Revision Checklist:

Mock 3 Series 2025

Mock 3 Week 1	9.00am Exam Start	1:30pm Exam Start
M 03/02/2025	English Language Paper 2	Biology Paper 2
	(1 hour 45 mins)	(1 hour 15 mins)
Tu 04/02/2025	French Listening and Reading	Computer Science Paper 1
	(F = 1 hour 20 mins H = 1 hour 45 mins)	(1 hour 30 mins)
W 05/02/2025	Maths Paper 1 Calc	Chemistry Paper 2
	(1 hour 30 mins)	(1 hour 15mins)
Th 06/02/2025	History Paper 1 and Geography Paper 1	Maths Paper 2 Non Calc
	(2 hours) (1 hour 30mins)	(1 hour 30 mins)
F 07/02/2025	Computer Science Paper 2 and Health and Social	French Writing
	(1 hour 30 mins) (1 hour)	(F = 1 hour H = 1 hour 15 mins)
Mock 3 Week 2	**9.00am Exam Start**	**1:30pm Exam Start**
M 10/02/2025	English Literature Paper 2	Sport
	(2 hour 15 mins)	(1 hour)
Tu 11/02/2025	History Paper 2 and Geography Paper 2+3	Statistics
	(1 hour 30 mins) (1 hour 30mins)	(1 hour 30 mins)
W 12/02/2025	Maths Paper 3 calc	Physics Paper 2
	(1 hour 30 mins)	(1 hour 15 mins)
Th 13/02/2025	Travel and Tourism + Food	Mop Up
	(1 hour 45mins)	
F 14/02/2025	Child Development + Mop Up	Mop Up
	(1 hour)	

Construction: Y11B/Cn1 will be on Thursday 27 February (PD +P5)
Y11C/Cn1 will be on Friday 28 February (PD + P5)

Key Dates

Date	Milestone
17th Jan	Mock 3 revision checklists distributed.
3rd Feb	Mock 3 exam series begins, and marking/moderation begins.
14th Feb	Mock 3 exam series ends.
3rd March	Marking and moderation ends.
13th March	Year 11 Parents Evening

Key Staff

Role	Name
Examination Officer	Mrs O'Neill
SLT Examination Lead	Mr Gregory
SLT SEND - (Access arrangements)	Mrs McKenzie and Mrs Perks
Year 11 AL	Mrs Cooksey
Year 11 AAL	Mrs Lockton

Grades

Mock 3 Grade:

- Grades will be awarded for all subjects.
- These grades will be based on the Mock 3 exam papers in addition to any coursework marks obtained to this point.

Predicted Grade:

- Our staff are encouraged to review the grade that they feel the student is likely to achieve by the end of year 11.
- Students will be provided with this grade on their Mock Grade report.
- This grade could be higher or lower than the Mock grade, based on the teacher's knowledge of what content is still to be covered.

Please note when making applications to various post-16 destinations, either of the two grade types may be requested.

Examination Logistics

Rooming:

Sports Hall – Main Cohort
Gym – Access Arrangement
W14 – Access Arrangement
Conference Room – Support Room

AM Exam Timings:

8:30 Line Up + Collect Phones and store securely.
9:00 Exam Start

Students will have break as normal.
If an examination runs into break, the cohort will be given an extension.

PM Exam Timings:

12:40 -Year 11 Lunch Start
1:15 -Line Up
1:30 – Exam Start

Registers will be taken in the exam hall using the desk name cards by attendance.
Students will leave site after PM exam, however, may stay on site to attend P6 revision sessions.

Malpractice Awareness:

Under exam conditions the use of unauthorised materials, copying or attempting to copy, escaping from supervision or collusion (i.e. cheating) is not permitted.

Unauthorised Materials Include – Mobile phones, air pods/ear pieces, food, drink labels, correction fluid, gel pens, multi/clicker pens, watches.

Mobile Phones:

Mobiles are not allowed in the exam room. We are collecting mobile phones from students at the start of each day, storing them securely and returning them as students leave site after the PM exams.

Students will not be allowed to enter the exam until contact home has been made should you fail to hand over your phone.

Toilets:

Students without a toilet pass are not allowed to leave the exam within 45 minutes of the exam starting and 30 minutes of the exam finishing.

Students without a toilet pass will not be permitted to leave the exam for any paper shorter than 1 hour 15 minutes.

Access Arrangements:

Students entitled to Access Arrangements may have slightly different rules as part of their plan.

Students will be made aware if this applies to you and access arrangements are organised by Mrs Perks.

Revision Timetable

It is important to have a balance of study, leisure and rest. Use these timetables to plan your week accordingly. These can also be used to plot where you do not have free time available, such as school or when attending clubs or appointments.

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
9:00							
10:00							
11:00							
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English Language Paper 2

Topic	What you need to know/do	Revise	Revisit
Language paper 2			
Writing techniques in non-fiction	• Understand techniques like anecdote, statistics, rhetorical questions, direct address, repetition, facts, opinions • Evaluate how writers build arguments or persuade (rhetoric)		
Comparing perspectives and attitudes	• Identifying similarities and differences in viewpoints. • Using comparative language effectively (e.g., "whereas," "similarly") • Summarising key points concisely		
Question 1	Identify four true statements		
Question 2	Write a summary – making clear inferences • Extract relevant information from both texts • Write concise, balanced summaries • Use comparative phrases (e.g., "both texts suggest")		
Question 3	Write about language and its effects • Identify language devices (e.g., metaphor, simile, hyperbole). • Analyse word choices and their connotations. • Explain the effect on the reader with evidence		
Question 4	Compare writer's viewpoints and perspectives • Highlight key language and structural features in both texts • Explain how these features convey different perspectives • Write a balanced and focused comparison		
Question 5	Transactional writing – write to voice opinion through letters, articles, speeches, leaflets, blogs • Plan and structure a persuasive response • Using rhetorical techniques (e.g., direct address, alliteration) • Craft an engaging opening and conclusion		

Revision sources	
Online	**Physical**
Mr Bruff Language paper 2:	Class notes Revision booklets

English Literature (Power and Conflict)

Poem	Themes	Revise	Revisit
Literature paper 2: Power and Conflict poetry			
Ozymandias	Power of rulers, transience of power, nature's dominance, pride, hubris, time.		
London	Social inequality, abuse of power, oppression, poverty, corruption, suffering.		
The Prelude	Power of nature, human vulnerability, fear, awe.		
My Last Duchess	Power and control, arrogance, jealousy, pride.		
The Charge of the Light Brigade	Bravery, sacrifice, futility of war, duty, patriotism, loss.		
Exposure	War and its futility, suffering, nature as an enemy, sacrifice.		
Storm on the Island	Power of nature, human helplessness, fear, conflict between humans and the environment, isolation.		
Bayonet Charge	Reality of war, fear, survival, patriotism and its questioning, individual conflict, chaos.		
Remains	Guilt, psychological conflict, trauma, violence, morality, effects of war.		
Poppies	Parental grief, loss, memory, war and its impact on families, sacrifice, emotional conflict.		
War Photographer	War and its horrors, detachment and guilt, responsibility, suffering, emotional conflict, memory.		
Tissue	Fragility of human power, the transience of life, identity.		
The Émigrée	Memory, exile, identity, conflict between idealism and reality, oppression, resilience, loss.		
Checking Out Me History	Power of knowledge, identity, colonialism, cultural conflict, historical bias, self-discovery.		
Kamikaze	Conflict between personal duty and national expectation, family, memory, cultural pressures, war, honour, shame.		

Revision sources	
Online	**Physical**
Mr Bruff Literature paper 2 (Power and Conflict):	Class notes Revision booklets

English Literature (Unseen poetry)

Topic	What you need to know/do	Revise	Revisit
Language paper 2: Unseen poetry			
Understanding the poem	• Can I read the poem carefully and understand its overall meaning? • Can I identify the speaker and their perspective? • Do I understand the tone of the poem (e.g., happy, sad, reflective, sarcastic)? • Can I summarise the poem in 2–3 sentences?		
Analysing language and structure	• Can I pick out key words or phrases that stand out in the poem? • Can I explain how the poet uses imagery (e.g., metaphors, similes, personification)? • Do I understand the poem's structure (e.g., stanzas, line length, rhyme, or rhythm)? • Can I explain the effect of any repetition, enjambment, or caesura?		
Themes and messages	• Can I identify the main themes or ideas in the poem (e.g., love, loss, nature, identity)? • Can I explain what the poet might be trying to say or make the reader feel? • Do I think about how the poem reflects on human emotions or experiences?		
Personal response	• Can I explain how the poem makes me feel and why? • Do I consider how different readers might interpret the poem? • Can I give my own opinion while supporting it with evidence from the poem?		

