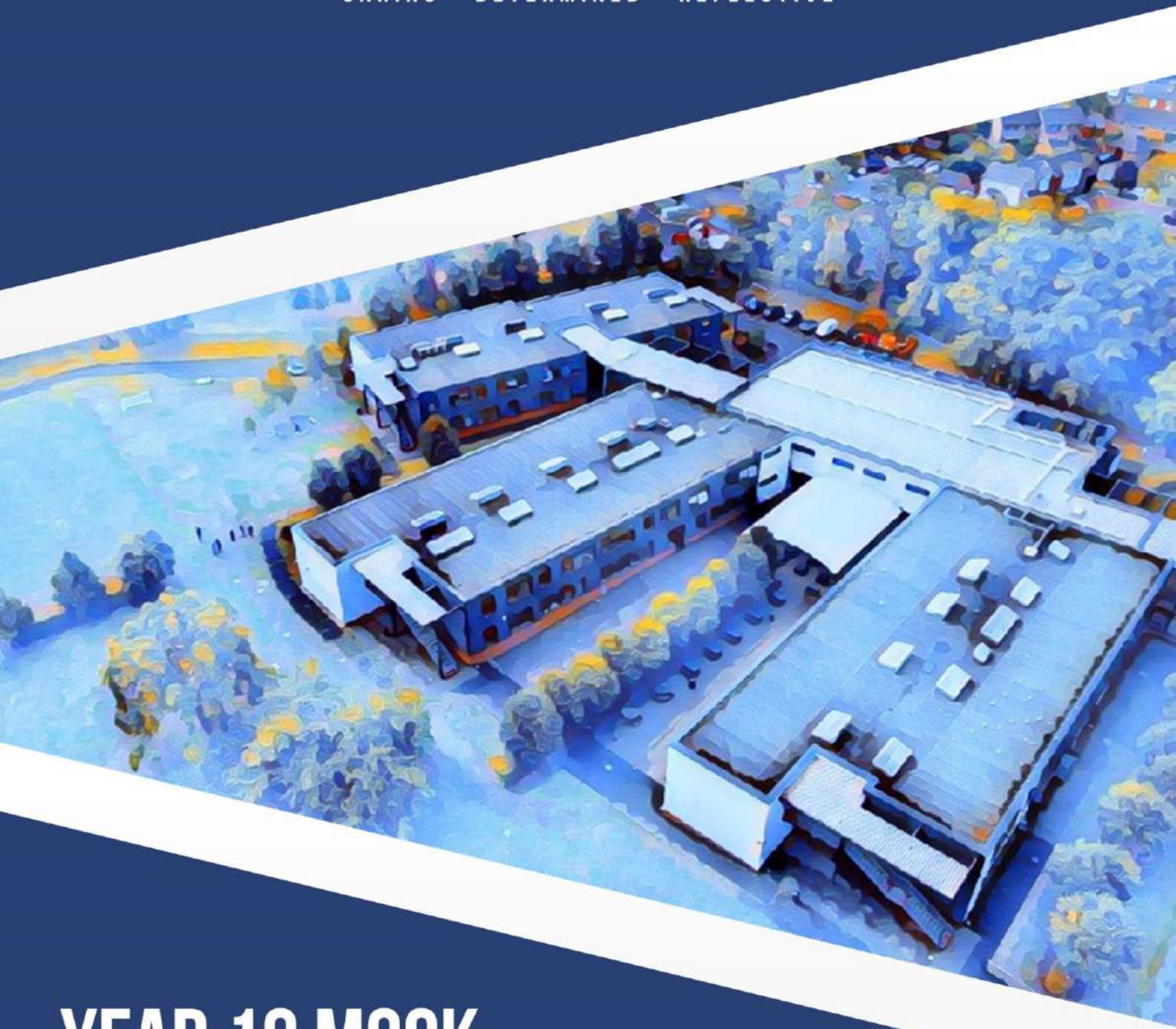
THE MALLING SCHOOL

CARING - DETERMINED - REFLECTIVE



YEAR 10 MOCK REVISION

ADVICE & GUIDANCE

NAME: _____

Tips for

successful revision

» How should I organise my revision?

- Make your own revision timetable or a tick list of topics for each subject
- It is important to spend some time deciding what to revise and when, so that you are fully prepared for every subject. Use a diary or wall chart to organise the time you have available for revision
- Try to vary the subjects you are revising
- Try tackling the subject you least like / find most difficult first and working towards a preferred one, rather than leaving difficult topics to the end of the day
- Do not plan to revise too late into the evening as your revision will be much less effective if you are too tired.

» Action points for students

- Create the revision timetable (use the template in this booklet) and put it somewhere your family can see it; the fridge is a good place!
- Ask your teachers for help if there is something you do not understand
- Attendance is key; aim for 100% attendance and also attend revision and support sessions after school.

» What can families do to support students?

- Provide a quiet study environment
- Help students construct a revision timetable and keep a copy somewhere visible
- Consider places students can work; a parent's home office, an attic room, a relative's house
- Be positive, particularly in moments of panic
- Offer help and support; carry out regular revision "book looks"
- Offer some incentives to work
- Consider taking students away from the house for scheduled breaks
- Make sure they have a healthy balanced diet whilst revising
- Try to avoid tension or arguments
- Encourage regular exercise.

Tips for

successful revision

» What should I be doing just before a test or examination?

The night before...

- get plenty of sleep
- pack your equipment
- double check what examinations you have, where they are and what equipment you will need.

On the day...

- arrive in good time
- consider walking to school and getting fresh air, this can help wake you up
- do not drink too much water but have some with you to sip throughout the examination
- remember your clear pencil case or plastic bag for essential stationary.

In the examination room...

- read any instructions carefully before you start
- ask the teacher if you are not sure about something before you begin
- allow enough time for every question.

» What are the most effective ways to revise?

1. Create a study plan: Setting aside specific times and dates to revise is a great way to be organized and prepared
2. Review notes and re-read the material: Going over class notes, lectures, and reading materials can help solidify the material in your mind and help you identify areas you need to focus on
3. Retrieval practice: Make flash cards or notes on key facts or definitions. Try to recall the knowledge and repeat at a later date just as you are starting to forget it (see the diagrams below)
4. Take practice tests: Taking practice tests or quizzes can help you understand what types of questions may be on an upcoming exam and prepare you for it
5. Explain concepts to others: Explaining concepts to others can help you better retain the information. It can also help you identify any gaps in your understanding
6. Connect the material to real life: Connecting the material to real life examples can help make the material more meaningful and help you remember it
7. Use mnemonic devices: Mnemonic devices are memory tools such as acronyms, rhymes, and stories that can help you remember key concepts
8. Ask for help: If you are having difficulty understanding a topic, don't be afraid to ask for help. Talking to a teacher, parent, or classmate can help you understand the material better.

