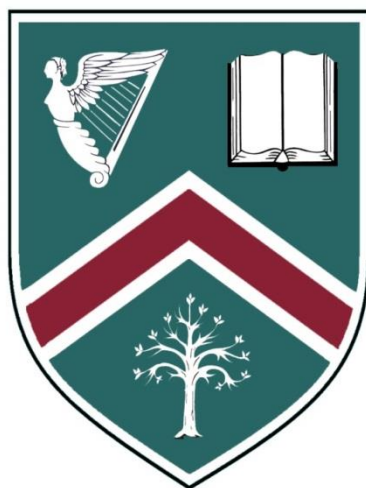


STRATHEARN SCHOOL



GCSE SUBJECT CHOICE BOOKLET 2021

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INTRODUCTION

In Northern Ireland there are some subjects which all pupils must study. In Strathearn we add English Literature to that list so that all pupils must study:

- GCSE Mathematics, GCSE English Language and GCSE English Literature;
- Religious Studies Full Course GCSE **or** Short Course GCSE (*half a GCSE*);
- Learning for Life & Work (*non-certificated - no examination*);
- Physical Education (*non-certificated*), except those who opt for it as a full GCSE.

Pupils now have a choice of subjects from the lists below, studied in five periods a week.

We recommend a broad and balanced curriculum which includes the study of one Science and one Language. Please:

- ✓ choose **ONE** subject from Group 1 and **ONE** from Group two,
- ✓ choose **THREE** subjects from Group 3, unless you have chosen Double Science in Group 1, in which case you choose **TWO** subjects from Group 3.

Group 1	Group 2	Group 3
Biology	French	Art
Chemistry	German	Biology
Physics	Spanish	Business Studies
Science (Double Award)		Chemistry
		Digital Technology
		Drama
		Food and Nutrition
		French
		Geography
		German
		History
		Music
		Physical Education
		Physics
		Spanish
		Technology and Design

choose **ONE** subject from Group 4 – page 4

You choose **ONE** subject from Group 4. A Group 4 subject is offered in only two periods per week:

Group 4
Further Mathematics (Selection of this course will lead to a full GCSE)
Religious Studies (Selection of this course will lead to a full GCSE)

Your choices will give you a total of **9 / 9.5 GCSE subjects**.

It will not be possible for us to provide every subject combination, as some may lead to classes which are too small or it does not fit with the final timetabled subject groups. If you choose such a combination, you will be advised of this and asked to make an alternative choice.

Find out

You will spend a long time studying each of your subjects, so it is well worth taking time to find out all you can about them, before you make your choices. You should:

- find out all you can about the kinds of career you might be interested in, 'Career A-Z', 'Career Starter' and 'Career Ideas' can be accessed on the computers in School; **xello** and www.nidirect.gov.uk/careers can be accessed on the internet. These will provide useful information along with other websites which can be found on our School website under 'Careers'.
- read the relevant pages in this booklet,
- talk to pupils already doing the subjects at GCSE,
- research new subjects very carefully,
- talk to your teachers,
- talk to your parents,
- talk to Mr Anderson, Miss Griffith or any member of the Careers Department.

GCSEs are DIFFERENT

No matter what subjects you choose, you will find GCSE work very different to Forms 1 - 3:

- You have more work to do, even though you have fewer subjects.
- You must regularly revise your work at home, to consolidate it and keep on top of it.
- There is extra pressure in Form 5, because you have to complete your controlled assessment tasks as well as revising for your final GCSE exams.
- The more work you do in Form 4, the less pressure there is in Form 5.

MODULAR EXAMS

In summer 2022 pupils in Form 4 will have the opportunity to complete GCSE modular exams across a small number of subjects (Form 4 modular exams are *currently* offered in GCSE English Literature, Mathematics, History and Technology). Our position with Form 4 modules remains under review, parents will be informed as soon as we make any decision about whether to continue with this in these subjects, or to extend this to other curriculum areas.

A Levels, University Courses and Careers

The way in which the GCSE subjects are grouped on the previous page, together with the compulsory subjects, has the strong advantage of ensuring that your own personal timetable is **balanced** – i.e. it ensures that you will study a wide range of subjects. This means that, later on, you will have a good choice of 'A' levels, university courses and careers.

For admission to **many** university courses, good A-level grades in **any** subjects are suitable. **However, there are some university courses that require particular subjects at A Level so you will need to have studied those at GCSE to be able to go on to study them at A Level. Therefore, it is really important that you do your own research.**

There is also lots of relevant information on the 'Useful Careers Websites' section on our **School Website**. If you are interested in finding out more about where the likely growth areas are for future job opportunities in Northern Ireland, please visit the section of our Careers page called '**Labour Market Information**'.