Revision sources	
Online	**Physical**
Mr Bruff Literature paper 2 (Unseen poetry):	Class notes Revision booklets

English Literature (An Inspector Calls)

Topic	Themes	Revise	Revisit
Plot and context			
1912-1945	Society, politics, labour, Titanic, General Strike, two World Wars.		
Social class	Hierarchy, patriarchy, capitalist, socialist.		
Young vs the old	Generation, beliefs, society, social change.		
Act one	Celebration interrupted; Inspector arrives.		
Act two	Secrets revealed; family tensions rise.		
Act three	Consequences discussed; Inspector departs.		
Characters			
The Inspector	Moral authority, mysterious, advocate for responsibility.		
Arthur Birling	Arrogant, capitalist, ignorant, self-serving.		
Sybil Birling	Cold, proud, judgmental, dismissive of responsibility.		
Sheila Birling	Naïve to mature, remorseful, socially aware.		
Eric Birling	Awkward, guilty, reckless, morally improving.		
Gerald Croft	Charming, privileged, evasive, reluctant to change.		
Eva Smith	Invisible, victimized, symbolizes the working class.		
Themes			
Gender	Eva Smith vulnerable to exploitation by men. Mrs. B expects Sheila to conform to traditional roles, marrying for status. Gerald and Eric's treatment of Eva reflects how men in privileged positions exploit women.		
Social responsibility	Inspector challenges each character to take responsibility for their actions, showing the consequences of their behaviour.		

Revision sources

Online	Physical
Mr Bruff Literature paper 2 (An Inspector Calls):	Class notes Revision booklets

Geography – Paper 1

Topic	Key information	Revise	Revisit
	Natural Hazards		
Tectonic Hazards	• Distribution of tectonic hazards • Plate margins – constructive, destructive (including collision) and conservative • Contrasting earthquake case studies **(Amatrice/Italy [HIC] and Nepal [LIC])**. Why were the impacts and management so different? • Why do people live in areas of tectonic hazards? Focus on volcanic hazards • How can we reduce the effects of tectonic hazards? 3ps and monitoring		
Weather Hazards	• Global atmospheric circulation model • Formation and distributions of tropical storms • Tropical storm case study **(Typhoon Haiyan) -** Impacts and responses. • How does global warming affect tropical storms? • How can we reduce the effects of tropical storms? 3Ps and monitoring • UK weather case study **(Cumbria Floods).** Impacts and responses. • What are the impacts of extreme weather in the UK and how can it be managed?		
Climate Change	• Evidence for and against climate change • Human and natural causes of climate changes • Social, economic and environmental impacts of climate change • Mitigation and adaptation strategies		
	Living World		
Ecosystems	• Small scale ecosystems, food webs, nutrient cycle and relationships within them • Location and characteristics of biomes		
Tropical Rainforests (TRF)	• Physical characteristics of the TRF. • Interdependence in the TRF • Biodiversity and plant and animal adaptations • Deforestation case study **(Amazon Rainforest)**. Causes, impacts and sustainable management of the TRF. • Importance of the TRF • Sustainable management of the TRF		
Hot Deserts	• Physical characteristics of hot deserts • Interdependence in hot deserts • Biodiversity and plant and animal adaptations • Hot desert case study **(Western Desert, USA)**. Opportunities (energy, mining etc...) and challenges in the Western Desert (Extreme heat, lack of water, inaccessibility). • Desertification – causes, impacts and management in the Sahel		
	Physical Landscapes of the UK		
Coasts	• Key Processes of erosion, transportation, deposition, weathering and mass movement • Formation of erosional (Stack, wave cut platform, headlands and bays) and depositional landforms (spit, bar, beach, sand dune) • Coastal landscape case study **(Dorset Coast)** - The coastline features, causes of erosion, coastal defences. • Hard and soft engineering methods. How they work and Positives/Negatives		
Rivers	• River features from source to mouth **(River Tees)** • Key Processes of erosion, transportation and deposition • Formation of waterfall, meander, flood plain, interlocking spurs, oxbow lakes and levees • Flood hydrographs – How to read them and what physical and human factors affect the chances of a flood. • Hard and Soft engineering methods. How they work and Positives/Negatives • Management of flood risks, e.g. Jubilee River Flood Relief Channel • Hydrographs		

Geography – Paper 2

Topic	Key Terms	Revise	Revisit
Urban Issues			
Urbanisation	• Causes of urbanisation around the world and reasons for different rates in LICs and HICs • Megacities – what are they are where are they found?		
Case study of an LIC city	• **Lagos –** Location and importance • Opportunities (Access to health, shanty town regeneration, public transport [BRT]). • Challenges (Managing shanty towns (Makoko), sanitation, water, waste disposal, air and water pollution) • How is Lagos improving the quality of lives for the urban poor? **Makoko Redevelopment.**		
Case study of a UK city	• **London –** Location and importance • Impact of internal and international migration on London • Opportunities (cultural mix, recreation, employment, transport system, urban greening) • Challenges (inequalities, urban deprivation, brownfield and greenfield sites, waste disposal, urban sprawl, crime, congestion) • Explanation of regeneration (London Olympic Park, Docklands, Shoreditch)		
Urban sustainability	• How can people live more sustainably? • Case study on sustainable urban living **(East Village/Olympic Park)** • How can urban transport strategies reduce traffic congestion? Crossrail and Boris Bikes		
Changing Economic World			
Comparison of LIC **(Nigeria)** and LICs **(UK)**	• How economic development leads to improved quality of life • Trade and aid as methods to reduce the development gap • The economic development of Nigeria, including its changing economy, TNCs, aid, debt, the involvement of China, economic migration out of Nigeria • The economic development of the UK including the industrial structure, deindustrialisation, post-industrial economy (M4 corridor), high-tech industry (Cambridge), motor industry, rural changes, transport and infrastructure (ports and airports) • Inequalities within a country: the UK's north-south divide • The UK's global links		

Revision Sources

Online	Physical
• GCSE Pod • Seneca • BBC Bitesize • Mr B's Geography Channel on Youtube	• Knowledge organisers • Exercise books • Revision work from class • Case Study information • Fieldwork summary crib sheet

Geography – Paper 3

Topic	Key Terms	Revise	Revisit
Fieldwork			

Enquiry Question	• You will be required to write the title of your fieldwork:
	  • Physical: To what extent is Elvaston Castle Country Park a healthy and balanced ecosystem?
	  • Human: To what extent has the regeneration of the CBD of Derby been overwhelmingly positive?
	• I know the factors that need to be considered when selecting suitable questions.
	• I know the potential risks of both human and physical fieldwork and how reduced		

Data Collection	• I can explain the difference between primary and secondary data • I can describe some data collection methods and explain their advantages and disadvantages – e.g. taking photographs, measuring channel depth, conducting traffic surveys. • I understand the difference between qualitative and quantitative data • I can identify and select different sampling methods such as random, stratified and systematic.		
Data Presentation	• I can select and use accurately appropriate presentation methods such as annotated photographs, bar charts and maps • I can describe different data presentation methods and explain their positives and negatives		
Data Analysis	• I can describe, analyse and explain the results of fieldwork data. • I can explain links between different sets of data • I can identify anomalies in fieldwork data • I can confidently calculate mean, mode, median, range and interquartile range		
Conclusion	• I can draw evidenced conclusions based on data analysis		
Evaluation	• I can identify the problems of data collection methods • I can identify the limitations of data collected • I can suggest other data that might be useful • I can suggest ways of improving enquiries in the future		

Geographical Skills – GCSE Pod (For all three papers)

Fieldwork	Graph	Cartographic (Map)	Statistics

Prefer Seneca?

