GATEWAYS
SCHOOL

Upper 4
REVISION LISTS
2019

Contents

NB: There are no Language examinations as Upper 4 take the FCSE courses

Examination Timetable

All examinations are held in the Sports Hall unless otherwise indicated

Monday 20th May	Normal timetable	Normal timetable
Tuesday 21st May	9.00-10.00 (10.15) Maths (1 hour) 11.30-12.30 (12.45) Chemistry (1 hour)	2.30-3.30 (3.45) Biology (1 hour)
Wednesday 22nd May	9.00-10.00 (10.15) Physics (1 hour) 11.30-12.30 (12.45) Geography (1 hour)	2.30-3.30 (3.45) English (1 hour)
Thursday 23rd May	9.00-10.00 (10.15) RS (1 hour) 12.00-12.30 (12.37) Computing (30 mins)	2.00-3.50 Music Performance & Examination (1 hour 50 mins)
Friday 24th May	9.00-9.30 (9.38) Technology (30 mins) 11.50-12.35 (12.47) Latin (45 mins)	2.30-3.30 (3.45) History (1 hour)

Biology

Use you specification to help.

Specification ref.	Revise 1	Revise 2	Consolidate
4.1.1 Cell Structure 4.1.1.1 Eukaryotes and Prokaryotes 4.1.1.2 Animal and Plant Cells 4.1.1.3 Cell Specialism 4.1.1.4 Cell Differentiation 4.1.1.5 Microscopy			
4.1.2 Cell Division 4.1.2.2 Mitosis and the cell cycle 4.1.2.3 Stem Cells			
4.1.3 Transport in cells 4.1.3.1 Diffusion 4.1.3.2 Osmosis 4.1.3.3 Active transport			
4.2.2 Animal tissues, organs and systems. 4.2.2.1 The human digestive system			

Chemistry

Spec Ref.	Topic and themes in the topic	CGP Revision guide pages	Revision 1	Revision 2	I have learnt this
5.1.1 **Atomic structure**	5.1.1.1 Atoms, elements and compounds 5.1.1.2 Mixtures 5.1.1.3 The development of the model of the atom 5.1.1.4 Relative electrical charges of subatomic particles 5.1.1.5 Size and mass of atoms 5.1.1.6 Relative atomic mass 5.1.1.7 Electronic structure	16-23 31-33			
5.2 **Bonding, structure, and the properties of matter**	5.2.1 Chemical bonds, ionic, covalent and metallic 5.2.2 How bonding and structure are related to the properties of substances 5.2.3 Structure and bonding of carbon	26-29 47-65			
5.1.2 **The periodic table**	5.1.2.1 The periodic table 5.1.2.2 Development of the periodic table 5.1.2.3 Metals and non-metals 5.1.2.4 Group 0 5.1.2.5 Group 1 5.1.2.6 Group 7	34-45			

Computing

Topic	Revise 1	Revise 2	Consolidate
Computational Thinking • Decomposition • Abstraction • Flowcharts • Algorithms • Simple coding exercises			
ICT in Society • Loyalty Cards • Use of digital systems in tracking people • New technologies			
Data Representation • Binary to Denary • Denary to Binary • Binary Addition • Logic Gates • Storing Images • Storing Sound			
HTML • Common tags • Webpage appearance • Links • Website design			

English

Topic	Revise 1	Revise 2	Consolidate
Reading Skills:			
Read carefully and with understanding. Pick out facts and information from a passage of text. Show understanding of what you have read by being able to back up your thoughts with evidence and make suggestions about what things mean.			
Identify and show understanding of the language used in a text: words/phrases/language features/language techniques/sentence forms. Show understanding of how the writer's choice of language can have an effect and influence a reader. Use subject terminology to support your views e.g. nouns/verbs/adjectives/adverbs/pronouns/repetition/lists/ alliteration/ metaphors/ similes/personification/ellipsis/ simple sentences/ compound sentences/complex sentences/rhetorical sentences			
Show understanding of how the writer has structured a text from a whole text level, to a paragraph level and at a sentence level. Show understanding of how structure can achieve effects and influence readers. Use subject terminology to support your views e.g. whole text: beginnings, changes of perspective, time shifts, endings, sense of journey paragraph level: topic change, discourse markers, cohesion, dialogue sentence level: pauses, choice of words and phrases			
Respond to a statement made about a text. Give a personal judgement about the text, showing that you are a thoughtful reader. Write from your point of view, using first person perspective e.g. "I agree with the opinion…"			