If you have any questions about careers, please speak to Miss Griffith, Mr Anderson or any members of the Careers Department as soon as possible.

Useful Careers Websites:

www.ucas.com

<http://russellgroup.ac.uk>

www.nidirect.gov.uk/careers

www.careersbox.co.uk/

www.notgoingtouni.co.uk/

<http://careersthatmove.co.uk/>

<http://hospitalityguild.co.uk/uksp>

<http://investigatecareers.com> Password: lobster (Please note that this password is changed annually, so please check with Miss Griffith or your Form Tutor if you have difficulty accessing the site.)

ART & DESIGN

The GCSE course encourages personal, creative and imaginative approaches to Art and Design and follows a natural progression from Key Stage 3. In addition to class time teaching, GCSE artists are offered a lunchtime Art Club, gallery visits and after school activities.

If you have felt inspired by our annual Art Exhibition in school, then this could be the subject for you!

What will I study?

In GCSE Art you will learn practical skills in drawing, painting, photography, textiles, print-making, ceramics and mixed media alongside opportunities to investigate and engage with the Creative and Cultural Industries.

You will:

- Research artists'/ designers' work to inspire your own artwork
- Experiment with a wide range of materials and techniques
- Develop your drawing and recording skills
- Develop your own ideas and artwork

You will obtain a high grade in GCSE Art by:

- Engaging with Art & Design by visiting exhibitions, craft outlets, studios and fairs
- Developing your skills in the formal elements of tone, form, colour, texture, etc.
- Producing exciting and personal final outcomes
- Learning to understand artists'/ designers' work, techniques and processes
- Sustaining your efforts across both years of the course by spending 1-2 hours each week on your Art

Coursework / Practical Part A and Part B

Coursework consists of A: an **exploratory portfolio of work** based on theme(s) set by the school's Art Department. Part B: **An investigation into the Creative and Cultural Industries**.

- This is completed in class time and as homework in both years of the course
- All class time can be counted as controlled assessment
- Your final mark is based on ALL the work completed over two years of the course, which includes sketchbooks, photos, samples and final outcome(s).

What exams will I take?

- The "exam" element of your course is known as the **Externally Set Assignment**.
- It is basically another project completed in class/homework in the Form 5 Spring term; the theme is set by the exam board. You must complete a minimum of **20 hours of preparatory work** for this.
- Your teacher will work closely with you to help you prepare for the exam
- In the final timed **10 hour exam** you will create a final outcome
- All your preparatory studies, sketchbook and exam outcome will be marked

For all units, work is internally marked by the school, and externally moderated by the examinations board with the following breakdown:

Part A: Exploratory Portfolio:	25% of final mark	} Combined = 60% of final mark
Part B: Investigating the Creative and Cultural Industries:	35% of final mark	
Externally Set Assignment:	40% of final mark.	

Students are asked to present an exhibition of their work for assessment purposes.

Where can I get more information?

All of the staff in the Art department teach GCSE Art and Design, and will be happy to advise.

BIOLOGY

Biology is the study of living things. Biologists are interested in looking at the living world and the environment. Do you like watching nature programmes on TV? Or are you interested in health related issues? Do you have a genuine curiosity about the world around you? If the answer is yes, then GCSE Biology might be for you!

What will I study?

Some of the topics are linked to work which has been started in KS3, the topics are:

Unit 1

Cells

Photosynthesis and plant leaves

Food and Energy

Digestion

The respiratory system and cell respiration

Co-ordination and control

Ecological relationships and energy flow

Unit 2

Osmosis and plant transport

The circulatory system

The genome, chromosomes, DNA and genetics

Reproduction, fertility and contraception

Variation and natural selection

Health, disease, defence mechanisms and treatments

The course allows you to learn about the natural world and discuss scientific issues which affect our lives, such as heart disease, healthy eating, genetic engineering, pollution, the global climate emergency and medical ethics.

Practical skills

You will learn to plan and carry out experiments, analyse information, draw conclusions and make decisions. Students will carry out two assessed practicals (7.5%) in the final year of study (between January and April). This is followed in June by a written exam based on practical skills which is 17.5% of the final score.

What exams will I take?

The exam board used in Strathearn is CCEA.

There are three exam papers and the practical assessment score is added to these.

Where can I get more information?

You should visit the school library and look at the biology books. Do you think you would like to study more about biology? You should also speak to your science teachers about your choices.

BUSINESS STUDIES

Business Studies provides students with a unique insight into the **world of work**. Through its study, students discover how and why businesses operate in the way they do and learn about their key elements and business functions.

