficence, mercy, fairness and justice/Adalat in Shi'a Islam, including different ideas about God's relationship with the world: immanence and transcendence.

- Angels, their nature and role, including Jibril and Mika'il.
- Predestination and human freedom and its relationship to the Day of Judgement.
- Akhirah (life after death), human responsibility and accountability, resurrection, heaven and hell.
- Risalah (Prophethood) including the role and importance of Adam, Ibrahim and Muhammad.
- The Holy books: Qur'an: revelation and authority the Torah, the Psalms, the Gospel, the Scrolls of Abraham. The Sunnah and Hadith and their authority.
- The imamate in Shi'a Islam: its role and significance.

Science-Combined (Biology)

AQA TRILOGY Biology - 4.1 Cell biology				
Topic	Student Checklist	R	A	G
4.1.1 Cell structure	Use the terms 'eukaryotic' and 'prokaryotic' to describe types of cells			
	Describe the features of bacterial (prokaryotic) cells			
	Demonstrate an understanding of the scale and size of cells and be able to make order of magnitude			
	Recall the structures found in animal and plant (eukaryotic) cells inc algal cells			
	Use estimations and explain when they should be used to judge the relative size or area of sub-cellular			
	<i>Required practical 1: use a light microscope to observe, draw and label a selection of plant and animal</i>			
	Describe the functions of the structures in animal and plant (eukaryotic) cells			
	Describe what a specialised cell is, including examples for plants and animals			
	Describe what differentiation is, including differences between animals and plants			
	Define the terms magnification and resolution			
	Compare electron and light microscopes in terms of their magnification and resolution			
	Carry out calculations involving magnification using the formula: magnification = size of image/			
<i>Required practical 2: investigate the effect of antiseptics or antibiotics on bacterial growth using agar</i>				
4.1.2 Cell Division	<u>Describe how genetic information is stored in the nucleus of a cell (inc genes & chromosomes)</u>			
	Describe the processes that happen during the cell cycle, including mitosis (inc recognise and describe			
	Describe stem cells, including sources of stem cells in plants and animals and their roles			
	Describe the use of stem cells in the production of plant clones and therapeutic cloning			
	Discuss the potential risks, benefits and issues with using stem cells in medical research/treatments			
4.1.3 Transport in cells	Describe the process of diffusion, including examples			
	Explain how diffusion is affected by different factors			
	Define and explain "surface area to volume ratio", and how this relates to single-celled and multicellu-			
	Explain how the effectiveness of an exchange surface can be increased, inc examples of adaptations for			
	Describe the process of osmosis (inc calculation of water uptake & percentage gain and loss of mass of			
	<i>Required practical 3: investigate the effect of a range of concentrations of salt or sugar solutions on the</i>			
	Describe the process of active transport, including examples - gut and roots			
	Explain the differences between diffusion, osmosis and active transport			

Science-Combined (Biology)

AQA TRILOGY Biology - 4.2 Organisation				
Topic	Student Checklist	R	A	G
4.2.1 Principles of organisation & 4.2.2 Animal tissues, organs and organ systems	<u>Describe the levels of organisation within living organisms</u>			
	Describe the digestive system and how it works as an organ system (from KS3)			
	Describe basic features of enzymes (inc rate calculations for chemical reactions)			
	<u>Describe the lock and key theory as a model of enzyme action and explain how the shape a of the ac-</u>			
	Explain the effect of temperature and pH on enzymes			
	Describe the digestive enzymes, including their names, sites of production and actions			
	Describe how the products of digestion are used			
	Describe the features and functions of bile and state where it is produced and released from			
	<i>Required practical 4: use qualitative reagents to test for a range of carbohydrates, lipids and proteins</i>			
	<i>Required practical 5: investigate the effect of pH on the rate of reaction of amylase enzyme</i>			
	Describe the structure of the human heart and lungs (inc how lungs are adapted for gaseous exchange)			
	Explain how the heart moves blood around the body (inc role and position of the aorta, vena cava, pul-			
	Explain how the natural resting heart rate is controlled and how irregularities can be corrected			
	Describe the structure and function of arteries, veins and capillaries			
	Use simple compound measures such as rate and carry out rate calculations for blood flow			
	Describe blood and identify its different components, inc identifying blood cells from photographs/			
	Describe the functions of blood components, including adaptations to function			
	Describe what happens in coronary heart disease and what statins are used for			
	Describe and evaluate treatments for coronary heart disease and heart failure (inc drugs, mechanical			
	Recall that heart valves can become faulty and describe the consequences of this			
Describe how patients can be treated in the case of heart failure				
Describe health and the explain causes of ill-health and the relationship between health and disease				
<u>Describe how different types of diseases may interact and translate disease incidence information be-</u>				
Describe what risk factors are and give examples discussing human and financial costs of non-				
Describe what cancer is and explain the difference between benign and malignant tumours				
Describe the known risk factors for cancer, including genetic and lifestyle risk factors				
4.2.3 Plant tissues, organs and system	Describe plant tissues (epidermal, palisade mesophyll, spongy mesophyll, xylem, phloem and meri-stem) and describe their functions			
	Explain how the structure of plant tissues are related to their function within the leaf (plant organ) inc stomata and guard cells			
	Recall the plant parts that form a plant organ system that transports substances around the plant			
	Explain how root hair cells, xylem and phloem are adapted to their functions			
	Describe the process of transpiration and translocation including the role of the different plant tissues			
	Explain how the rate of transpiration can be affected by different factors (inc naming the factors)			
	Describe the role of stomata and guard cells in the control of gas exchange and water loss			

Science-Combined (Biology)

AQA TRILOGY Biology - 4.3 Infection and response

Topic	Student Checklist	R	A	G
4.3.1 Communicable diseases	<u>Explain what a pathogen is and how pathogens are spread (inc how viruses, bacteria, protists and fungi)</u>			
	<u>Explain how pathogenic bacteria and viruses cause damage in the body</u>			
	Explain how the spread of diseases can be reduced or prevented			
	Describe measles, HIV and tobacco mosaic virus as examples of viral pathogens			
	Describe salmonella food poisoning and gonorrhoea as examples of bacterial pathogens			
	Describe the signs, transmission and treatment of rose black spot infection in plants as an example of			
	Describe the symptoms, transmission and control of malaria, including knowledge of the mosquito			
	Describe defences that stop pathogens entering the human body (inc skin, nose, trachea & windpipe,			
	Recall the role of the immune system			
	Describe how white blood cells destroy pathogens			
	Describe how vaccination works, including at the population level			
	Explain how antibiotics and painkillers are used to treat diseases, including their limitations			
	Describe how sources for drugs have changed over time and give some examples			
	Describe how new drugs are tested, including pre-clinical testing and clinical trials (inc double blind			