History – Conflict & Tension, The Interwar Years 1918-1939 (Paper 1)

Topic	Key Knowledge	Revise	Revisit
Key topic 1: Peacemaking 1918-1919	• The aims of the Big Three (Clemenceau, Wilson & LLoyd George) & why they were willing to comprom • The terms of the Treaty of Versailles • The reaction to the treaty: the views of the people & leaders of Britain, France & the USA • The reactions to the treaty: the views of the German people and the impact on the new Weimar government • Negative consequences of the treaty & arguments as to why it can be justified • The terms of the treaties imposed on Germany's allies • The extent that each of the Big Three achieved their aims		
Key topic 2: The League of Nations in the 1920s	• The creation of the League: aims, membership & powers • Structure of the League: Assembly, Council, Permanent Court of International Justice & role of Special Comm • The work of the Special Commissions: successes and failures • Events in the 1920s: Vilna (1920), Upper Silesia (1921-25), Aland Islands (1921), Corfu (1923), Bulgaria (1925) & Wall Street Crash (1929). • International agreements that did not involve the League: Locarno Treaties (1925), Rapallo Treaty (1922), Washington Arms Conference (1921-22) & Kellogg-Briand Pact (1928)		
Key topic 3: The League of Nations in the 1930s	• The impact of the Great Depression on international cooperation • The Manchurian Crisis: reasons for Japan's invasion, events of the invasion, the League's response • The Abyssinian Invasion: reasons for Italy's invasion, events of the invasion, the League's response • Results of the League's actions in the 1930s: effect on the League, impact on international relations & effect on Hitler • Factors in the League's failure: the League's actions, the response of Britain & France, incomplete membership, the League's weak powers, the Depression etc.		
Key topic 4: Hitler's Foreign Policy 1933-1938	• Hitler's foreign policy aims: Lebensraum, Volkesdeutsche, rearmament etc. • Early foreign policy events 1933-1935: reasons for leaving the Disarmament Conference, the Dollfuss affair (attempted Anschluss), rearmament, the Saar plebiscite & Anglo-German Naval Agreement. • The reoccupation of the Rhineland (1936): reasons for it, response from Britian, France & the League, why it was a gamble & results for Hitler. • Anschluss (1938): events, results for Germany, response from other countries • The Sudetenland Crisis (1938): reasons why Hitler wanted the Sudetenland, events of 1938, the effects of appeasement on Chamberlain's response. • The Munich Conference (1938): reasons why the conference was called, the reaction of Britain, France & Italy to Hitler's demands, results of the conference, Chamberlain's claims of 'peace in our time', subsequent invasion of the rest of Czechoslovakia. • Appeasement: positives and negatives of the policy. • The Nazi-Soviet Pact (1939): reasons for Germany & the USSR signing the Pact, what was agreed & Britain & France's response to the Pact. • The invasion of Poland (1939): Germany's actions, Britain & France's response. • Factors that resulted in the outbreak of the Second World War: Hitler's actions, the failure of the League, the Depression, the Treaty of Versailles & appeasement.		

History – Germany (Paper 1)

Topic	Key Knowledge	Revise	Revisit
Key topic 1: The rule of the Kaiser and the First World War 1890-1918	• Germany during the reign of the Kaiser: the growth of socialism and trade unions, the impact of these on parliamentary government, rivalry with Britain. • The Kaiser's foreign policy aims: Weltpolitik & the Naval Laws. • Germany and the First World War: impact of the war on the home front, reasons for the Kaiser's abdication, the Kiel Mutiny and armistice, the introduction of democratic government.		
Key topic 2: The Weimar Republic, 1918 -19	• The setting up of the Weimar Republic. The strengths and weaknesses of the new Constitution. • Reasons for the early unpopularity of the Republic, including the 'stab in the back' theory and the key terms of the Treaty of Versailles. • Challenges to the Republic from Left and Right: Spartacists, Freikorps, the Kapp Putsch. • Reasons for economic recovery, including the work of Stresemann, the Rentenmark, the Dawes and Young Plans and American loans and investment. • The challenges of 1923: hyperinflation; the reasons for, and effects of, the French occupation of the Ruhr. • The impact on domestic policies of Stresemann's achievements abroad: the Locarno Pact, joining the League of Nations and the Kellogg-Briand Pact. • Germany's Golden Age: cultural changes including developments in architecture, art and the cinema, music & reactions to these.		

History – Elizabethan England (Paper 2)

Topic	Key Knowledge	Revise	Revisit
Key topic 1: Elizabeth's court, Parliament & early issues of her reign	• Elizabeth's Character & early life • How England was ruled under Elizabeth – court, Parliament, the Privy Council, JPs & Lord Lieutenan • The difficulties facing a female ruler • The reasons why the issue of marriage was so important • The potential suitors • Elizabeth's attempts to find a religious solution		
Key topic 2: Challenges to Elizabeth at home and abroad, 1569–88	• The reasons for, and significance of, the Northern Rebellion, 1569–70. • The features and significance of the Ridolfi, Throckmorton and Babington plots. Walsingham a of spies. • Mary, Queen of Scots and why she posed a problem for Elizabeth • The reasons for, and significance of, Mary Queen of Scots' execution in 1587. • The reasons for the Earl of Essex' rebellion • Reasons why the rebellions against Elizabeth failed • Reactions to Elizabeth's religious policies: Catholic responses (papal bull, laws introduced against Catholics in the 1580s). • The arrival of missionaries & Jesuit priests e.g. Edmund Campion • Reactions to Elizabeth's religious policies: Puritan responses (arguments with Elizabeth, prophesyings, later crackdowns by John Whitgift)		
Key topic 3: Elizabethan society 1558-88	• Wealth and fashion in Elizabethan England: the differences between gentry & nobility, how people demonstrated their wealth • The role of the theatre. • The reasons why the Elizabethan period can be seen as a 'Golden Age'. • The reasons for the increase in poverty and vagabondage during these years. • The changing attitudes towards the poor. • The introduction of the Poor Law (1601)		
Key topic 4: Exploration & relations with Spain	• Factors prompting exploration, including the impact of new technology on ships and sailing and the drive to expand trade. • The reasons for, and significance of, Drake's circumnavigation of the globe. • The significance of Raleigh and the attempted colonisation of Virginia. • Commercial rivalry. The New World, privateering and the significance of the activities of Drake. • The impact of the voyages of discovery on England (wealth, power & territory) • Political and religious rivalry with Spain. • English direct involvement in the Netherlands, 1585–88. • Spanish invasion plans. Reasons why Philip used the Spanish Armada. • The reasons for, and consequences of, the English victory.		

History – Health & The People (Paper 2)

Topic	Key Knowledge	Revise	Revisit
Health & The People 1000-Present Day			
Medieval Period 1000-1500	• Hippocrates, Galen & the Four Humours • Treatments: the Natural, the Supernatural and Astrology • Medieval Medics • The Christian Church • Islam and Muslim Doctors • Medieval Public Health • The Black Death		
Renaissance Period 1500-1700	• Vesalius & the Human Anatomy • Paré, Ligatures and the Impact of War on Medicine • Harvey and the Circulatory System • Approaches to Treatment and Prevention of Illness • New Ideas, New Technologies, New Science • Responses to the Great Plague of 1665 • The Changing Nature of Hospitals and Medical Professions		
Industrial Period 1700-1900	• Simpson and Anaesthetics • Pasteur and Germ Theory • Lister and Antiseptics • Robert Koch and Bacteriology • Magic Bullets and Immunology • Treatment in Industrial Britain • Industrialisation and its Impact on Health and Medicine		
Modern Period 1900-2000	• Fleming, Florey, Chain and Penicillin • The NHS • Alternative Medicine • Modern Surgery • McIndoe and Plastic Surgery • Living Conditions and Welfare • Liberal Reforms • Modern Developments		

Revision Sources	
Online	**Physical**
BBC Bitesize www.bbc.co.uk/bitesize Oak Academy www.classroom.thenational.academy **YouTube:** **Early Elizabethan** England Revision https://www.youtube.com/watch?v=wEyo64_ixes Weimar and Nazi Germany https://www.youtube.com/playlist?list=PLxblrnocOkdUs6VsKaw4t4l7qHhgvIv7d	Booklets Revision booklets Class notes Knowledge Organisers

Maths – Foundation

Unit		Unit / Topic	Revise	Revisit
1	a	**Integers and place value**		
		Types of number		
		Use and order positive and negative numbers		
		Use inequality symbols		
		Four operations using positive and negative numbers		
		Round numbers to nearest 10, 100, 1000 and use rounding for estimation		
	b	**Decimals**		
		Use decimals and place value		
		Compare and order decimal numbers		
		Four operations using decimal numbers		
		Round to nearest whole number, decimal place & significant figures		
		Use one calculation to check another		
	c	**Indices, powers and roots**		
		Find squares and cubes		
		Use index notation including negative powers		
		Use laws of indices to multiply and divide numbers in index form		
		Order of operations including powers and brackets		
		Use of calculator		
	d	**Factors, multiples and primes**		
		Identify factors, multiples and prime numbers		
		Find prime factorisation of a number (& write in index form)		
		Find common factors & highest common factor		
		Find LCM of two (or three) numbers		
2	a	**Algebra: the basics**		
		Write an expression		
		Collect like terms		
		Simplify expressions		
		Use index laws		
	b	**Expanding and factorising single brackets**		
		Expand single brackets		
		Simplify expressions using squares and cubes		
		Factorise expressions		
	c	**Expressions and substitution into formulae**		
		Substitute into expressions involving brackets & powers		
		Substitute into a formula (& word formula)		
3	a	**Tables**		
		Sort and classify data (inc tally charts)		
		Extract data from lists and tables (inc time tables)		
		Identify mode from a list / table		
	b	**Charts and graphs**		
		Know which chart or diagram to use for different data sets		
		Draw and interpet bar charts (inc dual & composite)		
		Draw and interpet line graphs (vertical & time-series)		
		Draw and interpet pictograms		
		Draw and interpret stem and leaf diagrams		
	c	**Pie charts**		
		Draw and use pie charts		
		Find mode & total frequency from a pie chart		
		Compare two pie charts		
	d	**Scatter graphs**		
		Draw and use scatter graphs & lines of best fit		
		Identify outliers & correlation		