The knowledge, and the holistic understanding that it develops, is invaluable to students and can open a wide range of opportunities for further learning and employment. It offers an excellent foundation for those wishing to pursue careers in **management, marketing, project management, business accounting, management accounting, human resources, hospitality and leisure management and business journalism**.

As well as gaining a lifelong interest in and enjoyment of business subjects and developing students' knowledge and understanding of the world of business, pupils will also develop important personal skills and qualities such as:

- An enquiring, critical approach to distinguish facts and opinions, to build arguments and make informed judgements;
- An ability to apply knowledge, understanding and skills to today's issues in local, national and global contexts;
- An appreciation of the perspectives of different stakeholders in relation to business and economic activities;
- An ability to consider the extent to which business or economic activity can be ethical or sustainable;
- An understanding of the changing use of ICT in business and economic activities;
- An understanding of the use of the relevant terms, concepts and methods to describe business and economic behaviour effectively;
- Their abilities as effective and independent learners and as critical and reflective thinkers and enquiring minds; and
- Knowledge, understanding and skills to help them understand current events and provide a basis for their future role as active citizens and for possible further study of business.

What will I study?
Unit 1: Starting a Business (40%) <ul style="list-style-type: none">• Creating a Business• Marketing• Business Operations External written examination of 1 hour 30 minutes; short structured questions and extended writing.
Unit 2: Starting a Business (40%) <ul style="list-style-type: none">• Human Resources• Business Growth• Finance External written examination of 1 hour 30 minutes; short structured questions and extended writing.
Unit3: Planning a Business (20%) Controlled Assessment
Where can I get more information?
Mrs White (U10 beside the library) will be happy to give you more information or http://ccea.org.uk/business_studies/ or check the Business Studies page on the school website.

CHEMISTRY

For the student who:

- wishes to be inspired, motivated and challenged by following a broad, coherent, practical, satisfying and worthwhile course of study.
- Wants to develop their curiosity about the material and physical worlds and
- Develop an insight into and experience of how science works.

This Chemistry Course enables students to engage with chemistry in their everyday lives and to make informed choices both about further study in chemistry and related disciplines and about their careers. It aims to allow students to acquire sufficient understanding and knowledge to become confident self-reliant citizens in a scientific world able to take or develop an informed interest in matters of chemical importance.

What will I study?

There are three units to the course:-

Unit 1: Structures, Trends, Chemical Reactions and Analysis

Atomic Structure; Bonding; Structures; Nanoparticles Equations; Periodic Table; Quantitative Chemistry; Acids, Bases and Salts; Chemical Analysis; Solubility.

Unit 2: Further Chemical Reactions; Rates and Equilibrium; Calculations; Organic Chemistry;

Reactivity Series of Metals; Redox; Rates of Reaction; Equilibrium; Organic Chemistry; Quantitative Chemistry; Electrochemistry; Energetics; Gas Chemistry.

Unit 3: Practical Skills-See below

Practical Skills

Unit 3 is a practical skills assessment worth 25% towards your final mark.

Practical skills therefore play an important part in the overall final grade of the candidate.

Candidates will be assessed in 2 Skill Areas:

Part A Practical Skills 7.5% assessed in a laboratory during F5

Part B Written Exam on practical skills, assessed in the examination hall worth 17.5% and lasting 1 ½ hrs

What exams will I take?

There are two written exam papers for this subject.

Paper 1 is worth 35 % and lasts for 1 hour 15 minutes.

Paper 2 is worth 40% and lasts for 1 hour 30 minutes.

Paper 3 is worth 17.5%, lasts for 1 hour and is based on practical skills (see above)

Where can I get more information?

If you would like more information about the GCSE Chemistry course you should speak to Miss Stewart, Mrs Armstrong or Ms Griffith.

DIGITAL TECHNOLOGY (Multimedia)

This is a new qualification which provides a sound basis for further study of GCE Digital Technology or GCE Software Systems Development. The KS3 ICT curriculum followed in Strathearn provides pupils with the necessary ground work to embark on this qualification.

The content relates directly to current software development trends and the study of modern technology-based systems. The content is well balanced between knowledge and application. The specification develops practical skills using a range of generic software.

Aims

This specification aims to encourage students to:

- become independent and discerning users of digital technology;
- acquire and apply knowledge and understanding of digital technology in a range of contexts;
- acquire creative and technical digital technology skills and apply these in a range of contexts;
- develop and evaluate digital technology-based solutions to solve problems;
- develop their understanding of current and emerging technologies and the social and commercial impact of these technologies;
- develop their understanding of the legal, social, economic, ethical and environmental impact of digital technology;
- recognise potential risks when using digital technology and develop safe, secure and responsible practice; and
- develop the skills needed to work collaboratively.

