

Year 9

Revision Checklist

FULHAM CROSS GIRLS' SCHOOL
EMPOWERING TOMORROW'S WOMEN



English

Topic	What will I be assessed on in the exam?
Shakespeare- Romeo and Juliet	<ul style="list-style-type: none">✓ Your overall knowledge of the play and your understanding of the key scenes you have studied in class✓ Finding quotations within the extract you are provided with and recalling other quotations which you have learnt✓ Analysing language and structure✓ Explaining Shakespeare's intentions✓ Ability to recognise the influence of context on the play

What can I do at home?

- ✓ Revise the key extracts you have been provided with
- ✓ Memorise some of the important quotations within these key scenes (your teacher will provide you with a list of these)
- ✓ Practise identifying language and structural features within the extracts
- ✓ Practise writing PEAs on how effectively Shakespeare uses language and structure to convey meaning
- ✓ Revise the context of the play

Maths

	<u>9M, 9A, 9T</u>	
Unit 1		<ul style="list-style-type: none">• How to estimate an answer.• Calculate HCF and LCM using a prime factor tree.• Understand the notation for powers and roots• Index rules for powers and roots• Use zero, negative and fractional indices• Convert to and from Standard form• Calculate in standard form• Calculate using surds rules
Unit 2		<ul style="list-style-type: none">• Apply indices rules to algebra• Understand the difference between equations, identities, formulae and expressions• Expand and factorise expressions• Solve basic linear equations• Substitute values into a formula• Rearrange a formula• Find the nth term rule for a sequence (linear and quadratic)• Identify non-linear sequences (Fibonacci, etc)• Work with double brackets in algebra (expand and factorise)
Unit 3		<ul style="list-style-type: none">• Draw and interpret Pie Charts• Draw and interpret different types of bar charts• Draw and interpret scatter graphs• Draw and interpret time series and frequency polygons• Calculate the average and range for a set of data
Unit 4		<ul style="list-style-type: none">• Calculate with fractions• Solve problems using ratio and proportion• Use percentages in finance questions (simple interest, profit, loss)• Convert between fractions, decimals and percentages
Unit 5		<ul style="list-style-type: none">• Angle properties of triangles and quadrilaterals• Interior and Exterior angles of triangles and quadrilaterals• Calculate the interior and exterior angles of a polygon• Use Pythagoras theorem to calculate a side in a right angled triangle

Unit 6

- Use trigonometric ratios to find lengths in a right-angled triangle
- Use trigonometric ratios to find angles in a right-angled triangle
- Know exact values of sine, cosine and tangent for some angles

- Plot a graph from an equation
- Calculate gradient and y-intercept from an equation or graph
- Calculate the gradient of a line given two points
- Calculate the equation of a line given the gradient and a point
- Draw and interpret time distance graphs and velocity graphs
- Interpret real life graphs using gradient and the line of best fit
- Find the midpoint of a line segment
- Identify parallel and perpendicular lines using a gradient
- Draw and interpret quadratic graphs, cubic and reciprocal graphs

Unit 7

- Calculate area and perimeter of compound shapes
- Convert between metric units, including area and volume
- Surface area and volume of prisms and 3D shapes
- Calculate area and circumference of a circle or a sector.

Unit 8

- Plans & elevations of 3D solids
- Apply transformations to a 2d shape
- Describe transformations
- Use Bearings and loci in scale drawings
- Construct shapes and angle using a compass and ruler

9H and 9S

Unit 1

- Bidmas
- Rounding to decimal places and significant figures
- Multiplying and dividing decimal numbers
- Calculate the HCF and LCM
- Calculating squares, cubes and roots
- Using the index rules
- Using Prime factor trees to find the prime factors

Unit 2

- Write and simplify algebra expressions

Unit 3

- Use the index laws with algebra
- Substitute numbers into expressions and formula
- Know how to use brackets in algebra by expanding and factorising

- Design and read a data collection sheet
- Design and use a two way table
- Draw and interpret stem and leaf diagrams
- Draw and interpret Pie charts, bar graphs and time series graphs
- Draw and interpret scatter graphs

Unit 4

- Add, subtract, multiply and divide fractions
- Convert between fractions, decimals and percentages
- Calculate different percentages without a calculator
- Calculate different percentages with a calculator