AQA TRILOGY Biology - 4.4 Bioenergetics

Topic	Student Checklist	R	A	G
4.4.1 Photosynthesis	Describe what happens in photosynthesis, including using a word equation and recognise the chemical formulas for carbon dioxide, water, oxygen & glucose			
	Explain why photosynthesis is an endothermic reaction			
	Recall the limiting factors of photosynthesis			
	Explain how limiting factors affect the rate of photosynthesis, including graphical interpretation (limited to one factor)			
	HT ONLY: Explain how the limiting factors of photosynthesis interact, inc graphical interpretation (two/three factors)			
	HT ONLY: Explain how limiting factors are important to the economics of greenhouses, including data interpretation			
	HT ONLY: Explain and use inverse proportion in the context of photosynthesis			
	<i>Required practical 6: investigate the effect of light intensity on the rate of photosynthesis using an aquatic organism such as pondweed</i>			
	Describe how the glucose produced in photosynthesis is used by plants			
4.4.2 Respiration	Describe what happens in respiration including using a word equation and recognise the chemical formulas for carbon dioxide, water, oxygen & glucose			
	Describe aerobic and anaerobic respiration with regard to the need for oxygen, the differing products and the relative amounts of energy transferred			
	Recognise the equations for aerobic respiration, anaerobic respiration in muscles and anaerobic respiration in plants and yeast cells.			
	Recall what type of respiration fermentation is and its economic importance.			
	Describe what happens to heart rate, breathing rate and breath volume during exercise and why these changes occur			
	Explain what happens when muscles do not have enough oxygen and define the term oxygen debt			
	HT ONLY: Explain what happens to accumulated lactic acid in the body			
	Explain the importance of sugars, amino acids, fatty acids and glycerol in the synthesis and breakdown of carbohydrates, proteins and lipids			
	Explain what metabolism is, including examples			

Science-Combined (Chemistry)

AQA TRILOGY Chemistry - 5.1 Atomic structure and the periodic table				
Topic	Student Checklist	R	A	G
5.1.1 A simple model of the atom, symbols, relative atomic mass, elec-	State that everything is made of atoms and recall what they are			
	Describe what elements and compounds are			
	State that elements and compounds are represented by symbols; and use chemical symbols and formulae to represent elements and compounds			
	Write word equations and balanced symbol equations for chemical reactions, including using appropriate state symbols			
	HT ONLY: Write balanced half equations and ionic equations			
	Describe what a mixture is			
	Name and describe the physical processes used to separate mixtures and suggest suitable separation techniques			
	Describe how the atomic model has changed over time due to new experimental evidence, inc discovery of the atom and scattering experiments (inc the work of James Chadwick)			
	Describe the difference between the plum pudding model of the atom and the nuclear model of the atom			
	State the relative charge of protons, neutrons and electrons and describe the overall charge of an atom			
	State the relative masses of protons, neutrons and electrons and describe the distribution of mass in an atom			
	Calculate the number of protons, neutrons and electrons in an atom when given its atomic number and mass number			
	Describe isotopes as atoms of the same element with different numbers of neutrons			
	Define the term relative atomic mass and why it takes into account the abundance of isotopes of the element			
	Calculate the relative atomic mass of an element given the percentage abundance of its isotopes			
Describe how electrons fill energy levels in atoms, and represent the electron structure of elements using diagrams and numbers				
5.1.2 The periodic table	Recall how the elements in the periodic table are arranged			
	Describe how elements with similar properties are placed in the periodic table			
	Explain why elements in the same group have similar properties and how to use the periodic table to predict the reactivity of elements			
	Describe the early attempts to classify elements			
	Explain the creation and attributes of Mendeleev's periodic table			
	Identify metals and non-metals on the periodic table, compare and contrast their properties			
	Explain how the atomic structure of metals and non-metals relates to their position in the periodic table			
	Describe noble gases (group 0) and explain their lack of reactivity			
	Describe the properties of noble gases, including boiling points, predict trends down the group and describe how their properties depend on the outer shell of electrons			
	Describe the reactivity and properties of group 1 alkali metals with reference to their electron arrangement and predict their reactions			
	Describe the properties of group 7 halogens and how their properties relate to their electron arrangement, including trends in molecular mass, melting and boiling points and reactivity			
Describe the reactions of group 7 halogens with metals and non-metals				

Science-Combined (Chemistry)

QA TRILOGY Chemistry - 5.2 Bonding, structure, and the properties of matter				
Topic	Student Checklist	R	A	G
5.2.1 Chemical bonds, ionic, covalent and metallic	Describe the three main types of bonds: ionic bonds, covalent bonds and metallic bonds in terms of electrostatic forces and the transfer or sharing of electrons			
	Describe how the ions produced by elements in some groups have the electronic structure of a noble gas and explain how the charge of an ion relates to its group number			
	Describe the structure of ionic compounds, including the electrostatic forces of attraction, and represent ionic compounds using dot and cross diagrams			
	Describe the limitations of using dot and cross, ball and stick, two and three-dimensional diagrams to represent a giant ionic structure			
	Work out the empirical formula of an ionic compound from a given model or diagram that shows the ions in the structure			
	Describe covalent bonds and identify different types of covalently bonded substances, such as small molecules, large molecules and substances with giant covalent structures			
	Represent covalent bonds between small molecules, repeating units of polymers and parts of giant covalent structures using diagrams			
	Draw dot and cross diagrams for the molecules of hydrogen, chlorine, oxygen, nitrogen, hydrogen chloride, water, ammonia and methane			
	Deduce the molecular formula of a substance from a given model or diagram in these forms showing the atoms and bonds in the molecule			
	Describe the arrangement of atoms and electrons in metallic bonds and draw diagrams the bonding in metals			
5.2.2 How bonding and structure are related to the properties of substances	Name the three States of matter, identify them from a simple model and state which changes of state happen at melting and boiling points			
	Explain changes of state using particle theory and describe factors that affect the melting and boiling point of a substance			
	HT ONLY: Discuss the limitations of particle theory			
	Recall what (s), (l), (g) and (aq) mean when used in chemical equations and be able to use them appropriately			
	Explain how the structure of ionic compounds affects their properties, including melting and boiling points and conduction of electricity (sodium chloride structure only)			
	Explain how the structure of small molecules affects their properties			
	Explain how the structure of polymers affects their properties			
	Explain how the structure of giant covalent structures affects their properties			
	Explain how the structure of metals and alloys affects their properties, including explaining why they are good conductors			
	Explain why alloys are harder than pure metals in terms of the layers of atoms			
	Explain the properties of graphite, diamond and graphene in terms of their structure and bonding			
	Describe the structure of fullerenes, and their uses, including Buckminsterfullerene and carbon nanotubes			

Science-Combined (Chemistry)