What will I study?
To begin with pupils will study how to handle digital data, hardware, software, networks, cybersecurity, cloud technology, the impact of technology on society and various applications, e.g. databases and spreadsheets. After this pupils will study the concepts involved in the development of digital systems.
Controlled Assessment
The controlled assessment module accounts for 30% of the overall mark. This module is based on a scenario set each year by the examining authority. The time allocation to complete the controlled assessment is approximately 36 hours which will be a combination of work undertaken at home and in school. Pupils will complete a task based on the creation of a multimedia product.

What exams will I take?

There are 2 examinations lasting 1 hour and 1.5 hours. These are externally set and marked.

Unit 1: Digital Technology	External written examination 1 hour	30%
Unit 2: Multimedia Digital Authoring Concepts	External written examination 1 Hour 30 mins	40%
Unit 3: Multimedia Digital Authoring Concepts	Controlled Assessment	30%

The examining board for this course of study is CCEA.

Where can I get more information?

Mrs R Armstrong (rarmstrong779@c2kni.net)

DRAMA & THEATRE STUDIES

Why choose CCEA G.C.S.E. Drama?

Strathearn Drama department aims to encourage students to:

- develop a personal interest in drama and be motivated and inspired by studying a broad, coherent and rewarding course;
- actively engage in the process of dramatic study so they develop as effective and independent learners and as critical and reflective thinkers with enquiring minds;
- work imaginatively and creatively in collaborative contexts, generating, developing and communicating ideas;
- reflect on and evaluate their own work and the work of others;
- develop and demonstrate competence in a range of practical, creative and performance skills;
- develop as active citizens for their future, in employment and society, as well as for the possible further study of drama; and
- consider and explore the impact of social, historical and cultural influences on drama texts and activities.

A course based on this specification should help facilitate the study of drama and related subjects at a more advanced level. Examples include GCE Drama and Theatre Studies and GCE AS and A2 English Literature. The subject has maintained a 100% A* to C grade average which has led many GCSE students to pursue it to A level and beyond.

The course is divided into three components:

Component 1: Devised performance; 25%

Component 2: Scripted Performance; 35%

Component 3: Examination; 40%

In component 1, the class will work together in groups to create plays based on three topical areas offered by the examination board. The class will perform these plays to an invited audience in the Easter term of form four and will then write a portfolio detailing their experience.

In component 2, the class will work together in groups to bring a published script to life under the direction of their teacher. They will perform to an invited audience in the Easter term of form five.

In component 3, the class will study 'The Crucible' by Arthur Miller and will answer questions based on live theatre that they will experience over the course through our attendance at local theatre events and through an optional trip to London's West End (subject to availability and easing of wider restrictions).

For further information, please speak to Mrs Ingram or Miss McClure. Alternatively, check the website:

http://www.rewardinglearning.org.uk/microsites/drama/revised_gcse/index.asp

ENGLISH LANGUAGE

What will I study?

Over the two years of GCSE English Language, you will develop the critical skills which will enable you to analyse different sorts of texts: novels, leaflets, brochures, newspaper articles, DVD covers and the spoken word.

You will develop your writing skills. You will be given opportunities to produce creative writing, personal writing, functional writing and analytical writing.

Talking and Listening is also an important aspect of English Language. You will improve your oral communication by taking part in various talking and listening activities, including group discussions, role-plays and presentations.

Coursework / Practical

Coursework is worth 40% of GCSE English Language.

Unit 2 is Talking and Listening. It is worth 20% of the GCSE. Your ability to express your ideas and listen to the views of others in various different situations will be assessed.

Unit 3 is also a coursework unit and worth 20% of the GCSE. You will complete two different tasks under controlled conditions:

- a study of spoken language; and
- a study of written language

What exams will I take?

You will take two exams.

In the first exam which lasts for 1 hour 40 minutes, you will complete 5 tasks. You will produce a piece of writing for a specific purpose and audience, and then you will answer four short questions on non-fiction and media texts.

In the second exam which lasts for 1 hour 40 minutes, you will produce a piece of creative or personal writing, and then you will answer four short questions on literary and non-fiction texts.

Where can I get more information?

Your English teacher will be happy to give you further information.

ENGLISH LITERATURE

What will I study?

You will study a range of interesting and enjoyable literary texts. Over the course of GCSE English Literature you will develop the kind of critical skills which enable you to comment meaningfully on theme, characterisation, language, form and tone.

For the examinations, you will study a novel, a play and a poetry anthology. For coursework you will study a Shakespeare play.

Coursework / Practical

You will complete one task on a Shakespeare play in controlled conditions. You will have 2 hours to write about the play you have studied. This is worth 20% of the GCSE.

What exams will I take?