Unit 5

- Solve Equations
- Solve inequalities and be able to lot inequalities on a number line
- Substitute into a formula and solve
- Change the subject of a formula
- Generate a sequence given a rule
- Calculate the nth term rule of a sequence

Unit 6

- Know side and angle properties of quadrilaterals
- Use corresponding and alternate angle rules
- Solve angle problems in triangles
- Calculate the interior and exterior angles of polygons
- Calculate missing angles using angle rules

Unit 7

- Calculate area and perimeter of compound shapes
- Convert between metric units, including area and volume
- Calculate surface area and volume of prisms and 3D shapes
- Calculate area and circumference of a circle or a sector

Unit 8

- Calculate the perimeter of shapes
- Calculate the area and perimeter of a trapezium
- Convert between metric units including area and volume
- Calculate the volume and surface area of prism

Science

What will I be assessed on in the exam?

Physics

Evolving model of the atom, atomic structure, isotopes, structure and properties of radiation (alpha, beta and gamma), uses and relative dangers of radiation, contamination and decontamination, half-life, radioactive decay chains

Chemistry

Atomic structure, electron configuration, Periodic table, Ions and Isotopes. History of the structure of the atom

Biology

Cells, Stem cells, differentiation of cell, mitosis, Osmosis, Diffusion and active transport

Geography

Rainforests

Example: Amazon Rainforest

The **mining** for oil and gold in the region has meant trees have been deforested and so large areas have been cleared. Oil mining has led to the pollution of major rivers in the area.

Cattle ranching and a reliance on the meat trade has meant trees are cut to have fields of soya beans as food for the cattle.

Cutting trees to sell such as mahogany and growing coca leaves in the **production of cocaine** has destroyed the forest.

The role of TNC's such as **Chevron** and the environmental impact these companies have on the Amazon.



Globalisation

There is a development gap throughout the world. Many poor countries find it almost impossible to become developed. Here are some reasons for the gap.

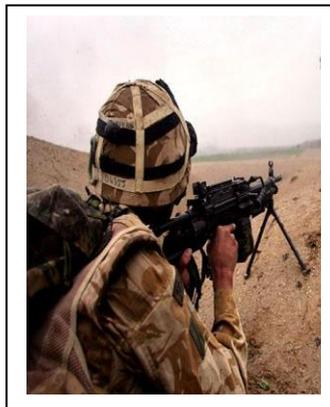
- 1) War or conflict
- 2) Climate (Extreme weather)
- 3) Diseases (Malaria/AIDS)
- 4) Corruption in government
- 5) Poor healthcare and education
- 6) Lack of resources such as food



Afghanistan Conflict 2001

Impact of conflict on a country can have an effect on development in the following ways:

- 1) **Health care** decreases and life expectancy goes down as death rates go up
- 2) **Education.** Children out of school and damage to



'Is the way that companies, ideas and lifestyles are spreading more easily around the globe.'

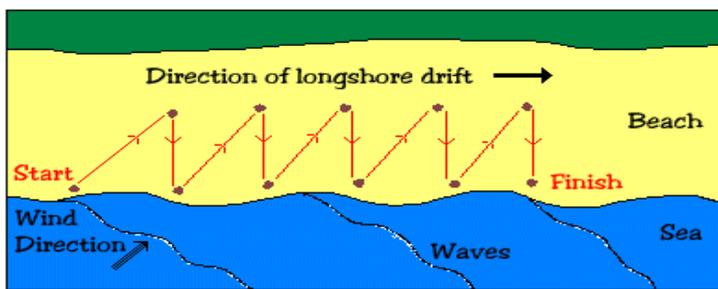
Globalisation can have a negative and positive effect on certain countries. The developed world seems to benefit through trade and income as large **TNC'S** (Transnational Companies) locate all over the world. Examples of TNC'S are **Starbucks, Nike, Apple Chevron** etc.

Geography cont...