AQA TRILOGY Chemistry - 5.3 Quantitative chemistry				
Topic	Student Checklist	R	A	G
5.3.1 Chemical measurements, conservation of mass and the quantitative interpretation	State that mass is conserved and explain why, including describing balanced equations in terms of conservation of mass			
	Explain the use of the multipliers in equations in normal script before a formula and in subscript within a formula			
	Describe what the relative formula mass (M_r) of a compound is and calculate the relative formula mass of a compound, given its formula			
	Calculate the relative formula masses of reactants and products to prove that mass is conserved in a balanced chemical equation			
	Explain observed changes of mass during chemical reactions in non-enclosed systems using the particle model when given the balanced symbol equation			
	Explain why whenever a measurement is made there is always some uncertainty about the result obtained			
5.3.2 Use of amount of substance in relation to masses of pure substances	HT ONLY: State that chemical amounts are measured in moles (mol) and explain what a mol is			
	HT ONLY: Use the relative formula mass of a substance to calculate the number of moles in a given			
	HT ONLY: Calculate the masses of reactants and products when given a balanced symbol equation			
	HT ONLY: Use moles to write a balanced equation when given the masses of reactants and prod-			
	HT ONLY: Explain the effect of limiting the quantity of a reactant on the amount of products in			
	Calculate the mass of solute in a given volume of solution of known concentration in terms of mass			
	HT ONLY: Explain how the mass of a solute and the volume of a solution is related to the concen-			

Science-Combined (Physics)

AQA TRILOGY Physics - 6.1. Energy				
Topic	Student Checklist	R	A	G
6.1.1 Energy changes in a system, and the ways energy is stored before and after such changes	Define a system as an object or group of objects and state examples of changes in the way energy is stored in a system			
	Describe how all the energy changes involved in an energy transfer and calculate relative changes in energy when the heat, work done or flow of charge in a system changes			
	Use calculations to show on a common scale how energy in a system is redistributed			
	Calculate the kinetic energy of an object by recalling and applying the equation: $[E_k = \frac{1}{2}mv^2]$			
	Calculate the amount of elastic potential energy stored in a stretched spring by applying, but not			
	Calculate the amount of gravitational potential energy gained by an object raised above ground level by recalling and applying, the equation: $[E_e = mgh]$			
	Calculate the amount of energy stored in or released from a system as its temperature changes by applying, but not recalling, the equation: $[\Delta E = mc\Delta\theta]$			
	Define the term 'specific heat capacity'			
	Required practical 14: investigation to determine the specific heat capacity of one or more materials.			
	Define power as the rate at which energy is transferred or the rate at which work is done and the watt as an energy transfer of 1 joule per second			
	Calculate power by recalling and applying the equations: $[P = E/t \ \& \ P = W/t]$			
	Explain, using examples, how two systems transferring the same amount of energy can differ in power output due to the time taken			
6.1.2 Conservation and dissipation of energy	State that energy can be transferred usefully, stored or dissipated, but cannot be created or destroyed and so the total energy in a system does not change			
	Explain that only some of the energy in a system is usefully transferred, with the rest 'wasted', giving examples of how this wasted energy can be reduced			
	Explain ways of reducing unwanted energy transfers and the relationship between thermal conductivity and energy transferred			
	Describe how the rate of cooling of a building is affected by the thickness and thermal conductivity of its walls			
	Calculate efficiency by recalling and applying the equation: $[\text{efficiency} = \text{useful power output} / \text{total power input}]$			
	HT ONLY: Suggest and explain ways to increase the efficiency of an intended energy transfer			
6.1.3 National and global energy resources	List the main renewable and non-renewable energy resources and define what a renewable energy resource is			
	Compare ways that different energy resources are used, including uses in transport, electricity generation and heating			
	Explain why some energy resources are more reliable than others, explaining patterns and trends in their use			
	Evaluate the use of different energy resources, taking into account any ethical and environmental issues which may arise			
	Justify the use of energy resources, with reference to both environmental issues and the limitations imposed by political, social, ethical or economic considerations			

Science-Combined (Physics)

AQA TRILOGY Physics - 6.2. Electricity				
Topic	Student Checklist	R	A	G
6.2.1 Current, potential difference and resistance	Draw and interpret circuit diagrams, including all common circuit symbols			
	Define electric current as the rate of flow of electrical charge around a closed circuit			
	Calculate charge and current by recalling and applying the formula: $[Q = It]$			
	Explain that current is caused by a source of potential difference and it has the same value at			
	Describe and apply the idea that the greater the resistance of a component, the smaller the			
	Calculate current, potential difference or resistance by recalling and applying the equation: $[V$			
	Required practical 15: Use circuit diagrams to set up and check circuits to investigate the fac-			
	Define an ohmic conductor			
	Explain the resistance of components such as lamps, diodes, thermistors and LDRs and sketch/interpret IV graphs of their characteristic electrical behaviour			
	Explain how to measure the resistance of a component by drawing an appropriate circuit dia-			
	Required practical 16: use circuit diagrams to construct appropriate circuits to investigate the I			
6.2.2 Series and parallel circuits	Show by calculation and explanation that components in series have the same current passing			
	Show by calculation and explanation that components connected in parallel have the same the			
	Calculate the total resistance of two components in series as the sum of the resistance of each			
	Explain qualitatively why adding resistors in series increases the total resistance whilst adding			
	Solve problems for circuits which include resistors in series using the concept of equivalent			
6.2.3 Domestic uses and safety	Explain the difference between direct and alternating voltage and current, stating what UK			
	Identify and describe the function of each wire in a three-core cable connected to the mains			
	State that the potential difference between the live wire and earth (0 V) is about 230 V and that			
	Explain that a live wire may be dangerous even when a switch in the mains circuit is open by			
6.2.4 Energy transfers	Explain how the power transfer in any circuit device is related to the potential difference across it and the current through it			
	Calculate power by recalling and applying the equations: $[P = VI]$ and $[P = I^2 R]$			
	Describe how appliances transfer energy to the kinetic energy of motors or the thermal energy of heating devices			
	Calculate and explain the amount of energy transferred by electrical work by recalling and applying the equations: $[E = Pt]$ and $[E = QV]$			
	Explain how the power of a circuit device is related to the potential difference across it, the current through it and the energy transferred over a given time.			
	Describe, with examples, the relationship between the power ratings for domestic electrical appliances and the changes in stored energy when they are in use			
	Identify the National Grid as a system of cables and transformers linking power stations to consumers			
	Explain why the National Grid system is an efficient way to transfer energy, with reference to change in potential difference reducing current			

Science-Combined (Physics)

AQA TRILOGY Physics - 6.3. Particle model of matter					
TOPIC	Student Checklist	R	A	G	
6.3.1 Changes of state and the particle model	Calculate the density of a material by recalling and applying the equation: [$\rho = m/V$]				
	Recognise/draw simple diagrams to model the difference between solids, liquids and gases				
	Use the particle model to explain the properties of different states of matter and differences				
	Required practical 17: use appropriate apparatus to make and record the measurements needed to determine the densities of regular and irregular solid objects and liquids				
	Recall and describe the names of the processes by which substances change state				
	Use the particle model to explain why a change of state is reversible and affects the properties of a substance, but not its mass				
6.3.2 Internal energy and energy transfers	State that the internal energy of a system is stored in the atoms and molecules that make up				
	Explain that internal energy is the total kinetic energy and potential energy of all the particles				
	Calculate the change in thermal energy by applying but not recalling the equation				
	Calculate the specific latent heat of fusion/vaporisation by applying, but not recalling, the				
	Interpret and draw heating and cooling graphs that include changes of state				
	Distinguish between specific heat capacity and specific latent heat				
6.3.3 Particle model and pressure	Explain why the molecules of a gas are in constant random motion and that the higher the				
	Explain, with reference to the particle model, the effect of changing the temperature of a gas				
	Calculate the change in the pressure of a gas or the volume of a gas (a fixed mass held at constant temperature) when either the pressure or volume is increased or decreased				