You will have two exams. In the first exam you will have 1 hour 45 minutes to write about a novel you have studied and to answer a question on an unseen passage from another novel. This exam is worth 30% of the GCSE. In the second exam you will have 2 hours to write about a play and poetry anthology you have studied. This exam is worth 50% of the GCSE.

Where can I get more information?

Your English teacher will be happy to give you further information.

Food and Nutrition

Nutrition and Food Science are high in the public's perception and there could not be a better time to develop knowledge and understanding of this subject, given the current global and national food issues. The Food and Nutrition course at GCSE level provides opportunity for the girls to develop their knowledge and understanding of human needs within a multicultural society. It involves the study of nutrition, food choice, diet and health in the context of relevant scientific and technological developments. The course seeks to encourage students to think critically, make informed choices, develop practical food skills and manage resources so that they are empowered to lead effective lives as individuals and family members as well as members of the wider society.

What will I study?

Food and Nutrition:

Students learn about the nutritional content of foods and how to meet the specific nutritional and dietary needs of different groups of people. To do this, they modify recipes and plan, prepare and cook meals and dishes that reflect current government nutritional guidelines. They also study how to be an effective consumer in relation to food choice, food safety and managing resources. Content includes:

- Food provenance;
- Food processing and production methods;
- Current dietary advice as issued by the Food Standards Agency;
- Functions, sources, requirements and effects of deficiency and excess of the main nutrient groups;
- Nutritional and dietary needs at key stages of the life cycle;
- Special dietary needs, including food allergy and intolerances, and sports nutrition;
- Priority health issues e.g. Cardiovascular disease, Type II Diabetes and Dental Caries;
- Being an effective consumer when shopping for food;
- Consumer choice including the changing nature of retailing;
- Food labelling and packaging;
- Food poisoning, safety and relevant legislation;
- Resource management e.g. how to manage time, energy and money;
- Creativity in food preparation and presentation.

Controlled Assessment

Controlled Assessment Task comprises 50% of the total marks for the subject. There is 1 controlled assessment task in the Food and Nutrition course:

- In this unit, students carry out a task that develops unique transferable skills. They research the given task title and various viewpoints on it. They choose and justify a practical food activity using a range of criteria. They complete the practical food activity and evaluate all aspects of the work.

What exams will I take?

The exam board used in Strathearn for Food and Nutrition is CCEA.

There is **one written Paper (50%)**: 2 hours

Where can I get more information?

Additional information is available from A Blayney (Head of Department) or from the CCEA website.

GEOGRAPHY

Introduction

The motto of the Geography Department is

"Inspiring the next generation to understand and engage with the world around them."



Strathearn
Geography

GCSE Geography (CCEA) provides students with an opportunity to:

- ➔ develop their knowledge and understanding of geographical concepts and appreciate how these concepts affect our changing world.
- ➔ develop their responsibilities as global citizens and recognise how they can contribute to a future that is sustainable and inclusive.
- ➔ develop and apply their learning to the real world through fieldwork and other learning outside the classroom.
- ➔ actively engage in the process of geography to develop as effective and independent learners and as critical thinkers with enquiring minds.

What will I study?	
Unit 1: Understanding Our Natural World	Unit 2: Living in Our World
Theme A – River Environments Theme B – Coastal Environments Theme C – Our Changing Weather and Climate Theme D – The Restless Earth	Theme A – Population and Migration Theme B – Changing Urban Areas Theme C – Contrasts in World Development Theme D – Managing Our Environment
Unit 3: Fieldwork Students complete a fieldwork investigation and then answer questions on the process in an external examination.	

What exams will I take?
➔ There are three written examination papers. ➔ Unit 1: Understanding Our Natural World – 1 hour 30 minutes external examination. 40% weighting. ➔ Unit 2: Living in Our World – 1 hour 30 minutes external examination. 40% weighting. ➔ Unit 3: Fieldwork – 1 hour. 20% weighting. ➔ Note: there is no controlled assessment component.

Where can I get more information?
For more detailed information, please contact Mr. Stevenson (Head of Geography)

HISTORY

GCSE History offers learners the opportunity to study significant events and people in the past to enhance their understanding of the world today. There are opportunities to explore key political, economic and social events that have helped shape today's institutions, governments and societies.

Students are encouraged to explore how the past has been represented and interpreted for different reasons and purposes. They will examine the attitudes, perceptions and ideologies that have influenced behaviour, how people in the past have interacted with their environments and how this has contributed to historical events.



In terms of skills, pupils will be encouraged to develop effective communication of historical knowledge and understanding in a range of ways. They will be shown how to argue a case, make judgements and reach substantiated conclusions.

What will I study?