Maths – Foundation

Unit		Unit / Topic	Revise	Revisit
4	a	**Fractions**		
		Equivalent fractions including simplifying & comparing		
		Express one amount as a fraction of another		
		Convert between mixed numbers and improper fractions		
		Four operations using fractions		
		Find a fraction of an amount		
	b	**Fractions, decimals and percentages**		
		Use fraction to decimal conversions		
		Recognise terminating & recurring decimals		
	c	**Percentages**		
		Convert between fractions, decimals & percentages		
		Order & compare fractions, decimals & percentages		
		Write one amount as a percentage of another		
		Calculate percentage of an amount		
		Calculate percentage increase/decrease		
		Use decimals to find quantities (multiplier methods)		
		Increase / decrease an amount by a percentage		
5	a	**Equations**		
		Use function machines		
		Solve equations (inc brackets and unknowns on both sides)		
		Rearrange simple equations		
		Set up & solve equations to solve problems		
	b	**Inequalities**		
		On a number line		
		Listing numbers that satisfy an inequality		
		Solving inequalities and show the solution on a number line		
		Error intervals due to rounding & truncation		
	c	**Sequences**		
		Continue sequences inc from pictures		
		Find the nth term		
		Use nth term rule to generate or continue a sequence		
6	a	**Properties of shapes, parallel lines and angle facts**		
		Measure and draw lines, angles, 2D & 3D shapes		
		Identify and name 2D shapes and their properties		
		Identify parallel and perpendicular lines		
		Use angle facts - around a point, straight line, vertically opposite etc		
		Use angle properties of parallel lines		
	b	**Interior and exterior angles of polygons**		
		Use sum of interior angles for irregular & regular polygons		
		Use sum of exterior angles for regular polygons		
7	a	**Statistics and sampling**		
		Understand bias		
	b	**The averages**		
		Use various charts & diagrams in relation to averages		
		Calculate the mean, mode, median and range from a list		
		Median, mean and range from a table (discrete data)		
		Modal class, median and estimate of the mean from grouped data		
8	a	**Perimeter and area**		
		Convert between metric measures		
		Read scales		
		Time		
		Perimeter of 2D shapes		
		Area of 2 D shapes		
		Area of compound shapes		
		Surface area of prisms & simple compound forms		

Maths – Foundation

Unit		Unit / Topic	Revise	Revisit
8	b	**3D forms and volume**		
		Identify and name 3D forms and their properties		
		Volume of a cuboid		
		Volume of a prism		
		Volume of a composite forms		
9	a	**Real-life graphs**		
		Use coordinates in all 4 quadrants		
		Midpoints of a line segment		
		Conversion graphs		
		Fixed cost and cost per unit graphs		
		Distance / time and Velocity/ time graphs		
	b	**Straight-line graphs**		
		Draw, use and interpret (inc gradient) straight line graphs		
		Identify parallel lines		
		Find the equation of a line (including from a graph)		
10	a	**Transformations I: translations, rotations & reflections**		
		Transform and describe translations		
		Transform and describe rotations		
		Transform and describe reflections		
	b	**Transformations II: enlargements and combinations**		
		Transform and describe enlargements		
		Transform shapes using a combination of transformations		
		Describe transformations when using multiple transformations		
11	a	**Ratio**		
		Write ratios in their simplest form (including in context)		
		Share a quantity in a given ratio (including 3 part ratios)		
		Use a ratio to find one quantity when another is known		
		Compare ratios		
		Write ratio in the form 1:n or n:1		
		Write a ratio as a fraction and vice versa		
	b	**Proportion**		
		Use direct & inverse proportion (and recognise graphically)		
		Best value		
		Recipes		
		Currency conversions		
12		**Right-angled triangles: Pythagoras and trigonometry**		
		Pythagoras' Theorem		
		Trigonometry - sin, cos and tan		
		Know exact trig values		
13	a	**Probability I**		
		Probability scale		
		Listing outcomes		
		Two way tables & Frequency Trees		
		Use 1-p		
	b	**Probability II**		
		Relative frequency		
		Sample space diagrams		
		Venn diagrams		
		Probability tree diagrams		
14		**Multiplicative reasoning**		
		Use compound measures: Pressure, Density & Speed		
		Percentage profit / loss		
		Reverse percentages		
		Simple interest		
		Compound interest & growth		
		Depreciation & decay		
		Rates of pay		

Maths – Foundation

Unit		Unit / Topic	Revise	Revisit
15	a	**Plans and elevations**		
		3D shape names and properties		
		Skettch 3D forms		
		Draw plans and elevations of shapes		
		Draw a 3D form given its plan and elevations		
	b	**Constructions, loci and bearings**		
		Standard constructions		
		Find regions satisfying a combination of loci		
		Use maps and scale drawings		
		Bearings		
16	a	**Quadratic equations: expanding and factorising**		
		Expand double brackets		
		Factorise quadratic expressions		
		Solve quadratic equations		
	b	**Quadratic equations: graphs**		
		Plot quadratic graphs		
		Find solutions, intercepts & turning points of a quadratic graph		
17		**Circles, cylinders, cones and spheres**		
		Name parts of a circle		
		Recall & use formula for area and circumference of a circle		
		Arcs and sectors		
		Surface area & volume of a cylinder		
		Spheres, pyramids, cones and composite solids.		
18	a	**Fractions and reciprocals**		
		4 operations with mixed number fractions		
		Reciprocal of an integer, decimal or fractions		
	b	**Indices and standard form**		
		Index laws to simplify & calculate the value of an expression		
		Convert between ordinary numbers and standard form		
		Work with the 4 operations in standard form		
		Use a calculator with indices and standard form		
19	a	**Similarity and congruence in 2D**		
		Use congruence criteria for triangles (SSS, SAS, ASA and RHS);		
		Identify similar shapes		
		Identify scale factors and find missing lengths in similar shapes		
	b	**Vectors**		
		Understand and use column notation including drawing them		
		Identify parallel column vectors		
		Calculate using column vectors		
20		**Rearranging equations, graphs of cubic and reciprocal functions and simultaneous equations**		
		Know the terms equation, identity, expression etc		
		Change the subject of a formula		
		Answer simple "show that" questions.		
		Use inverse proportion involving graphs		
		Recognise and sketch cubic functions		
		Recognise and sketch reciprocal functions		
		Solve simultaneous equations algebraically and graphically		

Revision Sources	
Online	**Physical**
Dr Frost Maths, On-Maths, maths made easy	Ms Cruise's High frequency topic booklets, Shadow exam papers, exam papers

Maths – Higher

Unit		Title	Revise	Revisit
1		**Calculations, checking and rounding**		
		Four operations with decimals and whole numbers		
	a	Use one calculation to find the answer to another		
		Product rule		
		Rounding & estimation		
		Indices, roots, reciprocals and hierarchy of operations		
	b	Use index notation including fractional and negative powers		
		Order of operations		
		Factors, multiples and primes		
		Identify factors, multiples and prime numbers		
	c	Find prime factorisation of a number (& write in index form)		
		Find common factors & highest common factor		
		Find LCM of two (or three) numbers		
		Standard form and surds		
		Index laws to simplify & calculate the value of an expression		
	d	Convert between ordinary numbers and standard form		
		Work with the 4 operations in standard form		
		Use a calculator with indices and standard form		
		Simplify surd expressions		
2		**Algebra: the basics**		
		Write an expression		
		Collect like terms		
		Simplify expressions		
	a	Use index laws		
		Expand single & double brackets		
		Factorise single brackets		
		Factorise quadratic expressions		
		Factorise quadratic expressions using difference of two squares		
		Setting up, rearranging and solving equations		
		Set up expressions and equations		
		Substitute into expressions, equations and formulae		
	b	Solve linear equations and inequalities		
		Change the subject of a formula		
		Sequences		
		Continue sequences inc from pictures		
		Find the nth term		
		Use nth term rule to generate or continue a sequence		
	c	Find the nth term of a quadratic sequence		
		Distinguish between arithmetic and geometric sequences		
		Recognise and use simple geometric progressions		
		Find term to term rule of a geometric sequence, including negative, fraction and decimal terms		
3		**Averages and range**		
		Use various charts & diagrams in relation to averages		
		Two way tables		
	a	Calculate the mean, mode, median and range from a list		
		Median, mean and range from a table (discrete data)		
		Modal class, median and estimate of the mean from grouped data		
		Representing and interpreting data		
		Know which chart or diagram to use for different data sets		
		Draw and interpet bar charts (inc dual & composite)		
		Draw and interpet line graphs (vertical & time-series)		
	b	Draw and use pie charts		
		Find mode & total frequency from a pie chart		
		Compare two pie charts		
		Produce and interpret histograms		
		Compare distributions		
		Scatter graphs		
	c	Draw and use scatter graphs & lines of best fit		
		Identify outliers & correlation		