AQA TRILOGY Physics - 6.4. Atomic structure					
TOPIC	Student Checklist	R	A	G	
6.4.1 Atoms and isotopes	Describe the basic structure of an atom and how the distance of the charged particles vary with the				
	Define electrons, neutrons, protons, isotopes and ions				
	Relate differences between isotopes to differences in conventional representations of their identi-				
	Describe how the atomic model has changed over time due to new experimental evidence, inc dis-				
6.4.2 Atoms and nuclear radiation	Describe and apply the idea that the activity of a radioactive source is the rate at which its unstable				
	Describe the penetration through materials, the range in air and the ionising power for alpha parti-				
	Apply knowledge of the uses of radiation to evaluate the best sources of radiation to use in a given				
	Use the names and symbols of common nuclei and particles to complete balanced nuclear equa-				
	Define half-life of a radioactive isotope				
	HT ONLY: Determine the half-life of a radioactive isotope from given information and calculate				
	Compare the hazards associated with contamination and irradiation and outline suitable precau-				
	Discuss the importance of publishing the findings of studies into the effects of radiation on humans				

Science-Separate (Biology)

AQA Biology - 4.1 Cell biology				
Topic	Student Checklist	R	A	G
4.1.1 Cell structure	Use the terms 'eukaryotic' and 'prokaryotic' to describe types of cells			
	Describe the features of bacterial (prokaryotic) cells			
	Demonstrate an understanding of the scale and size of cells and be able to make order of magnitude			
	Recall the structures found in animal and plant (eukaryotic) cells inc algal cells			
	Use estimations and explain when they should be used to judge the relative size or area of sub-cellular			
	<i>Required practical 1: use a light microscope to observe, draw and label a selection of plant and animal</i>			
	Describe the functions of the structures in animal and plant (eukaryotic) cells			
	Describe what a specialised cell is, including examples for plants and animals			
	Describe what differentiation is, including differences between animals and plants			
	Define the terms magnification and resolution			
	Compare electron and light microscopes in terms of their magnification and resolution			
	Carry out calculations involving magnification using the formula: magnification = size of image/			
	<i>Bio ONLY: Describe how bacteria reproduce and the conditions required</i>			
	<i>Bio ONLY: Describe how to prepare an uncontaminated culture</i>			
	<i>Bio ONLY: Calculate cross-sectional areas of colonies or clear areas around colonies using πr^2</i>			
	<i>Bio ONLY: Calculate the number of bacteria in a population after a certain time if given the mean divi-</i>			
<i>Bio & HT ONLY: Express answers for last two points in standard form</i>				
<i>Required practical 2: investigate the effect of antiseptics or antibiotics on bacterial growth using agar</i>				
4.1.2 Cell division	<u>Describe how genetic information is stored in the nucleus of a cell (inc genes & chromosomes)</u>			
	Describe the processes that happen during the cell cycle, including mitosis (inc recognise and describe			
	Describe stem cells, including sources of stem cells in plants and animals and their roles			
	Describe the use of stem cells in the production of plant clones and therapeutic cloning			
4.1.3 Transport in cells	Discuss the potential risks, benefits and issues with using stem cells in medical research/treatments (inc			
	Describe the process of diffusion, including examples			
	Explain how diffusion is affected by different factors			
	Define and explain "surface area to volume ratio", and how this relates to single-celled and multicellular			
	Explain how the effectiveness of an exchange surface can be increased, inc examples of adaptations for			
	Describe the process of osmosis (inc calculation of water uptake & percentage gain and loss of mass of			
	<i>Required practical 3: investigate the effect of a range of concentrations of salt or sugar solutions on the</i>			
	Describe the process of active transport, including examples - gut and roots			
Explain the differences between diffusion, osmosis and active transport				

Science-Separate (Biology)

AQA Biology - 4.2 Organisation				
Topic	Student Checklist	R	A	G
4.2.1 Principles of organisation & 4.2.2 Animal tissues, organs and organ systems	Describe the levels of organisation within living organisms			
	Describe the digestive system and how it works as an organ system (from KS3)			
	Describe basic features of enzymes (inc rate calculations for chemical reactions)			
	Describe the lock and key theory as a model of enzyme action and explain how the shape a of the			
	Explain the effect of temperature and pH on enzymes			
	Describe the digestive enzymes, including their names, sites of production and actions			
	Describe how the products of digestion are used			
	Describe the features and functions of bile and state where it is produced and released from			
	<i>Required practical 4: use qualitative reagents to test for a range of carbohydrates, lipids and pro-</i>			
	<i>Required practical 5: investigate the effect of pH on the rate of reaction of amylase enzyme</i>			
	Describe the structure of the human heart and lungs (inc how lungs are adapted for gaseous ex-			
	Explain how the heart moves blood around the body (inc role and position of the aorta, vena cava,			
	Explain how the natural resting heart rate is controlled and how irregularities can be corrected			
	Describe the structure and function of arteries, veins and capillaries			
	Use simple compound measures such as rate and carry out rate calculations for blood flow			
	Describe blood and identify its different components, inc identifying blood cells from photographs/			
	Describe the functions of blood components, including adaptations to function			
	Describe what happens in coronary heart disease and what statins are used for			
	Describe and evaluate treatments for coronary heart disease and heart failure (inc drugs, mechani-			
	Recall that heart valves can become faulty and describe the consequences of this			
Describe how patients can be treated in the case of heart failure				
Describe health and the explain causes of ill-health and the relationship between health and dis-				
Describe how different types of diseases may interact and translate disease incidence information				
Describe what risk factors are and give examples discussing human and financial costs of non-				
Describe what cancer is and explain the difference between benign and malignant tumours				
Describe the known risk factors for cancer, including genetic and lifestyle risk factors				
4.2.3 Plant tissues, organs and sys-	Describe plant tissues (epidermal, palisade mesophyll, spongy mesophyll, xylem, phloem and meri-stem) and describe their functions			
	Explain how the structure of plant tissues are related to their function within the leaf (plant organ) inc stomata and guard cells			
	Recall the plant parts that form a plant organ system that transports substances around the plant			
	Explain how root hair cells, xylem and phloem are adapted to their functions			
	Describe the process of transpiration and translocation including the role of the different plant tissues			
	Explain how the rate of transpiration can be affected by different factors (inc naming the factors)			
	Describe the role of stomata and guard cells in the control of gas exchange and water loss			