Unit 1 Section A: Modern World Studies in Depth - Life in Nazi Germany, 1933–45 (30%)

In this option, students focus on the impact of the Nazi dictatorship on people's lives in Germany. Students explore the dramatic interplay of political, economic, social and racial forces in Germany at this time. Areas covered include:

1. *Hitler takes political control, 1933–34;*
2. *Control and opposition;*
3. *Life for workers in Nazi Germany;*
4. *Life for women and the family in Nazi Germany;*
5. *Life for young people in Nazi Germany;*
6. *Life for the Jewish community and minorities in Nazi Germany;*
7. *Germany at war.*



Unit 1 Section B: Local Study - Northern Ireland and its Neighbours, 1920–49 (30%)

In this option, students focus on the changing relationships between the north and south of Ireland and Britain following the partition of the island of Ireland. Students examine the changing relationships against the backdrop of peace, war and neutrality. They also explore the significant impact of World War II on relations between Northern Ireland and its neighbours. Areas covered include:

1. *The partitioning of Ireland;*
2. *From Irish Free State to Éire;*
3. *The Economic War;*
4. *Northern Ireland and World War II;*
5. *Éire's neutrality and its impact on relationships;*
6. *German attacks and their impact on GB, NI and Éire;*
7. *Life in post-war Northern Ireland and Éire, 1945–49;*
8. *Constitutional changes and effects on relationships.*



Unit 2: Outline Study – International Relations, 1945–2003 (40%)

Students learn about how and why conflict occurred, attempts at resolving tensions and how international relations have been affected by the Cold War and the so called 'War on Terror'.

Areas covered include:

1. Co-operation ends and the Cold War begins

- Breakdown of the wartime alliance between the USA and USSR in 1945;

2. Emerging superpower rivalry and its consequences, 1945–49

- The USSR takeover of Eastern Europe;

3. Flashpoints in Europe and the impact on international relations

- The actions of the USSR in Eastern Europe and the impact on international relations;

4. Flashpoints outside Europe and the impact on international relations

- The actions of the USA and USSR outside Europe and the impact on international relations including:
 - ✓ The Korean War, 1950–53;
 - ✓ Conflict in Vietnam;
 - ✓ The role of China;
 - ✓ The Cuban Missile Crisis, 1959–62;
 - ✓ The Soviet war in Afghanistan, 1979–89.

5. The end of the Cold War, 1985–91

- The actions of the USSR and USA in Europe and the impact on international relations:
 - ✓ The policies of Gorbachev and the role of President Reagan;
 - ✓ The collapse of communism in Eastern Europe and the 'end' of the Cold War.

6. New tensions emerge, 1991–2003

- The new age of conflict, the 'war on terror' and the impact on international relations:
 - ✓ The rise of the Taliban and the origins of Al-Qaeda;
 - ✓ Reasons for the invasion of Iraq, 2003, the downfall of Saddam Hussein and the impact of the Iraq War on international relations.



What exams will I take?

UNIT 1: External written examination of 1 hour 45 minutes.

There are two sections and the paper includes short response questions, source-based questions, structured questions and an essay question.

UNIT 2: External written examination of 1 hour 15 minutes.

The paper includes source-based questions, a structured question and an essay question.

Students will complete three areas of study over two years assessed in two examination papers. Students are taught skills in verbal and written communication and critical analysis of the validity and reliability of information. Students learn a skills set that provide the opportunity to access a wide range of careers in every sector of higher education and employment. Student progress is reviewed and monitored on an ongoing basis to improve performance. We build on strengths and identify when support is needed. Ultimately, students are invited to form their own views on key historical issues, justified with substantiated knowledge thereby promoting skills that are transferable and highly valued by employers.

Where can I get more information?

<http://www.thecompleteuniversityguide.co.uk/courses/history/7-reasons-to-study-history/>

<http://strathearn.org.uk/studying/history.php>

<https://successatschool.org/advisedetails/210/Why-Study-History%3F>, <http://www.ccea.org.uk/history/>

MATHEMATICS

The programme of study for GCSE Mathematics builds on work completed in Forms 1 to 3 and encourages good mental, written and calculator skills. The KS3 course will be revised and extended to meet the requirements of the new GCSE Syllabus. GCSE Maths is of course compulsory as the skill set it brings is essential for future employment or further study and while we encourage our pupils to appreciate the practical usefulness of Mathematics in everyday life, we also aim to make the course enjoyable. We aim to enable as many as possible to see the elegance and beauty of Mathematics.