Maths – Higher

Unit		Title	Revise	Revisit
4	a	**Fractions**		
		Equivalent fractions including simplifying & comparing		
		Express one amount as a fraction of another		
		Convert between mixed numbers and improper fractions		
		Four operations using fractions		
		Find a fraction of an amount		
		Convert between recurring decimals to fractions and vice versa		
	b	**Percentages**		
		Use fraction to decimal conversions		
		Recognise terminating & recurring decimals		
		Convert between fractions, decimals & percentages		
		Order & compare fractions, decimals & percentages		
		Write one amount as a percentage of another		
		Calculate percentage of an amount		
		Calculate percentage increase/decrease		
		Use decimals to find quantities (multiplier methods)		
		Increase / decrease an amount by a percentage		
		Reverse percentages		
	c	**Ratio and proportion**		
		Write ratios in their simplest form (including in context)		
		Share a quantity in a given ratio (including 3 part ratios)		
		Use a ratio to find one quantity when another is known		
		Compare ratios		
		Write ratio in the form 1:n or n:1		
		Write a ratio as a fraction and vice versa		
		Write a ratio as a linear function		
		Use direct & inverse proportion (and recognise graphically)		
		Recipes		
		Currency conversions		
5	a	**Polygons, angles and parallel lines**		
		Measure and draw lines, angles, 2D & 3D shapes		
		Identify and name 2D shapes and their properties		
		Identify parallel and perpendicular lines		
		Use angle facts - around a point, straight line, vertically opposite etc		
		Use angle properties of parallel lines		
		Use sum of interior angles for irregular & regular polygons		
		Use sum of exterior angles for regular polygons		
		Use the side/angle properties of compound shapes made up of triangles, lines and quadrilaterals		
	b	**Pythagoras' Theorem and trigonometry**		
		Pythagoras' Theorem		
		Trigonometry - sin, cos and tan		
		Know exact trig values		
6	a	**Graphs: the basics and real-life graphs**		
		Use coordinates in all 4 quadrants		
		Conversion graphs		
		Fixed cost and cost per unit graphs		
		Distance / time and Velocity/ time graphs		
		Midpoints of a line segment		
		Calculate the length of a line segment		
	b	**Linear graphs and coordinate geometry**		
		Draw, use and interpret (inc gradient) straight line graphs		
		Find the equation of a line through two points		
		Find the equation of a line (including from a graph)		
		Identify parallel and perpendicular lines		
		Generate equations of parallel and perpendicular lines		
	c	**Quadratic, cubic and other graphs**		
		Plot quadratic graphs		
		Find solutions, intercepts & turning points of a quadratic graph		
		Recognise and sketch cubic functions		
		Recognise and sketch reciprocal functions		
		Draw circles, centre the origin, equation $x^2 + y^2 = r^2$.		

Maths – Higher

Unit		Title	Revise	Revisit
7	a	**Perimeter, area and circles**		
		Convert between metric measures		
		Read scales		
		Perimeter of 2D shapes		
		Area of 2 D shapes and compound shapes		
		Name parts of a circle		
		Recall & use formula for area and circumference of a circle		
		Arcs and sectors		
	b	**3D forms and volume, cylinders, cones and spheres**		
		Identify and name 3D forms and their properties		
		Volume of a cuboid		
		Volume of a prism		
		Volume of a composite forms		
		Surface area of prisms & simple compound forms		
		Surface area & volume of a cylinder		
		Spheres, pyramids, cones, frustums and composite solids.		
	c	**Accuracy and bounds**		
		Calculate the upper & lower bounds of numbers		
		Calculate the upper & lower bounds of an expression		
		Use error intervals (inc truncation)		
8	a	**Transformations**		
		Transform and describe translations, rotations & reflections		
		Transform and describe enlargements inc fractional and negative SF		
		Transform shapes using a combination of transformations		
		Describe transformations when using multiple transformations		
		Describe the changes & invariance achieved by combinations of transformations		
	b	**Constructions, loci and bearings**		
		Draw plans and elevations of shapes		
		Draw a 3D form given its plan and elevations		
		Use maps, scale drawings & bearings		
		Standard constructions		
		Find regions satisfying a combination of loci		
		Fnd and describe regions satisfying a combination of loci, including in 3D		
		Use constructions to solve loci problems including with bearings		
9	a	**Solving quadratic and simultaneous equations**		
		Set up and solve quadratic equations		
		Completing the square		
		Quadratic Formula		
		Solve simultaneous equations algebraically and graphically (linear/linear)		
		Solve simultaneous equations algebraically and graphically (linear/quadratic)		
		Solve simultaneous equations algebraically and graphically (linear/circle)		
	b	**Inequalities**		
		On a number line		
		Listing numbers that satisfy an inequality		
		Solving inequalities and show the solution on a number line		
10		**Probability**		
		Probability scale		
		Listing outcomes		
		Two way tables		
		Frequency trees		
		Use 1-p		
		Relative frequency		
		Sample space diagrams		
		Venn diagrams		
		Probability tree diagrams		
11		**Multiplicative reasoning**		
		Best value		
		Use compound measures: Pressure, Density & Speed		
		Percentage profit / loss		
		Reverse percentages		
		Simple interest		
		Compound interest & growth		
		Depreciation & decay		
		Rates of pay		

Maths – Higher

Unit		Title	Revise	Revisit
12		**Similarity and congruence in 2D and 3D**		
		Use congruence criteria for triangles (SSS, SAS, ASA and RHS);		
		Use formal geometric proof involving similarity & congruence		
		Identify similar shapes		
		Identify scale factors and find missing lengths in similar shapes		
		Use length, area and volume scale factors		
		Area and surface area of frustums		
13		**Graphs of trigonometric functions**		
	a	Recognise, sketch and interpret graphs of the trigonometric functions		
		Exact trig values		
		Transforming graphical functions		
		Further trigonometry		
		Formula for area of a triangle		
	b	Sine rule in 2D and 3D		
		Cosine rule in 2D and 3D		
		Pythagoras Theorem in 3D		
14		**Collecting data**		
	a	Types of data		
		Bias and eliminating bias		
		Cumulative frequency, box plots and histograms		
		Construct & interpret cumulative frequency tables/graphs		
		Median, quartiles & interquartile range from cumulative diagrams		
	b	Construct & interpret box plots		
		Median, quartiles & interquartile range from box plots		
		Construct & histograms		
		Estimate the mean and median from a histogram		
15		**Quadratics, expanding more than two brackets, sketching graphs, graphs of circles, cubes and quadratics**		
		Sketch quadratics		
		Identify roots, turning points and intercepts of quadratic graphs		
		Completing the square		
		Expand the product of more than two linear expressions		
		Sketch cubics		
		Solve simultaneous equations graphically		
		Solve and represent quadratic inequalities (including graphically)		
16		**Circle theorems**		
	a	Parts of a circle		
		Prove, recall and apply circle theorems		
		Circle geometry		
	b			
		Recognise and construct the graph of a circle		
		Find the equation of a tangent to a circle		
17		**Changing the subject of formulae (more complex), algebraic fractions, solving equations arising from algebraic fractions, rationalising surds, proof**		
		Rationalise the denominator involving surds		
		Simplify, multiply and divide algebraic fractions		
		Change the subject of a complex formula		
		Algebraic Proof		
		Functions & function notation		
18		**Vectors and geometric proof**		
		Understand represent and use vector notation, including column notation		
		Find the length of a vector		
		Calculate the resultant of a vector		
		Geometric problems in 2D where vectors are divided in a given ratio.		
		Geometrical proofs to prove points are collinear & vectors/lines are parallel		
19		**Reciprocal and exponential graphs; Gradient and area under graphs**		
	a	Recognise, sketch and interpret reciprocal graphs		
		Calculate and interpret the area under a curve		
		Calculate and interpret gradient of a tangent to a curve		
		Direct and inverse proportion		
	b	Recognise and interpret graphs of direct & inverse proportion		
		Set up and use formulae for direct & inverse proportion		