Science-Separate (Biology)

AQA Biology - 4.3 Infection and response				
Topic	Student Checklist	R	A	G
4.3.1 Communicable diseases	<u>Explain what a pathogen is and how pathogens are spread (inc how viruses, bacteria, protists and fungi)</u>			
	<u>Explain how pathogenic bacteria and viruses cause damage in the body</u>			
	Explain how the spread of diseases can be reduced or prevented			
	Describe measles, HIV and tobacco mosaic virus as examples of viral pathogens			
	Describe salmonella food poisoning and gonorrhoea as examples of bacterial pathogens			
	Describe the signs, transmission and treatment of rose black spot infection in plants as an example of			
	Describe the symptoms, transmission and control of malaria, including knowledge of the mosquito vec-			
	Describe defences that stop pathogens entering the human body (inc skin, nose, trachea & windpipe,			
	Recall the role of the immune system			
	Describe how white blood cells destroy pathogens			
	Describe how vaccination works, including at the population level			
	Explain how antibiotics and painkillers are used to treat diseases, including their limitations			
	Describe how sources for drugs have changed over time and give some examples			
Describe how new drugs are tested, including pre-clinical testing and clinical trials (inc double blind trials				
4.3.2 Monoclonal	<i>Bio & HT ONLY: Describe what monoclonal antibodies are and why they are useful</i>			
	<i>Bio & HT ONLY: Describe how monoclonal antibodies are produced</i>			
	<i>Bio & HT ONLY: Explain how monoclonal antibodies are used for diagnosis, research, chemical testing</i>			
	<i>Bio & HT ONLY: Evaluate the advantages and disadvantages of monoclonal antibodies (inc side effects)</i>			
	<i>Bio & HT ONLY: Describe some observable signs of plant disease, and how plant diseases can be identi-</i>			
4.3.3 Plant	<i>Bio ONLY: Give examples of plant pathogens</i>			
	<i>Bio ONLY: Give examples of plant ion deficiencies and their effects</i>			
	<i>Bio ONLY: Describe physical, chemical and mechanical defence responses of plants</i>			

Science-Separate (Biology)

AQA Biology - 4.4 Bioenergetics				
Topic	Student Checklist	R	A	G
4.4.1 Photosynthesis	Describe what happens in photosynthesis, including using a word equation and recognise the chemical formulas for carbon dioxide, water, oxygen & glucose			
	Explain why photosynthesis is an endothermic reaction			
	Recall the limiting factors of photosynthesis			
	Explain how limiting factors affect the rate of photosynthesis, including graphical interpretation (limited to one factor)			
	HT ONLY: Explain how the limiting factors of photosynthesis interact, inc graphical interpretation (two/three factors)			
	HT ONLY: Explain how limiting factors are important to the economics of greenhouses, including data interpretation			
	HT ONLY: Explain and use inverse proportion in the context of photosynthesis			
	<i>Required practical 6: investigate the effect of light intensity on the rate of photosynthesis using an aquatic organism such as pondweed</i>			
	Describe how the glucose produced in photosynthesis is used by plants			
4.4.2 Respiration	Describe what happens in respiration including using a word equation and recognise the chemical formulas for carbon dioxide, water, oxygen & glucose			
	Describe aerobic and anaerobic respiration with regard to the need for oxygen, the differing products and the relative amounts of energy transferred			
	Recognise the equations for aerobic respiration, anaerobic respiration in muscles and anaerobic respiration in plants and yeast cells.			
	Recall what type of respiration fermentation is and its economic importance.			
	Describe what happens to heart rate, breathing rate and breath volume during exercise and why these changes occur			
	Explain what happens when muscles do not have enough oxygen and define the term oxygen debt			
	HT ONLY: Explain what happens to accumulated lactic acid in the body			
	Explain the importance of sugars, amino acids, fatty acids and glycerol in the synthesis and breakdown of carbohydrates, proteins and lipids			
	Explain what metabolism is, including examples			

Science-Separate (Chemistry)

AQA Chemistry - 4.1 Atomic structure and the periodic table				
Topic	Student Checklist	R	A	G
4.1.1 A simple model of the atom, symbols, relative atomic mass, electronic	State that everything is made of atoms and recall what they are			
	Describe what elements and compounds are			
	State that elements and compounds are represented by symbols; and use chemical symbols and formulae			
	Write word equations and balanced symbol equations for chemical reactions, including using appropriate state symbols			
	HT ONLY: Write balanced half equations and ionic equations			
	Describe what a mixture is			
	Name and describe the physical processes used to separate mixtures and suggest suitable separation methods			
	Describe how the atomic model has changed over time due to new experimental evidence, including discovery of the electron			
	Describe the difference between the plum pudding model of the atom and the nuclear model of the atom			
	State the relative charge of protons, neutrons and electrons and describe the overall charge of an atom			
	State the relative masses of protons, neutrons and electrons and describe the distribution of mass in an atom			
	Calculate the number of protons, neutrons and electrons in an atom when given its atomic number and mass number			
	Describe isotopes as atoms of the same element with different numbers of neutrons			
	Define the term relative atomic mass and why it takes into account the abundance of isotopes of the element			
	Calculate the relative atomic mass of an element given the percentage abundance of its isotopes			
	Describe how electrons fill energy levels in atoms, and represent the electron structure of elements using diagrams and numbers			
4.1.2 The periodic table	Recall how the elements in the periodic table are arranged			
	Describe how elements with similar properties are placed in the periodic table			
	Explain why elements in the same group have similar properties and how to use the periodic table to predict the reactivity of elements			
	Describe the early attempts to classify elements			
	Explain the creation and attributes of Mendeleev's periodic table			
	Identify metals and non-metals on the periodic table, compare and contrast their properties			
	Explain how the atomic structure of metals and non-metals relates to their position in the periodic table			
	Describe noble gases (group 0) and explain their lack of reactivity			
	Describe the properties of noble gases, including boiling points, predict trends down the group and describe how their properties depend on the outer shell of electrons			
	Describe the reactivity and properties of group 1 alkali metals with reference to their electron arrangement and predict their reactions			
	Describe the properties of group 7 halogens and how their properties relate to their electron arrangement, including trends in molecular mass, melting and boiling points and reactivity			
	Describe the reactions of group 7 halogens with metals and non-metals			
<i>Chem ONLY: Describe the properties of transition metals and compare them with group 1 elements, including melting points and densities, strength and hardness, and reactivity (for CR, Mn Fe, Co, Ni & Cu)</i>				

Science-Separate (Chemistry)