What will I study? Higher Tier Combination

NUMBER: Whole numbers; Decimals, Fractions and Percentages; Estimation; Problem solving; Financial capability; Indices and Surds; Standard Form

ALGEBRA: Notation, Conventions and Manipulations; Factorising and Expanding; Index Rules; Formulae; Forming and Solving Equations; Inequalities; Graphs; Direct and inverse proportion

SHAPE, SPACE, MEASURES: Properties of 2-D and 3-D shapes, Formulae, Constructions and Loci; Transformations; Pythagoras' Theorem; Basic Trigonometry; Sine/Cosine Rules; Compound measures.

HANDLING DATA Statistics and Probability

* The Maths Help Desk operates on Monday Lunchtimes – pupils may wish to drop in to confirm their understanding, ask a quick question or to stay for the duration of lunch to practise problems of their choice with the support of a 6th Form pupil and/or a Maths teacher and to catch up on missed work.

Coursework / Practical

There is **no** coursework or controlled assessment in Mathematics.

What exams will I take?

Strathearn follow CCEA: GCSE Mathematics is a modular subject consisting of 2 sessions.

Session 1: 2 hour calculator paper (45%). This will be an M4 paper.

Session 2: 1 hour 15min. calculator paper followed by 1 hour 15min. non-calculator paper (55%). This will be either a M7 or an M8 paper.

M4/M7 gives access to a Grade A, M4/M8 gives access to an A* Grade. The combination of papers is chosen based on the result of the GCSE module sat in Form 4.

Not all combinations will provide a suitable foundation for A-level Maths. Pupils and parents will be advised of this when decisions about papers are being made.

Where can I get more information?

- Maths teacher
- CCEA website

FURTHER MATHEMATICS

The GCSE Further Maths course provides challenge and extension for pupils with a greater level of mathematical ability. Through the completion of this programme we aim to develop in our pupils a love and fascination for Mathematics while they enjoy the complexity of new material. It is very strongly recommended that pupils who wish to study Advanced GCE Mathematics should have studied GCSE Further Mathematics; it may also be useful for those who are considering Science or Technology in Sixth Form.

What will I study?

In Form 4 the GCSE Mathematics course is completed as described previously. In Form 5 the Further Mathematics programme will commence, this is a new and exciting prospect for Maths lovers. The course is comprised of 3 units: Pure Mathematics (50%), Mechanics (25%) and Statistics (25%).

PURE MATHEMATICS: Algebraic Fractions, Algebraic Manipulation, Completing the square, Solving Equations in 1, 2 or 3 unknowns, Quadratic Inequalities, Matrices, Logarithms, Further Trigonometry and Calculus – differentiation and integration. Any of these areas may be applied to unfamiliar contexts.

MECHANICS: Kinematics, Vectors, Forces, Newton's Laws of Motion, Moments

STATISTICS: Central Tendency and Dispersion, Probability, Binomial Distribution, Normal Distribution and Bivariate Analysis

* The Maths Help Desk is available to support pupils as previously mentioned

Coursework / Practical

There is **no** coursework or controlled assessment in GCSE Further Mathematics.

What exams will I take?

The exam board used in Strathearn is CCEA.

There are 3 written papers for GCSE Further Mathematics – calculators are permitted in each.

Pure Mathematics: 2 hours (50%)

Mechanics: 1 hour (25%)

Statistics: 1 Hour (25%)

Where can I get more information?

- Maths teacher
- CCEA Website

MODERN LANGUAGES

The programme of Study for GCSE French, German and Spanish builds on the skills taught at Key Stage 3. It is intended to be enjoyable and educational. You will learn about the countries and their culture and will also learn to communicate in simple everyday situations in the language you choose to study. The study of one language is compulsory for GCSE but two languages can be studied together, greatly enhancing your opportunities.

What will I study?

We study the CCEA specification for all languages.

The topics to be studied are as follows:

- **Identity, Lifestyle and Culture:** Myself, My Family, Relationships, New Technology and Social Media, Free time, Leisure activities and Daily routine, Customs, Festivals and Celebrations
- **Local, National, International and Global Areas of Interest:** My local area, Community Involvement, Social and Global Issues, Travel and Tourism
- **School Life, Studies and World of Work:** My studies and School life, Extra-Curricular Activities, Part time jobs and Money management, Future plans and Careers

Course structure

- The specification is divided into 4 separate units.
- The 4 units are listening, speaking, reading and writing which are each worth 25%.
- Homework is set frequently and regularly involves learning vocabulary and grammatical structures which are very important for success at GCSE.

What exams will I take?

- All testing will take place at the end of Form 5.
- You will sit reading, writing and listening examinations at either Higher or Foundation tier. The vast majority of girls will be entered at Higher tier in order to obtain a high grade.
- The Oral will last 7-12 minutes and will include 2 role-plays and a conversation on 2 topics.

Where can I get more information?