Globalisation

Greater risk of diseases being transported unintentionally between nations.	Manufacturing jobs in developed countries suffer because it is cheaper to make products in developing countries.	Globalisation helps make people more aware of global issues such as global warming, deforestation or the Asian Tsunamis.	TNC's bring wealth and money into local economies. This could be spent on housing, health care or infrastructure.
Globalisation can mean a loss of cultural diversity. Countries become more 'Western'.	There is a lack of international laws that make sure TNC's protect the environment or respect local people.	TNC's can help countries by creating jobs and teaching skills to local people.	Globalisation means there is more free trade between nations.
Globalisation means an increased flow of communications. This allows vital information to be shared between individuals and corporations around the world	There is a greater ease and speed of transportation for goods and people. It is easier to travel to other countries.	There can be a spread of a materialistic lifestyle and attitude that sees consumption as the way to wealth.	There may be an increase in the chances of civil war within developing countries and open war between developing countries as they vie for resources.

Coasts



Longshore Drift is the movement of material up and down the beach. The **swash** moves material into the beach and the **backwash** moves it back out to sea. The waves transport the sediment down the beach. Some waves erode such as destructive waves and others move the sediment such as constructive waves.

Erosion: Waves destroy and take away areas of land due to erosion. Humans have ways of being able to stop this erosion by building defences. Hard and soft engineering can be used and both of these types of defences have their pros and cons.

Hard Engineering: This involves placing structures along the coast that are designed to prevent erosion. They are expensive, ugly and may not last long.

Soft Engineering: These are less noticeable efforts, such as a row of underwater tyres just below low tide. They would break up the energy of the waves and reduce erosion. These solutions are cheaper and less ugly, but generally aren't as effective and need to be replaced often.

Hard Engineering examples



Groynes

Sea wall

Soft Engineering examples



Beach Replenishment

Music

Musical elements and their meaning	Texture Melody Structure Pitch Dynamics Tempo Timbre Metre
Styles of music and their features	The Blues Film Music Reggae
Identifying instruments	<ul style="list-style-type: none">• Orchestral instruments (Strings, woodwind, Brass, Percussion)• World music instruments• Pop instruments

Describing how a piece of music conveys a certain mood.

For example:

Listen to the piece of music and tell me how it shows a battle. Refer to the musical elements.

History

Content	Skills
Suffragettes and the right to vote Conditions and status of women in WW1	Writing PEA paragraphs that explain the causes or consequences of event Comparing causes/consequences
Treaty of Versailles and effects of WW1	Writing PEA paragraphs that explain which factor was the most important factor in causing and event
Germany in the 1920s and the rise of the Nazis	Practicing source analysis answering questions such as: What does this source tell me?
Hitler and Nazi Germany	What can I infer from the source?
Causes of WW2	Is this source useful in helping me understand an event?
WW2 including Dunkirk, Battle of Britain, The Blitz, D-Day and Home Front, Dropping the bomb on Japan, Impact on Women	Why is it useful?
Holocaust	What are some of the problems with this source?
	Can I trust this source? Why/why not

Religious Studies

Topics
Anti-semitism (Holocaust)
End of life
Philosophy and Humanism
Humanism

Computer Science

What you should do:

Read carefully through all the work in your class folders – makes notes and spider diagrams as you are doing so – tell others what you have learnt – ask someone to test you by asking you lots of questions.

Practice basic coding in Python (it is free to download from the Python website) – review all your Python learning very carefully

If you are not sure of something research it on the internet. Here are some websites that you may find helpful:

BBC Bitsize

teachICT.com

Code academy.com

Python.org

Topic	Content
Python Programming	<ul style="list-style-type: none"> ➤ Read and write basic Python codes: ➤ What syntax means and syntax errors ➤ What decompose means ➤ What an algorithm is and the different types of algorithms ➤ Keyboard shortcuts ➤ Printing a string ➤ Adding a quote to a string ➤ Comments, what they are and how to write them ➤ Escape sequences ➤ What operators, operands and quotients are ➤ Mathematical operators, PEDMAS and completing calculations using PEDMAS ➤ Combining text and calculations ➤ Data types and how to return the data type of an expression ➤ Variables – what they are, when to use them and how to write them
Binary	<ul style="list-style-type: none"> ➤ What binary is and why computers use binary ➤ The base system used for binary and denary ➤ How to convert denary (decimal) to binary ➤ How to convert binary to denary ➤ How to add, subtract and multiply binary
Data Representation	<p>Text</p> <ul style="list-style-type: none"> ➤ What the ASCII code is ➤ What the Unicode is ➤ The differences between the ASCII code and the Unicode code <p>Sound</p> <ul style="list-style-type: none"> ➤ The difference between analogue and digital sound ➤ What is used to convert analogue to digital (and vice-versa) ➤ All about sample rate – what it is, what it is used for and how it is measured ➤ All about bit depth - what it is, what it is used for and how it is measured <p>Images</p> <ul style="list-style-type: none"> ➤ The difference between a vector and bitmap image ➤ What pixels are, what they are used for and how screens are measured in pixels ➤ The colours used to create all images ➤ How to calculate colour depth

DAT

Where/how can I revise for KS3 exams in DAT?