AQA Chemistry - 4.1 Atomic structure and the periodic table				
Topic	Student Checklist	R	A	G
4.1.1 A simple model of the atom, symbols, relative atomic mass, electronic	State that everything is made of atoms and recall what they are			
	Describe what elements and compounds are			
	State that elements and compounds are represented by symbols; and use chemical symbols and formulae to represent elements and compounds			
	Write word equations and balanced symbol equations for chemical reactions, including using appropriate state symbols			
	HT ONLY: Write balanced half equations and ionic equations			
	Describe what a mixture is			
	Name and describe the physical processes used to separate mixtures and suggest suitable separation techniques			
	Describe how the atomic model has changed over time due to new experimental evidence, inc discovery of the atom and scattering experiments (inc the work of James Chadwick)			
	Describe the difference between the plum pudding model of the atom and the nuclear model of the atom			
	State the relative charge of protons, neutrons and electrons and describe the overall charge of an atom			
	State the relative masses of protons, neutrons and electrons and describe the distribution of mass in an atom			
	Calculate the number of protons, neutrons and electrons in an atom when given its atomic number and mass number			
	Describe isotopes as atoms of the same element with different numbers of neutrons			
	Define the term relative atomic mass and why it takes into account the abundance of isotopes of the element			
	Calculate the relative atomic mass of an element given the percentage abundance of its isotopes			
	Describe how electrons fill energy levels in atoms, and represent the electron structure of elements using diagrams and numbers			
4.1.2 The periodic table	Recall how the elements in the periodic table are arranged			
	Describe how elements with similar properties are placed in the periodic table			
	Explain why elements in the same group have similar properties and how to use the periodic table to predict the reactivity of elements			
	Describe the early attempts to classify elements			
	Explain the creation and attributes of Mendeleev's periodic table			
	Identify metals and non-metals on the periodic table, compare and contrast their properties			
	Explain how the atomic structure of metals and non-metals relates to their position in the periodic table			
	Describe noble gases (group 0) and explain their lack of reactivity			
	Describe the properties of noble gases, including boiling points, predict trends down the group and describe how their properties depend on the outer shell of electrons			
	Describe the reactivity and properties of group 1 alkali metals with reference to their electron arrangement and predict their reactions			
	Describe the properties of group 7 halogens and how their properties relate to their electron arrangement, including trends in molecular mass, melting and boiling points and reactivity			
	Describe the reactions of group 7 halogens with metals and non-metals			
	<i>Chem ONLY: Describe the properties of transition metals and compare them with group 1 elements, including melting points and densities, strength and hardness, and reactivity (for CR, Mn Fe, Co, Ni & Cu)</i>			

Science-Separate (Chemistry)

AQA Chemistry - 4.4 Chemical changes				
Topic	Student Checklist	R	A	G
4.4.1 Reactivity of metals	Describe how metals react with oxygen and state the compound they form, define oxidation and reduction			
	Describe the arrangement of metals in the reactivity series, including carbon and hydrogen, and use the reactivity series to predict the outcome of displacement reactions			
	Recall and describe the reactions, if any, of potassium, sodium, lithium, calcium, magnesium, zinc, iron and copper with water or dilute acids			
	Relate the reactivity of metals to its tendency to form positive ions and be able to deduce an order of reactivity of metals based on experimental results			
	Recall what native metals are and explain how metals can be extracted from the compounds in which they are found in nature by reduction with carbon			
	Evaluate specific metal extraction processes when given appropriate information and identify which species are oxidised or reduced			
4.4.2 Reactions of acids	HT ONLY: Describe oxidation and reduction in terms of loss and gain of electrons			
	HT ONLY: Write ionic equations for displacement reactions, and identify which species are oxidised and reduced from a symbol or half equation			
	HT ONLY: Explain in terms of gain or loss of electrons that the reactions between acids and some metals are redox reactions, and identify which species are oxidised and which are reduced (Mg, Zn, Fe + HCl & H₂SO₄)			
	Explain that acids can be neutralised by alkalis, bases and metal carbonates and list the products of each of these reactions			
	Predict the salt produced in a neutralisation reaction based on the acid used and the positive ions in the base, alkali or carbonate and use the formulae of common ions to deduce the formulae of the salt			
	Describe how soluble salts can be made from acids and how pure, dry samples of salts can be obtained			
	Required practical 1: preparation of a pure, dry sample of a soluble salt from an insoluble oxide or carbonate using a Bunsen burner to heat dilute acid and a water bath or electric heater to evaporate the solution			
	Recall what the pH scale measures and describe the scale used to identify acidic, neutral or alkaline solutions			
	Define the terms acid and alkali in terms of production of hydrogen ions or hydroxide ions (in solution), define the term base			
	Describe the use of universal indicator to measure the approximate pH of a solution and use the pH scale to identify acidic or alkaline solutions			
	<i>Chem ONLY: Describe how to carry out titrations using strong acids and strong alkalis only (sulfuric, hydrochloric and nitric acids to find the reacting volumes accurately</i>			
	Chem & HT ONLY: Calculate the chemical quantities in titrations involving concentrations in mol/dm³ and in g/dm³			
	<i>Chem ONLY: Required practical 2:</i> determination of the reacting volumes of solutions of a strong acid and a strong alkali by titration			
HT ONLY: Use and explain the terms dilute and concentrated (in terms of amount of substance) and weak and strong (in terms of the degree of ionisation) in relation to acids				
HT ONLY: Explain how the concentration of an aqueous solution and the strength of an acid affects the pH of the solution and how pH is related to the hydrogen ion concentration of a solution				
4.4.3 Electrolysis	Describe how ionic compounds can conduct electricity when dissolved in water and describe these solutions as electrolytes			
	Describe the process of electrolysis			
	Describe the electrolysis of molten ionic compounds and predict the products at each electrode of the electrolysis of binary ionic compounds			
	Explain how metals are extracted from molten compounds using electrolysis and use the reactivity series to explain why some metals are extracted with electrolysis instead of carbon			
	Describe the electrolysis of aqueous solutions and predict the products of the electrolysis of aqueous solutions containing single ionic compounds			
	Required practical 3: investigate what happens when aqueous solutions are electrolysed using inert electrodes			
	HT ONLY: Describe the reactions at the electrodes during electrolysis as oxidation and reduction reactions and write balanced half equations for these reactions			

Science-Separate (Physics)