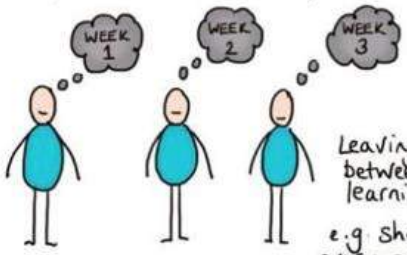
4 'BEST BETS' for LEARNING from RESEARCH

RETRIEVAL PRACTICE

Trying to recall learning at the point of forgetting

e.g. quick quizzes, MCQs

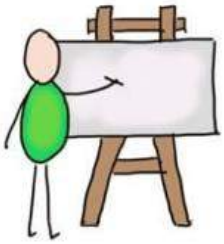
SPACED LEARNING



Leaving a gap between bouts of learning.

e.g. short sessions over a period of time

DRAWING your UNDERSTANDING



Using pictures & graphic organisation to represent learning

e.g. illustration of a concept, mindmap, flowchart, picture annotations of a poem

ELABORATION / making connections

Elaborating on the learning in answer to 'how' or 'why' questions.

e.g. justifying an answer, explaining the details of a process

4 Methods of Retrieval Practice

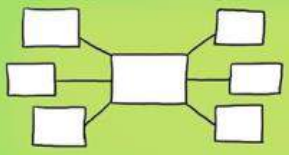
Before you start put away all your books & classroom materials.

Retrieval Practice Examples

- Exit Tickets
- Starter quizzes
- Multiple choice quizzes
- Short answer tests
- Free write
- Think, pair, share
- Ranking & sorting
- Challenge grids

BRAIN DUMP

Write, draw a picture, create a mind-map on everything you know about a topic.



Give yourself a time limit, say 3 minutes, then have a look at your books & add a few things you forgot.

QUIZZING

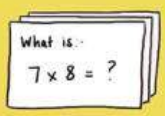
Create practice questions on a topic. Swap your questions with a partner & answer.

Question - What is a metaphor?

- ☐ A comparison using 'like, as, than'.
- ☐ A comparison where one thing is another.
- ☐ A comparison with a human attribute.

FLASHCARDS

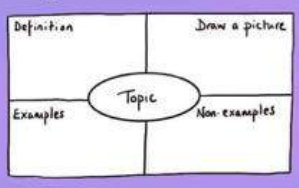
Create your own flashcards, question on one side answer on the other. Can you make links between the cards?



You need to repeat the Q&A process for flashcards you fail on more frequently & less frequently for those you answer correctly

KNOWLEDGE ORGANISERS

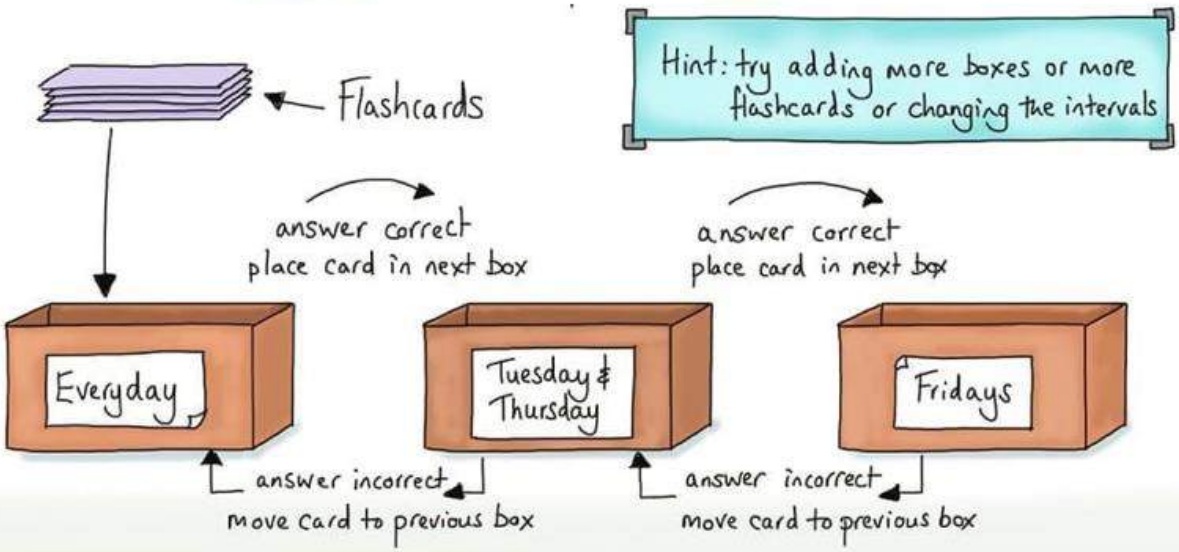
Complete a knowledge organiser template for key information about a topic.



You can use knowledge organisers to learn new vocab & make links in between subjects or ideas.

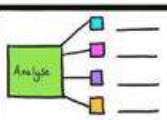
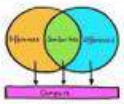
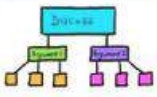
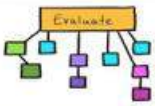
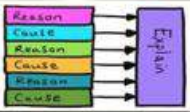
After you have retrieved as much as you can go back to your books & check what you've missed. Next time focus on that missing information

LEITNER Flash card method



An effective use of flashcards to prompt & recall learning using spaced practice proposed by Leitner in the 1970s. It focuses on the proficiency of recall of the learner. Information which is easily recalled has a longer time lapse before the next recall opportunity.

EXAM COMMAND WORDS

@ImpactWales			
Analyse	Break down into its fundamental parts and examine each in detail, stating its significance.		Key point 1 this shows/operates/ gives/illustrates. Name and describe each key point.
Compare	Identify differences and similarities between two or more sources of evidence.		however, whereas, larger than, greater, smaller, more than.....
Describe	Write about the features of a source of evidence using factual details.		patterns, trends, characteristics, distributions, effects, relationships
Discuss	Build up a balanced argument with supporting details.		Fact.. this is supported by shown by, you can see that, exemplified by, an example of this is....
Evaluate	Make a judgement about or give an opinion on a source of evidence, backed up by supporting details.		This shows that.... I believe that... In my opinion... The evidence shows us that....
Explain	Give reasons or causes for. Show an understanding of how or why something has occurred.		this happened and this shows... causes a reaction.... shows how it can/will
Summarise	Draw your key ideas and key points on a source of evidence together in one short section of writing.		Must be: Concise, accurate, objective Condenses information into key points

support for

revision and homework

The following pages contain a range of information for each subject with tips and links designed to assist students in their revision. If students would like further support with revision, please encourage them to contact their guidance team, tutor or subject teachers.

A reminder that we also offer homework club before and after school in the library and at lunchtime in B3. Teachers and computers are available at all these times to support you with homework as required.