French

Topic	Revision guide Page	Key Terms	Revise	Revisit
Reading, Listening, Speaking and Translation Theme 1- Identity and culture				
Me, my family and friends	Book one p 5-16	About yourself, family, describing people, personalities, relationships and partnership and marriage.		
Technology in everyday life	P 22-27	Technology, Social Media and the problems with Social Media.		
Free-time activities	p 27-46	Music, cinema, books, TV, food, eating out and sports.		
Customs and festivals in French-speaking countries	52-56	Festivals around the Francophone world, religious festivals and customs.		
Reading, Listening, Speaking and Translation Theme 2- Local, national, international and global areas of interest				
Home, town, neighbourhood and region	Book two P6,7, 22-43	Where you live, your home, what you do at home, clothes shopping, asking for directions and the weather.		
Social issues	56-61	Healthy living, unhealthy living and illnesses. Charity/volunteer work.		
Global issues	43-50	Environmental problems, poverty/homelessness.		
Travel and tourism	8,9, 13-23	Where to go, accommodation, getting ready to go, transport options, holiday activities.		
Reading, Listening, Speaking and Translation Theme 3- Current and future study and employment				
My studies	Book 3 P 5 - 23	School subjects, teachers.		
Life at school/college	5-23	School routine, timetable, bullying, what you do at break/lunch, pressures/exams.		
Education post-16	41-44	Further education, plans for college/6th form.		
Jobs, career choices and ambitions	24-40	Ideal job, part-time jobs, the world of work.		

French

Topic	Key Topics	Revise	Revisit
Foundation writing			
Theme 1- Identity and culture	• Me, my family and friends • Technology in everyday life • Free-time activities		
Theme 2- Local, national, international and global areas of interest	• Home, town, neighbourhood and region • Social issues		
Theme 3- Current and future study and employment	• My studies • Life at school/college • Jobs, career choices and ambitions		
Higher writing			
Theme 1- Identity and culture	• Me, my family and friends • Technology in everyday life • Free-time activities		
Theme 2- Local, national, international and global areas of interest	• Home, town, neighbourhood and region • Social issues • Global issues		
Theme 3- Current and future study and employment	• My studies • Life at school/college • Education post-16 • Jobs, career choices and ambitions		

Reading, writing, speaking and listening				
Language basics	From p. 24	Verbs, WOW phrases, exam techniques		

Revision Sources

Online	Physical
QR codes for past papers as Google quizzes Quizlet - AQA GCSE French Revision GCSE Pod	Paper-based revision guide

French

Revision Sources	
Online	**Physical**
QR codes for past papers as Google quizzes Quizlet - AQA GCSE French Revision GCSE Pod	Paper-based revision guide

Listening Foundation	Listening Higher	Reading Foundation	Reading Higher
https://forms.gle/gjNmcqxUzuBxt4CWA	https://forms.gle/fFQFzHtWR3bZdMr29	https://forms.gle/DZvC3dc3dEbeHiVn7	https://forms.gle/XTMvch5TGrV8dPnDA
My Score: _____	My Score: _____	My Score: _____	My Score: _____

Listening Foundation	Listening Higher	Reading Foundation	Reading Higher
https://forms.gle/HAp2VHjJaddwPWDy5	https://forms.gle/YAywNZdDdWie4mdw8	https://forms.gle/yTtBT1ekJrkTZiDr7	https://forms.gle/bXioL2bLnDNtcg878
My Score: _____	My Score: _____	My Score: _____	My Score: _____

Combined Physics – Paper 2

Topic		Revise	Revisit
Foundation Tier			
Forces	Contact and non contact forces, weight, resultant forces, forces and elasticity (springs)		
Motion	Motion graphs, scalars and vectors (distance/displacement, speed/velocity), Newton's laws, stopping distances		
Waves	Transverse waves, longitudinal waves, wave speed equation, wave properties (frequency and wavelength) and wave behaviour (reflection and refraction)		
Electromagnetic waves	Electromagnetic spectrum, Uses and dangers of electromagnetic waves, visible light, infra red radiation		
Electromagnetism	Permanent and induced magnets, magnetic field lines, making an electromagnet		
Higher Tier			
Forces	Contact and non contact forces, weight, resultant forces **in 2 dimensions** forces and elasticity (springs)		
Motion	Motion graphs, scalars and vectors (distance/displacement, speed/velocity), Newton's laws, stopping distances, **momentum**		
Waves	Transverse waves, longitudinal waves, wave speed equation, wave properties (frequency and wavelength) and wave behaviour (reflection and refraction).		
Electromagnetic waves	Uses and dangers of electromagnetic waves, lenses, visible light (colours and filters), infra red radiation		
Electromagnetism	Permanent and induced magnets, making an electromagnet, **motor effect**		

Revision Sources	
Online	**Physical**
• Seneca • BBC Bitesize, • Youtube "free science lessons"	• CGP Revision Guide (available to buy on school gateway and collect from reception)

Combined Chemistry – Paper 2

Topic			Revise	Revisit
Foundation Tier				
Rates of reaction	Factors affecting rates of reaction, collision theory, reversible reactions			
Organic chemistry	Hydrocarbons, fractional distillation, alkenes, testing for saturation			
Chemical analysis	Purity and formulations chromatography, gas tests			
The atmosphere	The history of the atmosphere, carbon footprint, pollutants			
Using resources	Properties of materials, life cycle assessments, finite and renewable resources, potable water, waste water treatment			
Higher Tier				
Rates of reaction	Factors affecting rates of reaction, collision theory, reversible reactions **le Chatelier's principle and dynamic equillibrium**			
Organic chemistry	Hydrocarbons, fractional distillation, alkenes, testing for saturation, combustion of hydrocarbons			
Chemical analysis	Purity and formulations, chromatography, gas tests			
The atmosphere	The history of the atmosphere, carbon footprint, pollutants			
Using resources	Properties of materials, life cycle assessments, finite and renewable resources, potable water, waste water treatment			

Revision Sources	
Online	**Physical**
• Seneca • BBC Bitesize, • Youtube "free science lessons"	• CGP Revision Guide (available to buy on school gateway and collect from reception)

Triple Biology – Paper 2

Topic		Revise	Revisit
Foundation Tier			
Homeostasis and the nervous system	Homeostasis, reflex reactions and the nervous system, reaction times		
Hormones	Blood glucose, puberty and the menstrual cycle, fertility		
Inheritance	DNA, meiosis, genetic diagrams, inherited disorders		
Evolution	Mendel, variation, evolution, selective breeding, genetic engineering, cloning, fossils, classification		
Ecology	Competition, biotic and abiotic factors, food chains, water cycle, carbon cycle, global warming, maintaining biodiversity, biomass transfer		
Higher Tier			
Homeostasis and the nervous system	Homeostasis, reflex reactions and the nervous system, reaction times, controlling temperature		
Hormones	Blood glucose, the kidneys, puberty and the menstrual cycle, fertility		
Inheritance	DNA, meiosis, genetic diagrams, inherited disorders		
Evolution	Mendel, variation, evolution, selective breeding, genetic engineering, cloning, fossils, speciation, classification		
Ecology	Competition, biotic and abiotic factors, food chains, water cycle, carbon cycle, decay, global warming, maintaining biodiversity, biomass transfer, food security and farming		

Revision Sources	
Online	**Physical**
• Seneca • BBC Bitesize, • Youtube "free science lessons"	• CGP Revision Guide (available to buy on school gateway and collect from reception)

Computer Science (Paper 1)