Show that you can refer to the methods used by the writer to make you (the reader) feel a certain way. Use evidence (quotations) from the text to support your points. Writer's methods can include any aspect of language and structure e.g. words and phrases, dialogue, tone, characterisation, perspective, chronology.			
Writing Skills:			
Show that you can write well and communicate clearly throughout the answer.			
Organise your writing so it makes sense. Write a plan before you begin.			
Write in paragraphs and use a variety of starting phrases (discourse markers) to structure your ideas.			
Show you have a good vocabulary and that you can use ambitious language to engage your reader.			
Show that you can vary your sentence types to make your writing interesting.			
Spell and punctuate your work to show that you clear and accurate. Use a range of punctuation.			
Show that you can write in an appropriate form for the task: this will be a piece of creative writing.			
Show that you can adapt your writing to suit the audience and purpose of the task.			
Choose interesting and imaginative ideas to write about.			

Geography

Topic	Revise 1	Revise 2	Consolidate
India			
Location of India (bordering countries, cities within India and key geographical features such as the Himalayas and River Ganges)			
Population control in India (Kerala)			
Analysing and interpreting graphs comparing areas			
Rivers			
Explain how erosion occurs in a river: Hydraulic action Abrasion Attrition Solution			
Explain how transportation occurs in a river Traction Saltation Suspension Solution			
Explain how deposition occurs in a river			
Create an annotated diagram to show the processes of waterfall formation			
Meanders and oxbow lakes (including a cross-section of a meander)			
Europe			
Locate named EU countries on a map			
Name capital cities of countries within the EU			
Development			
Key definitions of the following development indicators **including the units they are measured in**: Birth rate Death rate Infant mortality Daily calorie consumption GDP per capita Life expectancy Adult literacy rate Gender inequality Population density			

The North-South divide Human Development Index (HDI)			
Comparing MEDCs and LEDCs using data			
Describing and explaining geographical patterns relating to development and the North-South divide including analysis of choropleth maps and correlations			

History

Topics: Women's suffrage and WWI	Revise 1	Revise 2	Consolidate
WWI: be able to describe daily life for a soldier in the trenches.			
WWI; be able to explain why the stalemate was broken and war ended in 1918.			
Nazi Germany: the reasons why Germans voted for Hitler in 1932, including the Treaty of Versailles and economic depression.			
Nazi Germany: how Hitler was able to control the German people, with a focus on propaganda and education.			
Know how to write a structured answer using 'P.E.E' (the 'hamburger model).			
Primary source and secondary sources: how are they different and why are they both useful?			
The importance of the Nature (what it is), the Origin (who wrote or made it) and the Purpose (why it was made) when using sources.			

Latin

	1st Revision	2nd Revision	3rd Revision
Vocabulary			
Check lists 1-12			
Nouns (Declensions 1,2 & 3)			
Nominative Singular and Plural			
Accusative Singular and Plural			
Dative Singular and Plural			
Verbs			
Present tense verb endings and how to translate them			
Imperfect tense verb endings and how to translate them			
Perfect tense verb endings and how to translate them			
The verb 'to be' in the present tense (sum, es, est…) and imperfect tense (eram, eras, erat…)			
Adjectives			
Superlatives			
Comparatives			
Pronouns			
I, we and you in Latin (ego, nos, tu, vos), including the dative case (mihi, tibi, vobis and nobis) and how to translate them			

Mathematics

Every topic listed here can be found on both the mymaths website (www.mymaths.co.uk) and the Collins connect website (https://connect.collins.co.uk/school/portal.aspx). You can use these websites to support your revision. You will need the username and password provided to you by your mathematics teacher in order to access these websites.