» Example Revision Timetable

WEEKLY REVISION PLANNER

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	TIME	SATURDAY	SUNDAY
8:30AM –4PM	SCHOOL	SCHOOL	SCHOOL	SCHOOL	SCHOOL	9AM– 10AM	BREAKFAST/ SHOWER	BREAKFAST/ SHOWER
4PM– 5PM	HOMEWORK	TV/ GAMING/ SOCIAL MEDIA	HOMEWORK	TV/ GAMING/ SOCIAL MEDIA	HOMEWORK	10AM– 11AM	REVISION – ENGLISH	REVISION – SCIENCE
5PM– 6PM	DINNER	DINNER	DINNER	DINNER	DINNER	11AM– 1PM	SEEING FRIENDS/ LUNCH	SPORT/ LUNCH
6PM– 7PM	REVISION – GEOGRAPHY	HOMEWORK	REVISION – HISTORY	REVISION – FRENCH	REVISION – SCIENCE	1PM– 3PM	REVISION – MATHS	REVISION – FLASH CARDS
7PM– 8PM	REVISION – MATHS	REVISION – ENGLISH	FREE TIME	HOMEWORK	FREE TIME	3PM– 5PM	OUT WITH FAMILY	SPORT/ TV/ GAMING
8PM– 9PM	FREE TIME/ SHOWER	FREE TIME/ SHOWER	FREE TIME/ SHOWER	FREE TIME/ SHOWER	FREE TIME/ SHOWER	6PM– 8PM	DINNER/ FREE TIME	DINNER/ FREE TIME

WEEKLY REVISION PLANNER

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	TIME	SATURDAY	SUNDAY

USEFUL INFORMATION FOR

ENGLISH

» Overview

A mock revision booklet will be available for you to revise.

» Interventions

Mrs Curley is running poetry revision sessions in her classroom on Wednesday lunchtimes.

» Exam dates

- **AQA English Language: Paper 1**
  Monday 19th June - 9am start
  (1 hour 45 minutes)

- **AQA English Language: Paper 2**
  Tuesday 27th June - 9am start
  (1 hour 45 minutes)

- **AQA English Literature: An Inspector Calls, Poetry Anthology**
  Thursday 29th June - 9am start
  (1 hour 45 minutes)

» Resources

Links to audio versions of An Inspector Calls are on the Class Teams pages.

There is also a Word document containing a link to Mrs Allison's Annotations of the Poetry Anthology.

You will also find on Teams the Year 10 Curriculum and Homework Booklets in the Y10 Virtual School, and in your English Class Team.

Finally, please ask your teacher if you have any questions or concerns about any of the papers.

» Independent Learning

Literature: create flashcards with quotations, links to characters, themes and context. Make sure you know the plot. Learn subject terminology, analytical verbs and the strategies for answering the questions, including the sentence starters for the introductions.

Language: make sure you are confident with the question focus on both the Language exam papers. Learn the sentence starters and timings for each. Plan and practise Creative Writing questions and Non-Fiction Writing questions, using the correct strategy. Make flashcards to help you learn everything you need.

USEFUL INFORMATION FOR

Maths

Foundation - Key topics by paper		
Paper 1 (Non-Calculator)	**Paper 2** (Calculator)	**Paper 3** (Calculator)
▪ Converting units of measure ▪ Simplifying algebraic expressions ▪ Transformations ▪ Place Value ▪ Comparing fractions, decimals, and percentages ▪ Pictograms ▪ Money problems ▪ Bar charts ▪ Spotting patterns ▪ Temperature ▪ Problems involving electricity ▪ Calculating with fractions ▪ Writing probabilities ▪ Substitution ▪ Estimation ▪ Manipulating knowledge of a given calculation ▪ Speed, distance, time ▪ Frequency Trees ▪ Recipe problems ▪ Increase/Decrease by a % ▪ Area problems ▪ Stem and leaf diagrams ▪ Volume of shapes ▪ Solve inequalities ▪ Product of primes ▪ Problems with ratio ▪ Standard form: Writing ▪ Standard form: Calculating ▪ Angles in polygons ▪ Quadratic graphs ▪ Density problems	▪ Rounding ▪ Calculating with fractions ▪ Mean, median and mode ▪ Multiples ▪ Converting between fractions, decimals and % ▪ Ordering values ▪ Names and properties of polygons ▪ Coordinates ▪ Reading graphs ▪ Ratios in context ▪ Money problems ▪ Angles in triangles ▪ Function machines ▪ Two-way tables ▪ Comparing numbers ▪ Averages from a frequency table ▪ Scales ▪ Plotting linear graphs ▪ Calculating the mean ▪ Percentage profit ▪ Probability trees ▪ Expand and simplify ▪ Index laws ▪ Factorise linear expressions ▪ Transformations ▪ Error intervals ▪ Area problems ▪ Straight lines problems ▪ Find a straight line from two points ▪ Depreciation ▪ Currency conversion ▪ Simultaneous equations	▪ Converting with fractions, decimals, and percentages ▪ Fraction of an amount ▪ Factors of a number ▪ Simplify algebraic fractions ▪ Using a calculator ▪ Knowing a quadrilateral and its properties ▪ Sequences: nth term ▪ Faces, edges, and vertices ▪ Probability scales ▪ Worded operation problems ▪ Writing an amount as a fraction of another ▪ Bearing and scales ▪ Mean, median, mode and range ▪ Drawing a triangle based on information given ▪ Expand a bracket ▪ Solving ▪ Factorise ▪ Rounding to significant figures ▪ Percentage: Including fraction of an amount ▪ Angles in parallel lines and triangles ▪ Lowest common multiple ▪ Pythagoras Theorem ▪ Substitution ▪ Changing the subject ▪ Unit ratios ▪ Best buys ▪ Frequency polygons ▪ Speed/distance/time ▪ Area with algebra ▪ Converting units of speed ▪ Percentage increase or decrease

USEFUL INFORMATION FOR

Maths

Higher - Key topics by paper		
Paper 1 **(Non-Calculator)**	**Paper 2** **(Calculator)**	**Paper 3** **(Calculator)**
▪ Solving inequalities ▪ Writing a number as a product of its primes ▪ Finding a fraction of an amount ▪ Finding a percentage of an amount ▪ Ratio problems ▪ Converting into and out of standard form ▪ Calculating with standard form ▪ Angles in polygons ▪ Plotting quadratic graphs ▪ Density problems ▪ Similar shapes (including area and volume) ▪ Averages from a group frequency table ▪ Complex surface area problems ▪ Cumulative frequency graphs ▪ Complex probability questions ▪ Converting a recurring decimal to a fraction ▪ Vectors ▪ Probability trees ▪ Inverse and direct proportion ▪ Complex index laws ▪ Algebraic fractions ▪ Equation of a circle ▪ Complex area problems	▪ Expanding and simplifying ▪ Factorising linear expressions ▪ Transformation (Enlargement, Rotation, Reflection and Translation) ▪ Error intervals ▪ Area problems ▪ Straight line graph problems ▪ Compound interest ▪ Currency conversion ▪ Calculator efficiency ▪ Pressure/ Force/ Area ▪ Box plots ▪ Inverse proportion ▪ Parallel lines ▪ Capture/Recapture ▪ Ratio ▪ Venn diagrams and probability ▪ Volume problems ▪ The Sine Rule ▪ The Cosine Rule ▪ Circle theorems ▪ Solving quadratic inequalities	▪ Pythagoras Theorem ▪ Changing the subject ▪ Unit ratio ▪ Best buys ▪ Frequency polygons ▪ Speed problems ▪ Area problems ▪ Finding the gradient of a line in context ▪ Complex index laws ▪ Compound interest ▪ Reverse percentage ▪ Outcome in a given ▪ Context (probability) ▪ Trigonometry ▪ Vectors ▪ Expanding triple brackets ▪ Factorising quadratics ▪ Proof of similar shapes ▪ Bound questions ▪ Histograms ▪ 3D Pythagoras with Trigonometry ▪ Algebraic fractions ▪ Equation of a circle and straight lines