Topic	Page	Key Terms	Revise	Revisit
Components of a Computer System				
Computer systems	1	Processing data, Embedded systems, complex systems		
The CPU	2-3	Cache, 5 Registers, ALU, Fetch-Decode-Execute, Von Neumann		
Memory	4	RAM, ROM (BIOS), Volatile, Non-Volatile, Primary, Secondary		
CPU performance	5	Cores, Clock speed, Cache size, GPU, CPU		
Secondary Storage	6-7	Electronic Solid State (SSD, USB flash), Magnetic (HDD, tape, cassette), Optical (CD, DVD, Blu-ray), (Properties - SCRAPDC)		
Systems software	8	Operating System (PIPISMEF)		
Utilities software	10	Defragmentation, Compression, Encryption		
Data Representation				
Units	12	bits, nibbles, Bytes, Kilobyte, Megabyte, Gigabyte, Terabyte		
Binary	13-15	128 64 32 16 8 4 2 1 Base 2, 0 or 1, binary shifts, overflow		
Hexadecimal	16-17	Base 16, 1 2 3 4 5 6 7 8 9 A B C D E, nibbles		
Characters	18	ASCII (7 bis), Extended ASCII (8 bits) Unicode – character sets of 1s and 0s to represent characters		
Storing images	19	Pixels, Colour Depth, Resolution, ppi, Metadata (device, date stamp, location)		
Storing sound	20	Sample rate (Hz), sample size (bits), duration (s), metadata (artist, song title, track number, genre etc)		
Compression	21	Lossy (png, jpeg, mp3), Lossless (zip)		
Networks				
LAN and WAN	23	Local Area Network, Wide Area Network, Bandwidth		
Network Hardware	24	NIC's , switches, hubs, routers, bridge, WAP. Ethernet, Fibre optics, wireless (wifi, bluetooth, 3G, 4G 5G)		
Client - Server, Peer-to-Peer	25	Servers, P2P, File Managment, Backups		
Topologies	26-28	Ring, Bus, Star, Mesh. Edges and nodes.		
Protocols		Application (HTTP(S), FTP, POP, IMAP, SMTP), Transport (TCP/UDP), Internet (IP), Link/Network (wifi, ethernet). IP address, MAC address		
The Internet	29	www, Network of networks, URL, HTTP, HTTPS		
Security	30	Social Engineering, Malware, BOTS/BOTNET, SQL injections		
Issues – The Impact of Technology				
Ethical and Cultural	34	Digital Divide, Privacy, Censorship, Surveillance, Mental Health		
Environmental	38	Raw materials, E-waste, Energy usage, Renewable resources		
Legislation	39	Data Protection Act; GDPR; Copyright, Design and Patents Act; Computer Misuse Act		
Open Source and Propriety Software	40	Freeware, Shareware, Closed Source, Software Licences		

Revision Sources

- https://www.bbc.co.uk/bitesize/examspecs/zmtchbk
- https://www.youtube.com/c/craigndave (go to the OCR playlist!)
- https://isaaccomputerscience.org/topics/gcse?examBoard=all&stage=all#ocr
- Smart Revise, GCSEPod or Seneca

- CGP Revision Guide (page ref above)
- Class book from Year 10
- Smart Revise

Computer Science (Paper 2)

Topic	Page	Key Terms	Revise	Revisit
Algorithms				
Computational Thinking	42	Decomposition, abstraction, algorithmic thinking , pattern recognition		
Pseudocode, ERL	43	Sequence, Instructions, unambiguous,		
Algorithms - Flowcharts	44	Terminators, Decision, Input/output, Process, Subroutine, Flow		
Algorithms - Search	45	Binary Search in an ordered list; Linear search for unordered lists		
Algorithms - Sort	49	Bubble sort; Merge sort, sub lists; Insertion sort		
Programming				
Data types	50	Integer, Real/Float, Boolean, Character, String, Casting		
Operators	51	Arithmetic operators, +, -, *, **(^), /, // (DIV), % (MOD) Assignment, =; Comparison, ==, !=, <>, <, <=, >=		
Variables	52	Assigned, Value, CONSTANTS, decent names, naming_convention		
Strings	53	Text, Concatenation (+), String Manipulation, Functions, x.upper(), x.lower(), x.length()		
Program Flow	54 - 56	IF statements, IF, ELSE, Nested IF, ELIF, Switch statements. FOR Loops, WHILE Loops, DO-UNTIL Condition-Controlled loop		
Boolean Logic	57 -59	Logic Gates, Boolean Operators, NOT, AND, OR, Truth Tables		
Randomisation	60	From Random Import RandInt (start, end)		
Arrays	61-62, 64	Data Structure, Element, One Dimensional Arrays, Update Arrays, Two Dimensional Arrays		
File Handling	63	Open, read, close, convert string to array, perform operations, convert to string, open, write/amend, close		
SQL, Storing and Searching databases	65	Records, Group Records, Select, From, Fields, Retrieve		
Sub Programs	66-67	Procedures, functions (return), called, built-in, parameters, arguments		
Design, Testing and IDE's				
Structured Programming	69	Structure diagrams (sub-programs), comments (relevant)		
Defensive Design	70	Input Validation (sausages!), Format, Authentication, Try: Except		
Testing	71	Syntax errors, Logic Errors, Runtime error; Source code, Invalid data, Test Plan, normal, boundary, erroneous; iterative testing		
Trace Tables	73	'Dry Run', change in variable values, loop or selection condition		
Translators, IDE's	74-75	High level (one-to-many), Low level (machine code, assembly language, one-to-one) Translated, Compiler (.exe), Interpreters (line by line), IDE Features, colours, auto-indent, error detection		

Revision Sources

- https://www.bbc.co.uk/bitesize/examspecs/zmtchbk
- https://www.youtube.com/c/craigndave (go to the OCR playlist!)
- https://isaaccomputerscience.org/topics/gcse?examBoard=all&stage=all#ocr

- CGP Revision Guide (page ref above)
- Class book from Year 10
- Smart Revise

Btec Sport

Topic	Key Concepts	Page	Revised	Revisit
AO1 Demonstrate knowledge of facts, components of fitness, fitness tests, training methods/processes/principles in relation to improving fitness in sport and exercise				
A1 The importance of fitness for successful participation in sport	Components of fitness Physical and Skill related Types of sports requiring specific components of fitness	Book 1 P.3 – P.6		
A2 Fitness training principles	FITT Additional Principles (overload, specificity, adaptation, individual differences, reversibility…)	P.7 – P.11		
A3 Exercise intensity and how it can be determined	Intensity (HR training Zones) Calculating Max HR Borg Scale Repetition Maximum for strength and muscular endurance gains	P.12 – P.16		
B Investigate fitness testing to determine fitness levels. Learners will understand why fitness testing is carried out and know				
B1 Importance of fitness testing and requirements for administration of each fitness test	Reasons for fitness testing Pre-test procedures Reliability of testing Validity & Practicality	P.17 – P.24		
B2 Fitness test methods for components of physical fitness	Know fitness testing for each component of fitness	P.25 – P.33		
B3 Fitness test methods for components of skill-related fitness	Know fitness testing for each component of fitness	P.34 – P.42		
B4 Interpretation of fitness test results	Use of normative data to interpret results	P.43 – P.46		
Notes:				

Construction Unit 1

Topic	Page	Key Terms	Revise	Revisit
1.1: The Sector	2-10	Buildings and Structures, Infrastructure and Civil Engineering Products, Building services Engineering, Professional and Managerial Roles		
1.2: The Built Environment Life Cycle	12-25	Raw Material Extraction, Manufacturing, Construction, Operation and Maintenance, Demolition, Disposal, Reuse or Recycling		
1.3: Types of Building and Structure	26-32	Different forms of Infrastructure		
1.4: Technologies and Materials	32-54	Elements and Components of low rise buildings, Materials involved in walls, building services, fitting roofs, finishing interiors, Renewable technologies, materials, heat pumps, solar panels, wind turbines.		
1.5: Building Structures and Forms	54-62	Cellular Construction, Rectangular and Portal Framed Construction, Heritage and Traditional Methods		
1.6: Sustainable Construction Methods	62-68	The Environmental, Cultural, Social and Financial benefits of Sustainable Construction, Pollution and the Preservation of the Natural Environment.		
1.7: Trades, Employment and Careers	73-78	Bricklaying, Stonemasonry, Plastering, Carpentry and Joinery, Electricals, Plumbing, Painting and Decorating, Flooring and Tiling		
1.8: Health and Safety	78-93	Risks for Employees, Employers, Risks to the Public, Following Procedures, Health and Safety at Work Act 1974, Risk Assessments, Legislation, PPE, Gas, Water and Electricity, Working at Heights		

Revision Sources	
Online	**Physical**
https://www.homebuilding.co.uk/ https://www.derby.gov.uk/environment-and-planning/planning/ https://www.wickes.co.uk/	Revision guide provided by teachers, WJEC Vocational Award Constructing The Built Environment Level 1/2 Award By Howard Davies