AQA Physics - 4.1. Energy				
Topic	Student Checklist	R	A	G
4.1.1 Energy changes in a system, and the ways energy is stored before and after such changes	Define a system as an object or group of objects and state examples of changes in the way energy is stored in a system			
	Describe how all the energy changes involved in an energy transfer and calculate relative changes in energy when the heat, work done or flow of charge in a system changes			
	Use calculations to show on a common scale how energy in a system is redistributed			
	Calculate the kinetic energy of an object by recalling and applying the equation: $[E_k = \frac{1}{2}mv^2]$			
	Calculate the amount of elastic potential energy stored in a stretched spring by applying, but not recalling, the equation: $[E_e = \frac{1}{2}ke^2]$			
	Calculate the amount of gravitational potential energy gained by an object raised above ground level by recalling and applying, the equation: $[E_e = mgh]$			
	Calculate the amount of energy stored in or released from a system as its temperature changes by applying, but not recalling, the equation: $[\Delta E = mc\Delta\theta]$			
	Define the term 'specific heat capacity'			
	Required practical 1: investigation to determine the specific heat capacity of one or more materials.			
	Define power as the rate at which energy is transferred or the rate at which work is done and the watt as an energy transfer of 1 joule per second			
	Calculate power by recalling and applying the equations: $[P = E/t \text{ \& } P = W/t]$			
	Explain, using examples, how two systems transferring the same amount of energy can differ in power output due to the time taken			
4.1.2 Conservation and dissipation of energy	State that energy can be transferred usefully, stored or dissipated, but cannot be created or destroyed and so the total energy in a system does not change			
	Explain that only some of the energy in a system is usefully transferred, with the rest 'wasted', giving examples of how this wasted energy can be reduced			
	Explain ways of reducing unwanted energy transfers and the relationship between thermal conductivity and energy transferred			
	Describe how the rate of cooling of a building is affected by the thickness and thermal conductivity of its walls			
	Required practical 2: investigate the effectiveness of different materials as thermal insulators and the factors that may affect the thermal insulation properties of a material.			
	Calculate efficiency by recalling and applying the equation: $[\text{efficiency} = \text{useful power output} / \text{total power input}]$			
	HT ONLY: Suggest and explain ways to increase the efficiency of an intended energy transfer			
4.1.3 National and global energy resources	List the main renewable and non-renewable energy resources and define what a renewable energy resource is			
	Compare ways that different energy resources are used, including uses in transport, electricity generation and heating			
	Explain why some energy resources are more reliable than others, explaining patterns and trends in their use			
	Evaluate the use of different energy resources, taking into account any ethical and environmental issues which may arise			
	Justify the use of energy resources, with reference to both environmental issues and the limitations imposed by political, social, ethical or economic considerations			

Science-Separate (Physics)

AQA Physics - 4.2. Electricity				
Topic	Student Checklist	R	A	G
4.2.1 Current, potential difference and resistance	Draw and interpret circuit diagrams, including all common circuit symbols			
	Define electric current as the rate of flow of electrical charge around a closed circuit			
	Calculate charge and current by recalling and applying the formula: $[Q = It]$			
	Explain that current is caused by a source of potential difference and it has the same value at any point in a single closed loop of a circuit			
	Describe and apply the idea that the greater the resistance of a component, the smaller the current for a given potential difference (p.d.) across the component			
	Calculate current, potential difference or resistance by recalling and applying the equation: $[V = IR]$			
	Required practical 3: Use circuit diagrams to set up and check circuits to investigate the factors affecting the resistance of electrical circuits			
	Define an ohmic conductor			
	Explain the resistance of components such as lamps, diodes, thermistors and LDRs and sketch/interpret IV graphs of their characteristic electrical behaviour			
	Explain how to measure the resistance of a component by drawing an appropriate circuit diagram using correct circuit symbols			
Required practical 4: use circuit diagrams to construct appropriate circuits to investigate the I–V characteristics of a variety of circuit elements				
4.2.2 Series and parallel circuits	Show by calculation and explanation that components in series have the same current passing through them			
	Show by calculation and explanation that components connected in parallel have the same the potential difference across each of them			
	Calculate the total resistance of two components in series as the sum of the resistance of each component using the equation: $[R_{total} = R_1 + R_2]$			
	Explain qualitatively why adding resistors in series increases the total resistance whilst adding resistors in parallel decreases the total resistance			
	Solve problems for circuits which include resistors in series using the concept of equivalent resistance			
4.2.3 Domestic uses and safety	Explain the difference between direct and alternating voltage and current, stating what UK mains is			
	Identify and describe the function of each wire in a three-core cable connected to the mains			
	State that the potential difference between the live wire and earth (0 V) is about 230 V and that both neutral wires and our bodies are at, or close to, earth potential (0 V)			
	Explain that a live wire may be dangerous even when a switch in the mains circuit is open by explaining the danger of providing any connection between the live wire and earth			

Science-Separate (Physics)

AQA Physics - 4.2. Electricity				
Topic	Student Checklist	R	A	G
4.2.1 Current, potential difference and resistance	Draw and interpret circuit diagrams, including all common circuit symbols			
	Define electric current as the rate of flow of electrical charge around a closed circuit			
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	Explain that current is caused by a source of potential difference and it has the same value at any point in a single closed loop of a circuit			
	Describe and apply the idea that the greater the resistance of a component, the smaller the current for a given potential difference (p.d.) across the component			
	Calculate current, potential difference or resistance by recalling and applying the equation: $[V = IR]$			
	Required practical 3: Use circuit diagrams to set up and check circuits to investigate the factors affecting the resistance of electrical circuits			
	Define an ohmic conductor			
	Explain the resistance of components such as lamps, diodes, thermistors and LDRs and sketch/interpret IV graphs of their characteristic electrical behaviour			
	Explain how to measure the resistance of a component by drawing an appropriate circuit diagram using correct circuit symbols			
	Required practical 4: use circuit diagrams to construct appropriate circuits to investigate the I–V characteristics of a variety of circuit elements			
4.2.2 Series and parallel circuits	Show by calculation and explanation that components in series have the same current passing through them			
	Show by calculation and explanation that components connected in parallel have the same the potential difference across each of them			
	Calculate the total resistance of two components in series as the sum of the resistance of each component using the equation: $[R_{total} = R_1 + R_2]$			
	Explain qualitatively why adding resistors in series increases the total resistance whilst adding resistors in parallel decreases the total resistance			
	Solve problems for circuits which include resistors in series using the concept of equivalent resistance			
4.2.3 Domestic uses and safety	Explain the difference between direct and alternating voltage and current, stating what UK mains is			
	Identify and describe the function of each wire in a three-core cable connected to the mains			
	State that the potential difference between the live wire and earth (0 V) is about 230 V and that both neutral wires and our bodies are at, or close to, earth potential (0 V)			
	Explain that a live wire may be dangerous even when a switch in the mains circuit is open by explaining the danger of providing any connection between the live wire and earth			

Science-Separate (Physics)