USEFUL INFORMATION FOR

Maths

» Guide to using the Revision List

There are a number of different ways you can use the revision list to support the planning of your revision. It is advisable to gather your unit assessments and highlight those topics which you have achieved in within the assessments. In addition to this highlight those topics which you feel confident in. These topics are low priority topics and should therefore only be revised once others which are high priority have been mastered.

» Websites

There are a number of websites which are extremely useful for revision:

- **Sparx** – search for the topic in the search bar and complete the quizzes, watching the videos as you go for those questions which you are struggling with.
- **Corbett Maths** – using the worksheets you can access a video, exam questions or practice questions to embed your learning
- **Maths Genie** – all exam questions with videos to support
- **On Maths** – an interactive website where you can access past papers and predicted papers, completing on line which provides the mark scheme for the answers to support you in understanding any mistakes you may have made.

Watching videos are an excellent way of deepening your understanding of a topic. However, it is much more successful if you are active whilst watching. So, take notes, turn the notes into flashcards, practice with the flashcards and then use the exam questions for some timed practice.

» Other Resources

In addition to the above you have your past curriculum booklets which have your notes, teacher modelled examples and exam questions in.

Ask your teacher if you want to know more about what specifically you should revise and if you are struggling to understand a specific topic.

USEFUL INFORMATION FOR

Combined Science

» Revision tips

- Test yourself by quizzing, there are quizzes included in BBC bitesize pages.

Link to all Edexcel Combined Science Revision: BBC bitesize menu

- Spend time revising the topic you know least well. Revising is an active process so writing yourself quiz cards/flashcards and testing yourself with them is a good method.

This link takes you to a short video on how to use flashcards: Flashcards & the Leitner system

Biology				
Topic	**Curriculum booklet**	**CGP Revision Guide**		**BBC Bitesize link**
		Higher	**Foundation**	
Cells & Microscopy	Introduction to cells	11-14	11-14	Cell structure
Enzymes	Inside cells	15-17	15-17	Enzymes
Transporting substances	Inside cells	18-19	18-19	Transport in cells
Cell division & Growth	Cells and DNA	20-22	20-22	Cell division
DNA & sexual reproduction	Cells and DNA	26-27	26-27	Reproduction & Genome
Genetics	Cells and DNA	28-31	28-31	Genetics & Inheritance
Communicable diseases	Health and disease	39-43	39-43	Communicable diseases Treating, Curing & Preventing Diseases Making medicines
Non-communicable diseases	Health and disease	44-46	44-46	Non-communicable diseases
Circulatory System & Respiration	The circulatory system	59-65	57-64	Circulatory System & Respiration
Hormones & Homeostasis	Responding to change	52-57	52-56	Hormones & Homeostasis
Nervous system	Responding to change	23-24	23-24	The Nervous System
Plants & Photosynthesis	Plants and photosynthesis	47-50	47-50	Plants & Photosynthesis

USEFUL INFORMATION FOR

Combined Science

Chemistry				
Topic	**Curriculum booklet**	**CGP Revision Guide**		**BBC Bitesize link**
		Higher	**Foundation**	
Atomic Structure & Periodic table	Atomic structure & ion formation	78-82	78-82	Atomic Structure Periodic Table
Ionic Bonding	Atomic structure & ion formation	83-85, 76	83-85	Ionic Compounds
Covalent Bonding	Covalent and Metallic bonding	86-87	86-88	Simple Molecules Giant Covalent
Metallic Bonding	Covalent and Metallic bonding	88	89	Metals & Non-metals
States of Matter & Separating Techniques	Pure & Impure substances	97-104	96-103	States of Matter & Mixtures
Acids & Alkalis	Acids and bases	105-109	104-109	Acids & Alkalis Making Salts
Rates of Reactions	Measuring chemical reactions	128-133	127-132	Rates of Reaction
Exothermic & Endothermic Reactions	Measuring chemical reactions	134-136	133-135	Energy Changes in Reactions
Conservation of Mass	Chemistry calculations	89	90	Conservation of Mass
Relative Formula Mass & Formulas	Chemistry calculations	90	91	Relative Formula Mass
Concentration	Chemistry calculations	92	94	Concentration
Empirical Formulas	Chemistry calculations	93	92-93	Empirical Formula 1 Empirical Formula 2
Moles & Reacting Masses	Chemistry calculations	91-95	-	Higher only Calculations
Extracting Metals	Metals	114-120	114-119	Extracting Metals
Groups in the Periodic Table	Groups in the periodic table	123-126	121-125	Groups in the Periodic Table

USEFUL INFORMATION FOR

Combined Science

Physics				
Topic	**Curriculum booklet**	**CGP Revision Guide**		**BBC Bitesize link**
		Higher	**Foundation**	
Motion & Forces	Motion	145-155	145-155	Scalar & Vector Motion Newton's Laws Motion of Vehicles
Energy	Conservation of energy	156-162	156-163	Energy
Waves	Waves	164-167	165-169	Waves
EM Spectrum	EM Spectrum	168-171	170-172	EM Spectrum
Radioactivity	Radioactivity	172-177	173-179	Radioactivity
Forces & Energy	Work & Power and Advanced forces	179-182	181-183	Forces Doing Work Forces & Their Effects
Springs	Springs	205-206	205-206	Forces & Elasticity

USEFUL INFORMATION FOR

Separate Science

» Revision tips

- Test yourself by quizzing, there are quizzes included in BBC bitesize pages.

Link to all Edexcel Science Revision:

- *Biology: BBC bitesize menu*
- *Chemistry: BBC bitesize menu*
- *Physics: BBC bitesize menu*

- Spend time revising the topic you know least well. Revising is an active process so writing yourself quiz cards/flashcards and testing yourself with them is a good method.