Food Preparation and Nutrition

Topic	CGP Page	Key Terms	Revise	Revisit
Food Nutrition and Health				
Macronutrients	1-5	Protein, Fats and Carbohydrates, function, sources, classifications i.e LVB, HBV etc...		
Micronutrients, trace elements & Fibre and Water	10-13	Vitamins (Fat and Water soluble) Minerals, minerals and trace elements, fibre, water, function, sources		
Healthy Eating Guidelines and Energy Needs	16, 23	Eat Well Guide		
Age groups and nutritional needs	17, 18	Young children, teenagers, adults, the elderly, pregnant women.		
Diet related health problems	19, 20	Obesity, Coronary Heart Disease (CHD), Anaemia, Diabetes, Skeletal issues		
Nutritional analysis and Planning Meals	25-27	Following EWG, reducing salt, fat, sugar, factors to consider when planning meals lactose intolerance, nut allergies, coeliac disease, dietary choices		
Food Science				
Why food is cooked and heat transfer	31,32	Reasons why, Conduction, Convection, Radiation		
Cooking methods	33-36	Wet methods, dry methods, Fat-based methods		
Changing properties of Carbs, Protein, Fats and Oils	39-41	**Denaturing, Coagulation**, Foams, Gluten formation, **Gelatinisation,** Dextrinisation, **Caramelisation,** Aeration, **Shortening**, Plasticity, Emulsification		
Raising Agents	43	Chemical, biological, steam & mechanical		
Food Safety				
Food Spoilage and Food poisoning	48,49, 53	Microorganisms, High risk foods, enzymes, moulds and yeasts, Bacteria – Ecoli, Listeria, Camplyobacter, Staphylococcus aureus – control methods		
Storing and Preparing Food Safely	50-52	Storage, cross contamination hygiene procedures,		
Uses of microorganisms in Food production	54	Moulds, yeasts and bacteria		

Revision Sources

Online	Physical
BBC Food Preparation and Nutrition, Food a Fact of Life, Seneca, GCSE Pod	CGP revision guides Question a day

Food Preparation and Nutrition

Topic	CGP Page	Key Terms	Revise	Revisit
Food Choice				
Food labelling, marketing and sensory testing	69-73	Laws and compulsory information, non-compulsory information, traffic light system, Marketing – special offers, brand endorsement, health claims, Sensory testing – How we taste, why we test ranking tests, rating test, star diagram,		
Food choices and influences	59-62	PAL, Cost, Skills, Lifestyle, Seasonality, Availability, Religions – Christianity, Islam Hinduism, Judaism, Buddhism, Moral/Ethical - Animal Welfare, Environmental impact, Allergies and Intolerances		
Cuisines (British and Interational)	63-65	British cuisine, international cuisine		
Food Provenance				
Grown Food, Reared Food, Caught Food	78-81	Intensive v organic farming, GM crops, grown food, reared food, caught food,		
Processing	92-95	Primary - Flour, milk, fruit and veg, Secondary – flour to pasta, fruit to jam, milk to cheese/yoghurt, Fortification, Additives,		
Food and the environment	84-88	Waste and packaging, food miles and carbon footprint, global food production		

Revision Sources	
Online	**Physical**
BBC Food Preparation and Nutrition, Food a Fact of Life, Seneca, GCSE Pod	CGP revision guides Question a day

Travel and Tourism

Topic	Key Terms	Revise	Revisit
Factors that influence global travel and tourism			
Factors influencing global travel and tourism	Economic factors Political factors Natural factors Media Factors Safety and security factors Health and risk factors		
Response to factors	Response of travel and tourism organisations Response of governments Response of voluntary organisations		
Impact of Travel and Tourism sustainability			
Possible impacts of tourism	Sociocultural impacts (positive and negative) Economic impacts of tourism (positive and negative) Environmental impacts of tourism (positive and negative)		
Sustainable tourism	What is sustainable tourism The aims of sustainable tourism		
Managing sociocultural impacts	Educating visitors Transport and essential infrastructure Consulting local communities Shared ownership Taxes		
Managing economic impacts	Employment and training opportunities Supporting local communities Restricting foreign ownership Increasing visitor spend		
Managing environmental impacts	Managing visitors Managing traffic Controlling planning Educating visitors Controlling resources Protecting natural areas.		
Destination management			
Tourism development	Stages of the butler development model Emerging destinations Characteristics of emerging destinations Mature destinations Characteristics of mature destinations		
The role of local and national governments in tourism development	Reasons for governments to develop tourism The government roles in controlling tourism development		
The importance of partnerships in destination management	Types of partnership and their purpose Possible advantages of partnerships Possible disadvantages of partnerships		

Revision Sources

Online	Physical

Health and Social

Topic	CGP Page	Key Terms	Revise	Revisit
Section A - Factors affecting PIES				
Physical	16, 62, 73	Illness (chronic or acute)/Disability/Genetic Inheritance/Wellbeing		
Emotional	25, 65	Stress/Mental Health		
Social	20, 67	Relationships/Integration		
Economic	28,72	Financial/employment/unemployment/Income//Poverty/Wealth		
Environmental	26, 70	Pollution/Water/Air/Noise/Living conditions/Location		
Cultural	22, 68	Gender/Education/Stigma		
Life Event	32, 73-77	Expected/Unexpected/Positive/Negative		

Revision Sources	
Online	**Physical**
Surviving Squalor: Britain's Housing Shame 1000lb sister's 24 hours in A&E	Class Booklets & Notes Exam Practice Papers & Questions Health and Social care Revision Guide (CGP)– Practice BTEC Health and Social care Revision Guide Pearson.

Child Development

Topic	Key Terms	Revise	Revisit
	Section A		
Investigate individual needs that may impact on play, learning and development	Physical needs: - A child with a sensory impairment; visual or hearing impairment - A child who has delayed gross motor skills - A child who has delayed fine motor skills - A child who uses a wheelchair or walking frame to move around. - A child who has a long-term health or physical condition which restricts their physical activity or movement. Cognitive/intellectual needs: - Learning disability - Poor concentration levels - Memory issues - Difficulties in problem solving - A child who has delayed literacy skills.		
	Section B		
Create safe environments to support play, learning and development in children aged 0–5 years	Manage risks and hazards of environments and activities. consider safety issues in the home, in community settings and in early years settings. They will need to consider adaptations that can be made for the following age groups: ● 0–18 months ● 18 months–3 years ● 3–5 years.		
Ensure all children are safe	Manage risks and hazards of environments and activities: - Consider the risks – likelihood of an environment, activity and/or resources causing harm - Consider the hazards – potential for an environment, activity and/or resource to cause harm - Risk assessments for activities – both indoors and outdoors - Positive risk taking – balancing the potential risk of harm against the benefit of children participating in activities; the benefits of children exploring/experimenting in a safe but challenging environment		
Health and safety considerations for inside environments for children with individual needs	- Width of doorways, corridors. - Layout of furniture. - Types of flooring and floor coverings in the space, considering potential trip hazards. - How resources can be organised to enable children to find things easily. - Continuity of use of specific areas for play activities and routines. - Selecting appropriate resources to ensure safety, linked to the ability of the child. - Monitoring activities to ensure safety is being maintained.		

Revision Sources	
Online	**Physical**
	Class Booklets & Notes Exam Practice Papers & Questions Revision pack from Mrs Stevenson

Revision Strategies

Is your revision FLAT?

FOCUSED

Put your phone away

Turn the music off

Avoid distractions

Be in the right physical place to revise

Be in the right frame of mind to revise

LONG-TERM

Start early to cut down on stress later in the year

Make a revision timetable and commit to it

Plan for 3 - 4 hours a week from January

Interleave different topics

ACTIVE

Engage your brain by actively creating revision resources

Test yourself, get others to test you

Practise exam technique by writing or planning answers

Revise what you struggle with

TRANSFORMED

Transform the knowledge you want to learn into a different format

Make flashcards
Produce a timeline
Record a podcast
Invent a mnemonic
Take Cornell notes
Create a mindmap
Design a flowchart
Make a powerpoint
Teach it

Flash Cards

Write a question or prompt on one side of your flash card. Add colour and any pictures to help remind you of the content.

Complete the other side of your flash card with the answer or piece of information.

Mind Maps

Mind maps are a visual way to organise your information. One mind map should represent one topic.

Place the name of the topic in the middle, with sub-topics and further detail around it.

Note Taking

Start by taking your text book or revision guide, read them through whilst simplifying the text into easily manageable notes.

Then cover up those notes and test yourself by rewriting as much as you can remember.

Command Words

It is important to understand the different command words used on an exam paper.

Write a list of various command words such as explain, justify and evaluate and then add what each word is asking you to do.

Self-quizzing

Once you have made your revision resources it's time to test yourself.

Start by doing some fact recall quizzes before attempting some exam style questions.

Past Papers

When you have revised the information its time to fully test yourself using past papers.

It is important that you practise examination skills and use the official mark scheme to check your work.