Along with your project booklets/sketchbooks which can be requested, you can look at skills and subject knowledge via the following websites per subject.

Product Design	Catering	Art
<ul style="list-style-type: none"> • BBC Bitesize.co.uk • Instructables.com • Designandtech.com • Technologystudent.com 	<ul style="list-style-type: none"> • BBC Bitesize.co.uk • NHS and British heart foundation • British Nutrition Foundation • Change 4 Life 	<ul style="list-style-type: none"> • BBC Bitesize.co.uk • www.kids.tate.org.uk

Year 9	Product Design	1	The first project of the year involved CAD/CAM and wooden joining methods . Students worked extensively with Adobe Photoshop and social/moral and ethical issues in design . These are the areas which should be revised.
		2	The second project of the year was all about Design Movements and famous product designers . Recalling key areas of existing designers styles throughout the years should be revised along with key technical principles of manufacturing their chosen product made in this project.
	Catering	1	The first project focused on the main nutrients (protein- HBV and LBV, carbohydrates- simple and complex, fat- saturated and unsaturated) and minerals- calcium and iron. Students' need to learn why they are needed in the body and food sources.
		2	The second project focused on vitamins in detail (Fat soluble- A, D, E, K) and (Water soluble- B vitamins and C), and dietary needs throughout the life stages . Revise these topics.
	Art	1	The second project focused on creating lino prints inspired by the artist Kathe Kollwitz . Students developed their ability to evaluate their own work and should focus on this skill for revision.
		2	The second project focused on refining students drawing and painting skills based on the work of the artist Jim Dine . Students should practice drawing from observation in order to prepare for their exam.

Product Design Key words

 CAD	 CAM	 Social and moral issues in Design	 Coping Saw	 Hand file	 Pillar drill	 Scroll Saw
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Catering Key words

High biological value	Low biological value	Simple carbohydrates	Complex carbohydrates	Saturated fat	Unsaturated fat	Water soluble vitamins	Fat soluble vitamins
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Art Key words

Tone	Texture	Line	Colour	Shape	Form	Mark Making	Pattern
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MFL - French

Term	Topic for revision
Autumn 1	Activities you do online Time phrases Advantages and disadvantages of social media Using modal verbs to discuss what you can or can't do online (je peux, je ne peux pas) The dangers of the internet Activities you use your phone for and their advantages and disadvantages Comparatives and superlatives
Autumn 2	Parts of the body Illnesses Using modal verbs (il faut) Using modal verbs in the conditional (il devrait) to give advice Food and drink vocabulary Using the simple future tense to make resolutions Sports and their advantages and disadvantages Bad habits: junk food, drugs and smoking
Spring 1	Countries and holiday destinations Developing your opinions (complex opinion phrases) Question words Revision of 3 tenses: past, present and future Ideal holidays (conditional tense)
Spring 2	Disastrous holidays (imperfect tense) Holiday essentials Reflexive verbs to describe holiday activities Making a complaint
Summer 1	Different jobs and verbs to describe them Your career choices Using languages in the work place Your life as a child (the imperfect tense)
Summer 2	Environmental disasters Helping the environment at school Recycling Endangered species Shopping and sustainable fashion Happiness

MFL - Spanish

Term	Topic for revision
1a	Friends: describing friends using adjectives, nationalities and using opinions
1b	Tv and cinema: describing Tv programmes and film genres, comparatives and superlatives, present tense
2a	Food and drink, ordering at a restaurant, using the immediate future tense
2b	Holidays: countries and nationalities, means of transport, types of accommodation, preterite tense and using 3 tenses
3a	Body parts, saying what's wrong, healthy living, giving advice using modal verbs and conditional tense
3b	Clothing and GCSE based skills: translation, literary texts, speaking, listening authentic texts