This link takes you to a short video on how to use flashcards: Flashcards & the Leitner system

Biology			
Topic	**Curriculum booklet**	**CGP Revision Guide**	**BBC Bitesize link**
Cells & Microscopy	Introduction to cells	12-15	Cell structure
Enzymes	Inside cells	16-18	Enzymes
Testing for Biological Molecules & Energy in Food	Inside cells	19-20	Testing Food Molecules Calorimetry
Transporting substances	Inside cells	21-22	Transport in cells
Cell division & Growth	Cells and DNA	24-26	Cell division
DNA & Sexual Reproduction	Cells and DNA	32-34	Reproduction & Genome
Genetics	Cells & DNA	38-39, 42-43	Genetics
Communicable diseases	Health and disease	55, 57-59	Health & Diseases - incl. Plant Diseases
Non-communicable diseases	Health and disease	65-67	Non-Communicable Diseases
Plants & Photosynthesis	Plants and photosynthesis	69-73	Plants
Plant Hormones	Plants and photosynthesis	74-75	Plant Hormones
Nervous system	Responding to change	27-30	The Nervous System
Hormones & Homeostasis	Responding to change	77-82	Homeostasis
Thermoregulation and Kidneys & Osmoregulation	Responding to change	83-85	Homeostasis in Humans
Circulatory System & Respiration	The circulatory system	87-93	Circulatory System & Respiration

Chemistry			
Topic	**Curriculum booklet**	**CGP Revision Guide**	**BBC Bitesize link**
Atomic Structure & Periodic table	Atomic structure & ion formation	15-19	Key Concepts in Chemistry
Ionic Bonding	Atomic structure & ion formation	20-22	
Covalent Bonding	Covalent and Metallic bonding	23-24	
Metallic Bonding	Covalent and Metallic bonding	25	
States of Matter & Separating Techniques	Pure & Impure substances	34-41	States of Matter & Mixtures
Acids & Alkalis	Acids and bases	43-47	Acids & Alkalis
Titrations & Molar concentration	Chemistry calculations 2	65	Separate Chemistry Calculations
Rates of Reactions	Measuring chemical reactions	77-82	Rates of Reaction
Exothermic & Endothermic Reactions	Measuring chemical reactions	83-85	Energy Changes in Reactions
Conservation of Mass	Chemistry calculations 1	26-32	Chemistry calculations
Relative Formula Mass & Formulas			
Concentration			
Empirical Formulas			
Moles & Reacting Masses			Moles
Extracting Metals	Metals	52-58	Extracting Metals
Groups in the Periodic Table	Groups in the periodic table	73-76	Groups in the Periodic Table

Physics			
Topic	**Curriculum booklet**	**CGP Revision Guide**	**BBC Bitesize link**
Motion & Forces	Motion	12-19, 22-23	Motion & Forces
Energy	Conservation of energy	24-30	Energy
Waves	Waves	32-42	Waves
EM Spectrum	EM Spectrum	43-47	EM Spectrum
Radioactivity	Radioactivity	49-58	Radioactivity
Forces & Energy	Work & Power and Advanced forces	65-69	Forces Doing Work Forces & Their Effects
Springs	Springs	99-100	Forces & Elasticity

USEFUL INFORMATION FOR

3D Design, Art & Textiles

» Mock Exam

Year 10 Art, Textiles and 3D Design pupils are currently working on their first mock exam preparation. They will be working on a selected theme and have already produced the initial research. After May half term pupils will be developing ideas and trialling media in preparation to produce a final piece of work within the 10-hour exam.

The majority of marks are given at the preparation stage, so it is **vital** that pupils are completing their sketchbook work to their highest ability and in advance of their final 10-hour exam. Where teachers have given direct feedback, pupils need to act on this to make improvements to their work and develop grades.

Within the final 10-hour exam pupils will produce their final personal response to complete the project. This piece will reflect on the developmental journey of ideas throughout their sketchbook and may incorporate a range of skills and mediums.

Before the final 10-hour exam pupils must ensure that they have prepared materials in advance.

The 10-hour mock exam dates are:

- **Art and Design pupils:** Monday 1st July and Tuesday 2nd July 2024
- **3D Design pupils:** Wednesday 3rd July and Thursday 4th July 2024
- **Textiles:** Wednesday 3rd July and Thursday 4th July 2024

» Additional Support

All pupils are invited to attend lunch club daily in their teacher's classroom for additional support and guidance or to complete sketchbook work in advance of the 10-hour exam.

- Textiles pupils may also attend an after-school club every **Tuesday 3:20pm – 4:30 pm in B15.**
- Art and 3D pupils may attend an afterschool session every **Monday 3:20pm – 4:30pm in B14.**

» Mock Exam Guidance

Please refer to our 'Assessment and Success in Art and Design GCSE' revision guide when completing coursework which can be found here on the Y10 Virtual School Team.

All sketchbook work that accompanies the mock exam must be completed and handed in on the first day of the mock exam.

USEFUL INFORMATION FOR

Business

» GCSE Business Studies Edexcel: Paper 1 - Theme 1

- Revision Resources - revision guide & revision workbook
- Study notes on Teams
- Seneca Learning
- BBC Bitesize videos & exam technique: www.bbc.co.uk/bitesize/examspecs/z98snbk

» Theme 1 Formulas:

- **% change** = difference in values ÷ original value x 100 To increase by a percentage amount = original figure x 1. (The amount after the decimal is the % increase)
- **Market Share %** of the market that one business has, i.e., Business A sales ÷ total market sales x 100
- **Revenue** = selling price x number sold (p x q)
- **Total Variable Costs** = variable cost for one item x number of items produced
- **Fixed Costs** NEVER change as output changes
- **Total Costs** = Fixed costs + Total Variable costs
- **Interest payable** = amount borrowed x percentage rate of interest (convert % into decimals)
- **Total amount payable** = (amount borrowed x percentage rate of interest) + Amount borrowed OR Monthly payment x (12 x number of years)
- **Monthly payments** = Total amount payable ÷ (number of years borrowed x 12)
- **% Interest charged** = (total repayment – borrowed amount) ÷ borrowed amount x 100
- **Profit** = Revenue – Total Costs
- **Break even** = Fixed costs ÷ (Selling price – variable costs)
- **Margin of safety** = Actual output – break even output
- **Net Cash Flow** = Total inflows – total outflows
- **Closing Balance** = Net Cash Flow + Opening Balance

» Exchange Rates

- converting from a foreign currency to UK£, divide the price by the exchange rate
- converting TO a foreign currency FROM UK£, MULTIPLY the price by the exchange rate
- Impact of Exchange Rates SPICED

USEFUL INFORMATION FOR

Computing

» Algorithms and Programming

Key Definitions:

- **Variable** – an assigned place in a computer's memory that stores a piece of data that may change.
- **Constant** – A value in an algorithm that remains the same when the program is run
- **Local Variable** – Operates in a section of the code, usually a function
- **Global Variable** – Runs throughout the entire code.
- **Assignment** – assigns an initial value to a variable
- **Casting** – changes the data type of a variable

Computational Thinking:

- **Abstraction** – Removes the important information from a problem and discards the unimportant information
- **Decomposition** – Breaks a problem down into smaller problems, solve those smaller problems in order to find a solution to the whole problem.
- **Algorithmic Thinking** – Apply the algorithm, a step by step set of instructions to the problem in order to solve the problem

Programming Constructs:

- **Sequence** – Used in all algorithms. The code is read line by line in a sequence from top to bottom, no lines missed or repeated
- **Selection** – A block of code is executed based on a condition being met (if statement, switch case)
- **Iteration** – A block of code repeats within the algorithm (for loop, while loop, do loop, repeat loop)

Searches:

- **Linear** – Searches each item one by one and stops when the item is found
- **Binary** – finds the mid-point (if two it is always the higher value), splits the list higher or lower, repeats until the item is found

****BINARY SEARCH IS ONLY MORE EFFICIENT ON LONGER LISTS/DATA MUST BE IN ORDER****

Sorts:

- **Least efficient** – Bubble, Linear, Merge – Most efficient (only on longer lists)

Mathematical operators:

** - exponential (power of) – e.g. 2^3 = 8
// - int Division (will cut off decimal place) – e.g. 10//3 = 3
MOD, %, MODULUS, MODULO – Returns the remainder – e.g. 10 % 3 = 1

USEFUL INFORMATION FOR

Computing

String manipulation:

Name = “dave”
Name.upper() – DAVE
Name.lower() – dave
Name[1] = a
Name[1,3] = av
Name.substring(1,3) = ave

Converting between ASCII and CHR:

Num = ASC(“A”) = Num now stores 65 (its ascii value)
Letter = CHR(66) = Letter now stores B (Its ASCII chr)

List, Arrays and Record Key Facts:

- **Lists** and **Arrays** can only store one data type.
- You can store multiple bits of data under one identifier (variable name)
- A **List/Array** can be sorted, a **Record** cannot

Records (We have not yet programmed records):

- **Records** are used for storing tables of data
- They can store multiple data types
- Used when dealing with databases

Sub-Programs (procedures and functions):

A **Function** always returns a value (that needs to be stored in a variable) a **Procedure** does not.

Benefits:

- Once written a sub program can be called and used multiple times throughout the code without the need to re-write it
- You can save you sub program to a function library and reuse it in future projects
- It breaks the code into sections giving it a clearer structure that is easier to read (improves maintainability)
- Each sub program can be tested separately without effecting the rest of the code

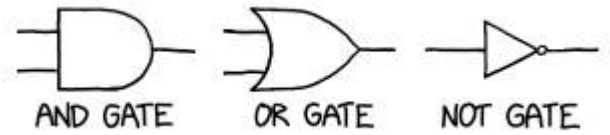
SQL – Standard Query language:

Used for searching tables in a database
SELECT... list the fields you want displayed
FROM... the name of the table/record
WHERE... write your condition* means wildcard (returns all fields)

USEFUL INFORMATION FOR

Computing

Logic Gates:



Symbols:

^ = And V = Or ¬ = NOT

Defensive Design:

How to defend your design against misuse, hacking or other programmers.

- **Authentication Routines** – Passwords, usernames – strong password $45aDf%r
- Input Validation – Range check, Type check, Length check, Presence check, format check

Maintainability:

- **Sensible Variables names** – so it is clear what is stored in them
- **Indentation** – inside branches of IF statements, LOOPS so the code is easier to read/trace through for errors
- **Commenting** – at the key points in your algorithm to explain a loop/function
- **Sub-programs** – to split your code into logical sections, making it easier to read and maintain/trace errors

Errors:

- **Syntax Errors** – A grammatical error within the code, the code will not run
- The IDE will attempt to identify these and highlight the type of error and the line where the code stops working
- **Logic Errors** – the code will run but give an unintended result
- The IDE cannot identify these as the code functions, just not as intended

Testing:

Iterative Testing – Testing the code during development at the end of each key point. Easier to find and fix errors.

End Testing – Testing after the code has been developed, only way to test the whole code and that all user requirements have been met. Harder to find and fix errors.

USEFUL INFORMATION FOR

Computing

Test Data:

- **Normal** – data that should give an expected output
- **Boundary** – Data that is on the boundary
  1. Erroneous data – a slight error such as the wrong data type
  2. Invalid data – data that will return an error message

High and Low-Level Languages:

High Level Language – python, java, C++ etc.

- Closer to structured English making it easier for a programmer to understand
- One command word can perform multiple functions
- Need to be translated
- Can be ported between processors

Low Level Language – binary, machine code

- Does not need to be translated before working
- Hard for programmers to use as contains no structured English
- Cannot be ported between CPUs/You need to know structure of CPU

Translators:

Compiler

- Translates the whole code at once
- Creates an executable and therefore does not need translating again
- Hard to spot errors

Interpreter

- Translates the code line by line
- Much easier to stop errors

Features of an IDE:

- An integrated development environment is where we write the code
- Code editor – to write and edit code
- Run time environment – to run and test the code
- Debugger/error diagnostics – tools to help locate errors in your code
- Translator – Translates the code from a high-level language to a low-level language

GEOGRAPHY

» How can I revise for the mock?

For your geography mock you will answer a whole paper 1: The Physical Environment. The topics included in this paper are outlined in the table below.

- Use the knowledge organisers in each of your curriculum booklets
- Use the purple revision guide that you have at home

Remember, you do not answer the glaciers section of this paper.

Exam Paper	Topic	Important themes	Case studies
1	UK Landscapes	▪ Geology ▪ Weathering processes ▪ Land use (agriculture, forestry, settlement) ▪ Map skills	UK Landscapes - The South Downs National Park
	Coasts	▪ Coastal processes (erosion, transportation, deposition) ▪ Coastal landforms ▪ Coastal erosion and management	Coasts - Dawlish Warren Spit
	Rivers	▪ River processes (erosion, transportation, deposition) ▪ River landforms ▪ Flood risk (flood hydrographs) ▪ Management of river flooding	Rivers - The River Dee, UK
	Weather Hazards and Climate Change	▪ Atmospheric and oceanic circulation ▪ Natural causes of climate change ▪ Human causes of climate change ▪ Evidence of climate change ▪ Impacts of climate change ▪ Understanding the UK's climate ▪ Tropical storms and their impacts ▪ Causes and impacts of drought	Typhoon Haiyan (Philippines) – Developing Hurricane Sandy (USA) – Developed Californian Drought (USA) – Developed Ethiopian Drought (Ethiopia) - Developing
	Ecosystems, Biodiversity and Management	▪ Global ecosystem distribution ▪ The nutrient cycle ▪ Goods and services from the biosphere ▪ The UK's ecosystems (temperate deciduous) ▪ Threats to deciduous woodlands ▪ Tropical rainforest ecosystems and their importance ▪ Deforestation in tropical rainforests	The New Forest National Park (Temperate Deciduous Forest) Madagascar (Tropical Rainforest)

USEFUL INFORMATION FOR

HISTORY

» Topics covered so far:

Paper 1 – *Medicine Through Time, 1250-Present and Medicine on the Western Front*
Paper 3 – *Weimar and Nazi Germany, 1918-1939*

» Online Resources:

- Content revision for Weimar and Nazi Germany
- Content revision for Medicine Through Time /BBC Bitesize
- Content revision for the Western Front
- Practice questions for Weimar and Nazi Germany
- Practice questions for Medicine Through Time
- Practice questions for the Western Front

Every class has been given access to courses on Seneca – the link to access this has been emailed to each of you had added to your Teams Group. It has courses on all of the topics that we cover.