AQA Physics - 4.3. Particle model of matter					
TOPIC	Student Checklist	R	A	G	
4.3.1 Changes of state and the particle model	Calculate the density of a material by recalling and applying the equation: [$\rho = m/V$]				
	Recognise/draw simple diagrams to model the difference between solids, liquids and gases				
	Use the particle model to explain the properties of different states of matter and differences in the density of materials				
	Required practical 5: use appropriate apparatus to make and record the measurements needed to determine the densities of regular and irregular solid objects and liquids				
	Recall and describe the names of the processes by which substances change state				
	Use the particle model to explain why a change of state is reversible and affects the properties of a substance, but not its mass				
4.3.2 Internal energy and energy transfers	State that the internal energy of a system is stored in the atoms and molecules that make up the system				
	Explain that internal energy is the total kinetic energy and potential energy of all the particles in a system				
	Calculate the change in thermal energy by applying but not recalling the equation [$\Delta E = m c \Delta\theta$]				
	Calculate the specific latent heat of fusion/vaporisation by applying, but not recalling, the equation: [$E = mL$]				
	Interpret and draw heating and cooling graphs that include changes of state				
	Distinguish between specific heat capacity and specific latent heat				
4.3.3 Particle model and pressure	Explain why the molecules of a gas are in constant random motion and that the higher the temperature of a gas, the greater the particles' average kinetic energy				
	Explain, with reference to the particle model, the effect of changing the temperature of a gas held at constant volume on its pressure				
	Calculate the change in the pressure of a gas or the volume of a gas (a fixed mass held at constant temperature) when either the pressure or volume is increased or decreased				
	<i>PHY ONLY:</i> Explain, with reference to the particle model, how increasing the volume in which a gas is contained can lead to a decrease in pressure when the temperature is constant				
	<i>PHY ONLY:</i> Calculate the pressure for a fixed mass of gas held at a constant temperature by applying, but not recalling, the equation: [$pV = \text{constant}$]				
	PHY & HT ONLY: Explain how work done on an enclosed gas can lead to an increase in the temperature of the gas, as in a bicycle pump				

Science-Separate (Physics)

AQA Physics - 4.4. Atomic structure				
TOPIC	Student Checklist	R	A	G
4.4.1 Atoms and isotopes	Describe the basic structure of an atom and how the distance of the charged particles vary with the absorption or emission of electromagnetic radiation			
	Define electrons, neutrons, protons, isotopes and ions			
	Relate differences between isotopes to differences in conventional representations of their identities, charges and masses			
	Describe how the atomic model has changed over time due to new experimental evidence, inc discovery of the atom and scattering experiments (inc the work of James Chadwick)			
4.4.2 Atoms and nuclear radiation	Describe and apply the idea that the activity of a radioactive source is the rate at which its unstable nuclei decay, measured in Becquerel (Bq) by a Geiger-Muller tube			
	Describe the penetration through materials, the range in air and the ionising power for alpha particles, beta particles and gamma rays			
	Apply knowledge of the uses of radiation to evaluate the best sources of radiation to use in a given situation			
	Use the names and symbols of common nuclei and particles to complete balanced nuclear equations, by balancing the atomic numbers and mass numbers			
	Define half-life of a radioactive isotope			
	HT ONLY: Determine the half-life of a radioactive isotope from given information and calculate the net decline, expressed as a ratio, in a radioactive emission after a given number of half-lives			
	Compare the hazards associated with contamination and irradiation and outline suitable precautions taken to protect against any hazard the radioactive sources may present			
4.4.3 Hazards and uses of radioactive emissions and of background radiation	<i>PHY ONLY: State, giving examples, that background radiation is caused by natural and man-made sources and that the level of radiation may be affected by occupation and/or location</i>			
	<i>PHY ONLY: Explain the relationship between the instability and half-life of radioactive isotopes and why the hazards associated with radioactive material differ according to the half-life involved</i>			
	<i>PHY ONLY: Describe and evaluate the uses of nuclear radiation in exploration of internal organs and controlling or destroying unwanted tissue</i>			
	<i>PHY ONLY: Evaluate the perceived risks of using nuclear radiation in relation to given data and consequences</i>			
	<i>PHY ONLY: Describe nuclear fission</i>			
	<i>PHY ONLY: Draw/interpret diagrams representing nuclear fission and how a chain reaction may occur</i>			
	<i>PHY ONLY: Describe nuclear fusion</i>			

Visual Arts

Year 11 Visual Arts Mock Exam for Fine Art, Graphics and Photography.

The mock exam in Visual Arts is to create the final outcome (AO4) for the GCSE coursework project called 'Identity'.

Before the mock exam, students need to ensure that all preparation work in their coursework sketchbook is up to date (AO1, AO2 & AO3).

The completed coursework project represents 60% of the final GCSE mark.

	Key Skills:	Work Assessed:
AO1	Developing Ideas Critical Analysis Cultural Understanding	<i>Mind Map</i> <i>Artist Research</i> <i>Artist Response</i>
AO2	Refining Ideas Material & Techniques	<i>Response Development</i> <i>Experimentation</i> <i>Refinement</i>
AO3	Recording Ideas Reviewing Progress	<i>Visual Recording</i> <i>Presentation</i> <i>Annotation</i>
AO4	Presenting Final Ideas Realising Project Intentions	<i>Final Outcome</i> <i>Coherence of the Project</i>

Year 11 Internal Exams Timetable 19 Nov - 30 Nov 2018

If you do not have an exam, you go to your normal timetabled lesson.

If you normally have access arrangements you will be given information about rooms before the exams.

		Lessons 1 and 2			Room		Lessons 3 and 4			Room	Afternoon		Ro om
Mon	19	Maths Paper 1	9.00 - 10.30	SH		Physical Geography	11.25 - 12.55	SH		French Reading German Reading	14.05 - 14.50/15.05 14.05 - 14.50/15.05	SH SH	
Tues	20	Biology Triple Biology Double	9.00 - 10.45 9.00 - 10.15	SH SH		History	11.20 - 13.20	SH		Btec Business	14.05 - 15.05	F22	
Wed	21	English Language P2	9.00 - 10.45	SH		Media Btec Business	11.20 - 12.50 11.20 - 12.20	F33/F34 F31		Geography	14.10 - 14.55	SH	
Thurs	22	Chemistry Triple Chemistry Double	9.00 - 10.45 9.00 - 10.15	SH SH		Economics Drama	11.20 - 13.05 11.20 - 12.50	SH SH					
Fri	23	English Literature P2	8.45 - 11.00	SH		French Writing German Writing Product Design	11.20 - 12.20/12.35 11.20 - 12.20/12.35 11.20 - 13.20	SH SH SH		PE	14.05 - 15.05	SH	
Mon	26	Physics Triple Physics Double	9.00 - 10.45 9.00 - 10.15	SH SH		Computing Child Care	11.25 - 12.55 11.25 - 12.55	SH SH		Btec Business	14.10 - 15.10	SH	
Tues	27	Maths Paper 2	9.00 - 10.30	SH		Business Music	11.20 - 13.05 11.20 - 12.50	SH K1					
Wed	28	Economics Latin Food Tec ICT	9.00 - 10.45 9.00 - 11.00 9.00 - 10.30 9.00 - 10.30	SH SH SH SH		RE	11.20 - 13.20	SH					
Thurs	29	Maths Paper 3	9.00 - 10.30	SH		Computing	11.25 - 12.55	SH		PE	14.05 - 15.05	SH	
Fri	30												
Mon	3	Art Graphics Photography	all day all day all day	E block E block E block		Art Graphics Photography	all day all day all day	E block E block E block		Art Graphics Photography	all day all day all day	all day E Block E Block	
Tues	4	Art Graphics Photography	all day all day all day	E block E block E block		Art Graphics Photography	all day all day all day	E block E block E block		Art Graphics Photography	all day all day all day	all day E Block E Block	
Wed	5	Drama	all day	RH		Drama	all day	RH		Drama	all day	RH	