Mathematics Upper 4 Set 1

Topic	Revise 1	Revise 2	Consolidate
Number			
Simple Interest **Percentage increase and decrease** **Repeated percentage change** **Adding and subtracting fractions** **Multiplying and dividing fractions** **Algebraic fractions** **Powers of 10** **Standard form**			
Algebra			
Expanding brackets **Factorising algebraic expressions** **Factorising quadratic expressions** **Difference of two squares** **Linear, quadratic and cubic graphs**			
Shape and Space			
Properties of polygons **Interior and exterior angles of regular polygons** **Pythagoras' theorem** **Trigonometry** **Volume of a cylinder** **Surface area of a cylinder**			
Handling Data			
Scatter graphs and correlation **Two way tables** **Estimation of mean from grouped data** **Cumulative frequency diagrams** **Compound units**			

Mathematics Upper 4 Set 2

Topic	Revise 1	Revise 2	Consolidate
Number			
Simple interest **Percentage increase and decrease** **Percentage – calculate the original value** **Find the percentage change** **Add and subtract fractions and mixed numbers** **Multiply and divide fractions, integers and mixed numbers** **Powers of 10** **Standard form** **Round appropriately** **Mental calculations** **Problem solving including unit pricing**			
Algebra			
Multiply out brackets (up to two brackets) **Factorise algebraic expressions (including with indices)** **Write and simplify expressions** **Substitute values into expressions** **Solve equations with brackets and fractions** **Rearrange formulae** **Draw a straight line from its equation** **Draw a quadratic graph from its equation** **Use graphs to solve equations**			
Shape and Space			
Angles in polygons and regular polygons **Constructions** **Use Pythagoras' theorem** **Convert between metric units for area and volume** **Volume and surface area of a prism including cylinders** **Use trigonometry (SOHCAHTOA) to find missing sides and missing angles** **Speed, density**			
Handling Data			
Mode, median, mean, range **Scatter graphs and correlation** **Two-way tables and probabilities from them** **Compare two or more sets of data**			

Physics

Topic	Revise 1	Revise 2	Consolidate
Scalars and vectors			
Speed and acceleration			
Graphs of motion			
Resultant forces			
Newton's laws of motion			
Terminal velocity			
Stopping distances and affecting factors.			
Momentum			
Hooke's Law			
Work done and power			
Efficiency			

Religious Education

Topic	Revise 1	Revise 2	Consolidate
How do we know what's real? – Scepticism, Descartes' Cogito & Plato's Cave			
The key terms of Atheism, Agnosticism and Theism			
Cosmological Argument			
Design (teleological) argument – Paley and Fine Tuning			
Miracles			
Religious Experience			
The Problem of Evil and why this is an argument against the existence of God			
People of Faith (at least two examples)			
Religion and Freedom of Speech			
Religion and Homosexuality			
Religion and Women			
Religion and Race			

Technology

Topic	Revise 1	Revise 2	Consolidate
Function of eggs in: • meringues • lemon meringue pie • chicken nuggets			
Review testing for readiness: • Look at each recipe we have cooked. How do you know when a component/dish is ready? • What tests are used?			
Review lasagne recipe.			
Review rice based recipes.			
Mulitcultural recipes. Identify the country of origin of: • Risotto/Paella/Biryani/Pilaf • Pasties • Lasagne • Sticky Lemon Chicken • Enchiladas			
All the recipes we have used are saved in the group drive on the school network for pupils to access and are also in the recipe booklet sent home in Upper 3.			
Embellishment techniques: • tie dye • applique • reverse applique • block printing			
Pattern cutting, construction and following written making instructions			
Making of either a skirt/apron/tote bag. Review the pattern instructions.			

Music

Topic	Revise 1	Revise 2	Consolidate
Treble Clef note names			
Bass clef notes names			
Ledger Lines note names			
Note lengths (including dots and triplets)			
Time Signature			
Counting tones and semitones			
Scales			
Information about Pop Music			
Chords			
Melody Keywords			
Listening vocabulary			