» Revision techniques:

1. Identify a topic that you need to do content revision for
2. Select a page of the revision book, website or notes that you have made previously and read through without taking notes. You can highlight if you need to. Make sure that you are taking the time to take in the information/don't just skim over it
3. Close the revision book
4. In a notebook or on a whiteboard, try to write out the notes from the section you just looked at. This will feel hard and it is likely you won't be able to remember everything. That is not a problem
5. When you have noted down as much as you can remember – reopen your revision book to the same page and re-read the section
6. Repeat the process of closing the revision book, this timing adding to your notes – you don't have to start again from scratch but you can choose to, if you should so wish
7. Add in any new notes in a different colour.

You also have access to all your curriculum booklets which have knowledge organises and application questions attached – these are a great place to start revising some of the basic details you will need by answering the application questions.

USEFUL INFORMATION FOR

HISTORY

» Topics to revise:

Medicine Through Time – Topics	
Medicine Through Time – Middle Ages 1250-1500	▪ Supernatural and religious explanations of what people believed disease including astronomy. ▪ Rational explanations about what people believed caused disease including the Theory of the Four Humours and miasma. ▪ The role of Hippocrates and Galen on medicine 1250-1500. ▪ Preventions used 1250-1500 including: religious actions, bloodletting and purging, purifying the air and the use of herbal remedies. ▪ Hospital care in the 13th century. ▪ The role of the physician, apothecary, barber surgeon and wise woman in the treatment and care provided within the community and hospitals 1250-1500. ▪ What people believed caused the Black Death in 1346, how they tried to treat it and attempts to prevent its spread. ▪ The role of the Church in medicine in the Middle Ages. ▪ Supernatural and religious explanations of what people believed disease including astronomy.
Medicine Through Time – Renaissance 1500-1700	▪ The development of a more scientific approach to medicine including the work of Thomas Sydenham in improving diagnosis. ▪ The influence of the printing press on the spread of new ideas. ▪ The influence of the Royal society on the spread of new ideas. ▪ Continuity of treatment and prevention (bloodletting, purging and sweating, herbal remedies, the practice of regimen Sanitatis, the removal of bad air and care for the sick) and why they stayed the same. ▪ Changes in approaches to prevention, treatment and care including: transference, the use of chemical cures rather than relaying on herbs and bloodletting, Renaissance hospitals starting to treat people with wounds and curable diseases such as fevers and the introduction of hospitals specialising in one particular disease e.g. pox houses. ▪ The influence of Vesalius on medical knowledge, particularly anatomy, in England. ▪ Examples of where Vesalius proved Galen wrong. ▪ Increased exploration bringing new plants and herbs to be used in herbal remedies e.g. quinine to treat malaria. ▪ The influence of William Harvey, his discovery of the circulation of the blood and the impact this had on medical understanding at the time. ▪ Approaches to dealing with the Great Plague, including beliefs about what caused it, treatments and attempts to prevent it. This should include: beliefs linked to religion, miasma, the four humours and person to person touch. The use of prayers, quarantine, smoking tobacco, killing cats and dogs, burning barrels of tar, closing theatres etc.

USEFUL INFORMATION FOR

HISTORY

Medicine Through Time – Industrial 1700-1900	▪ Continuity in beliefs about what caused disease in this period, including miasma and the Theory of the four humours, though the theory of the four humours was losing popularity. ▪ Changing beliefs in what caused disease – the influence of Pasteur's Germ Theory and Robert Koch's work on microbes. ▪ The work of Joseph Lister (carbolic acid) and James Simpson (chloroform) on surgery. Antiseptics and anaesthetics. ▪ The Enlightenment and the impact of this on medical understanding at the time. ▪ Improvements and changes in hospital care and the influence of Florence Nightingale on this. ▪ The role of Edward Jenner in the development of the smallpox vaccine and the impact of this. ▪ Fighting Cholera in 1854 – attempts to prevents its spread the significance of Snow and the Broad Street Pump. ▪ Public Health Acts of 1848 and 1875.
Medicine Through Time – Modern 1900-present	▪ Changes in understanding about the cause of disease and illness: the influence of genetic and lifestyle factors. ▪ The impact that the availability of blood tests, scans and monitors had on diagnosis. ▪ Change in care and treatment – the impact of the NHS. ▪ The impact on science and technology on medicine. ▪ Advancements in medicine including magic bullets (Salvarsan 606 and Prontosil). ▪ Alexander Fleming and the development of penicillin (First antibiotic). The role of Florey and Chain. ▪ The fight against lung cancer, the use of science and technology in diagnosing and treating it. Government action. ▪ High-tech and medical and surgical treatments in hospitals e.g. robotic surgery.

USEFUL INFORMATION FOR

HISTORY

Weimar and Nazi Germany 1918-1939	
The Weimar Republic 1918-1929	▪ The legacy of the First World War. The abdication of the Kaiser, the armistice, November Criminals and the revolution 1918-1919. ▪ The creation of the Weimar Republic and the strengths and weaknesses of the constitution including Article 48. ▪ Reasons for the 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 the Left – Spartacist Uprising 1919. ▪ Challenges to the Republic from the right the Freikorps and the Kapp Putsch (1920). ▪ Challenges of 1923 – hyperinflation, the reasons for and impact. ▪ The occupation of the Ruhr – reasons for and impact. ▪ Reasons for economic recovery between 1924-1919 including the work of Stresemann, the Rentenmark, the Dawes and Young Plans and the American loans and investments. ▪ The impact of the Locarno Pact, joining the League of Nations and the Kellog-Briand Pact. ▪ Changes in the standard of living including wages, housing and unemployment insurance. ▪ Changes in the position of women, politics and leisure. ▪ Cultural changes: developments in architecture, art and the cinema.
Hitlers Rise to Power 1919-1933	▪ Hitler's early career, including: joining the German Workers' Party and the creation of the Nazi Party, 1919-1920. ▪ The early growth and features of the NSDAP, including: the Twenty-Five Point Programme and the role of the SA. ▪ The reasons for, events and consequences of the Munich Putsch. Mein Kampf. ▪ Reasons for limited support for the Nazi Party, 1924-1928. Party reorganisation and the Bamberg Conference. ▪ The growth of unemployment – its causes and impact. ▪ The failure of successive Weimar governments to deal with unemployment from 1929 to January 1933. ▪ The growth in support of the Communist Party. ▪ Reasons for the growth in support of the Nazi Party, including the appeal of Hitler and the Nazis, the effects of propaganda and the work of the SA. ▪ Political developments in 1932 – the role of Hindenburg, Bruning, von Papen and von Schleicher. ▪ The part played by Hindenburg and von Papen in Hitler becoming Chancellor in 1933.

USEFUL INFORMATION FOR

HISTORY

Please be aware that the content below this is within the Weimar and Nazi Germany topics but is unlikely to be covered until after your mocks but has been put here for future reference.	
Nazi control and dictatorship 1933-1939	▪ The Reichstag Fire and its impact including the Reichstag Fire Decree. ▪ The Enabling Act, the banning of other parties and trade unions. ▪ The threat of Ernst Rohm and the SA to Hitler, the Night of the Long Knives. ▪ The death of Hindenburg and Hitler becoming Fuhrer. ▪ The army and its oath of allegiance. ▪ The role of the Gestapo, the SS, the SD and concentration camps in the creation and enforcement of the police state. ▪ Nazi control of the legal system, judges and law courts and impact on the police state. ▪ Nazi policies towards the Catholic and Protestant churches, including the Reich Church and the Catholic Concordat. ▪ Goebbels and the Ministry of Propaganda – how this was used to control and influence attitudes. Including: censorship, Nazi use of media, rallies and sport, including the Berlin Olympics (1936). ▪ Nazi control of culture and the arts, including art, architecture, literature and film. ▪ The extent of support for the Nazi regime. ▪ Opposition from the Churches, including the role of Pastor Niemoller. ▪ Opposition from the young, including the Swing Youth and the Edelweiss Pirates.
Life in Nazi Germany 1933-1939	▪ Nazi views on women and family. ▪ Nazi policies towards the young. ▪ The Hitler Youth and the League of German Maidens. ▪ Nazi control of the young through education, including the curriculum and teachers. ▪ Nazi policies to reduce unemployment, including labour service, autobahns, rearmament and invisible unemployment. ▪ Changes in the standard of living, especially of German workers. ▪ The Labour Front, Strength through Joy and the Beauty of Labour. ▪ Nazi racial belief and policies and the treatment of minorities: Slavs, ‘gypsies’, homosexuals and those with disabilities. ▪ The persecution of the Jews, including the boycott of Jewish shops and businesses (1933), the Nuremberg Laws and Kristallnacht.

USEFUL INFORMATION FOR

MFL

Students in both French and Spanish will be sitting exams in all four skills: Listening, Speaking, Reading and Writing.

» Listening

This will take place in class before the exam weeks begin. Questions will be taken from topics already covered in year 9 and 10 (see table below).

» Speaking

A very short assessment completed in class, individually with the class teacher. Students will prepare a role-play task worth 15 marks. The task will be fully explained to students in lessons, they will be given time to prepare their answers. They will be required to ask a question and also respond to an unseen question.

» Reading

A 45-minute paper, questions will all be taken from topics covered in year 9 & 10 (see table below). There will be a short translation task, translating from French/ Spanish into English.

» Writing

Students will complete a Foundation level writing paper, consisting of the following tasks:
-Describing a picture.
-40 word paragraph.
-Translating into Spanish/ French.
-90 word written task.

» Topics to revise

French	Spanish
Myself, my family and friends Technology in Everyday Life Free time and Leisure Celebrations and Festivals	Holidays School Life Free time activities Technology in Everyday Life

Students will be provided with vocabulary lists in their lessons to revise. Please encourage them to use Quizlet.com or to write out their vocabulary and test themselves on the key words they will need for the exams.

USEFUL INFORMATION FOR

PSYCHOLOGY

» Resources on Teams:

- Revision tips: Revision ideas
- Test yourself by completing the sample paper: Sample paper (this includes the topic 'Psychological problems' which will not be in your mock, so please ignore that section)
- Revisit curriculum booklets and see if you can complete these independently: All Curriculum Booklets
- The revision file contains a variety of useful revision resources: Revision Resources
- The lesson PowerPoints for Paper 1 topics we have covered so far are on Teams to visit: Revision PPTs
- There are A3 overview's for each topic with a fill in the gaps to check your knowledge: A3 Revision Overviews
- All of this year's lessons are on teams if there is any particular subtopics you would like to revisit in detail: All Lessons

» Other ideas for revision:

The Revision Aid has a variety of ideas for different areas you have studied so far: Revision Aid

Paper One (1 hour 30 minutes)		
Topic	**Curriculum booklet link**	**Checklist link**
Memory	Memory Curriculum Booklet	Memory Checklist
Development	Development Curriculum Booklet	Development Checklist
The Brain & Neuropsychology	Brain & Neuropsychology Curriculum Booklet	Brain & Neuro Checklist
Social Influence	Social Influence Curriculum Booklet	Social Influence Checklist

USEFUL INFORMATION FOR

SOCIOLOGY

» Topics covered so far:

Education
Families and households

» Useful links:

www.thesociologyguy.com/revision-notes/
www.aqa.org.uk/resources/sociology/gcse/sociology/teach/resource-list

» Education

Topic area	Very confident	Quite confident	Not at all confident	Comments
The functions of education: economic and selective				
The functions of education: socialisation, social control and political				
Formal and informal education and the hidden curriculum				
The functionalist approach: Durkheim				
The functionalist approach: Parsons				
The Marxist approach: Bowles and Gintis				
Key historical changes in education: the tripartite and comprehensive systems				
The organisation of the education system in Britain today				
The state and independent sectors				
Vocational education and alternative forms of provision				
The 1988 Education Act, including marketisation and choice				
The influence of marketisation, including Ball, Bowe and Gewirtz				
New Labour policies after 1997, including raising standards, diversity and reducing inequality				

USEFUL INFORMATION FOR

SOCIOLOGY

» Family and Households

Topic area	Very confident	Quite confident	Not at all confident	Comments
Definitions of 'family'				
Different types of family in the UK				
Alternatives to families in the UK today				
Changing family and household settings over the course of an individual's life				
Links between families, households, ethnicity and social class				
Different types of family diversity including the work of the Rapoports				
Different families within a global context				
The functionalist perspective on the family				
Parsons' views on the functions of the nuclear family				
The Marxist perspective on the family including the work of Zaretsky				
Feminist perspectives on the family including the work of Delphy and Leonard				
Conjugal role relationships in the past				
Young and Willmott's work on the symmetrical family				

» Revision Videos:

www.youtube.com/playlist?list=PL7O6CcKg0HaFlmZaTky0GIPO59KkQ1j0r
www.tutor2u.net/sociology/collections/quick-revise-aqa-gcse-sociology-revision-blast-videos

» Online Quizzes:

www.senecalearning.com/en-GB/revision-notes/gcse/sociology/aqa