Speaking a Modern Language can increase opportunities in a number of careers such as Law, Accountancy, Banking, Marketing, Sales, Journalism, the Media, Tourism, PR, the Service Industry etc. Please speak to the HOD or your language teachers if you have any questions. More information is also available at www.ccea.org.uk

MUSIC

GCSE Music may be a good choice for you if you enjoy listening to different types of music and would be interested in studying some pieces in more detail, if you like experimenting with sounds and composing your own music, and if you sing or play an instrument and are committed to continuing lessons and practising regularly during your GCSE years.

The Music course will help you to develop your creative abilities, communication and presentation skills, teamwork, self-management, IT skills, critical reflection, physical dexterity and the specific skills of listening, composing and performing. These are essential skills for further musical study and highly transferable to other subject areas.

What will I study?

The course is built around four areas of study. Each of these involves listening to, composing and performing music related to a theme. The themes are:

- **Popular music, 1980 to the present day**
- **Film music**
- **Musical traditions of Ireland**
- **Western classical music 1600 - 1910**

Activities in class are varied and often practical. They include keyboard, instrumental and vocal work, performing skills, learning and practising new composing techniques, presenting individual compositions, computer sequencing and recording, studying set pieces of music and developing listening skills within a wide range of musical styles.

Group and paired work form part of the course, but GCSE differs from Key Stage 3 Music in that there is much more emphasis on individual work. To do well, you need to be creative and inventive, and you should be able to work diligently on your own, being determined to achieve the best possible end result.

Coursework/Practical

- **Composing:** Two compositions are created for controlled assessment. The music is composed by the individual student and is recorded, using either computer resources or live musicians.
- **Performing:** At the end of the course, each student is assessed in two performances, one as a soloist and one as part of a small group, by a visiting examiner. There is also a short assessed discussion. It is essential that students are continuing instrumental or vocal lessons and practising regularly for this part of the course. It is not possible to undertake this component without specialised tuition for the student. Grade 3 is the standard required in order for full marks to be possible in the assessment.

What exams will I take?

The course is assessed as follows:

- **Listening exam (35%)** This is based on the set works studied during the course, as well as other unfamiliar music which will enable the students to show their general listening skills.
- **Performing assessment (35%)** See above
- **Composing coursework (30%)** See above

Where can I get more information?

Please contact Ms Kimber for further information.

PHYSICS

What will I study?

How can radiation be useful in medicine?
How did the Universe begin?
How is electricity produced?
What causes short and long sight and how can these defects be corrected?

Physics aims to help us understand the world around us, by answering questions like the ones listed above. In the GCSE course you develop further the ideas met at Key Stage 3.

Form 4 (unit 1)	Form 5 (unit 2)
Forces and Motion	Waves, light and lenses
Energy and Heat Transfer	Electricity
Nuclear fission and fusion	Space Physics
Radioactivity	

The course also aims to develop important skills such as thinking logically, problem solving, experimenting and understanding scientific information. We try to encourage more independent learning at GCSE and students are expected to consolidate their work regularly in their own time.

A good mathematical ability is recommended for this subject.

Questions are set in class and at home, to allow pupils to assess their understanding. We incorporate as much practical work as possible and our resources allow most experiments to be carried out in pairs. Units 1 and 2 are examined separately at the end of Form 5.

Practical Skills (unit 3)

The practical skills unit is worth 25% of the final mark. Students complete two practical tasks from a list of prescribed practicals. This is carried out in class and will last 2 hours. An external exam will include questions set in a practical context and will last 1 hour and 15 minutes.

What exams will I take?

Physics GCSE is assessed by CCEA in 2 terminal, written papers, each lasting 1 hour and 30 minutes.

Where can I get more information?

If you would like to find out more about the GCSE Physics course, please speak to Dr Ross, Miss Foster or Miss Wallace.

PHYSICAL EDUCATION*

What will I study?
<p>Component 1: Factors Underpinning Health and Performance (25%)</p> <p>Students develop an understanding of the changes that take place in the body as a result of exercise, training and skill development. They learn about the positive and negative consequences of lifestyle decisions and how to plan a healthy lifestyle. The active leisure industry will be studied in relation to its role and contribution in developing health for everyone as well as for elite performers.</p> <p>Students complete one written question paper lasting 1 hour 15 minutes. (100 marks)</p>
<p>Component 2: Developing Performance (25%)</p> <p>Students develop knowledge and understanding of the concept of physical fitness and its importance for health and for efficient and effective performances in physical activities and sports. They then learn how to plan effective training programmes and sessions to develop physical fitness and bring about these long term effects. Students also develop knowledge and understanding of the concept of skill. They apply factors that underpin effective learning and mastering of skills to improve performance.</p> <p>Students complete one written question paper lasting 1 hour 15 minutes. (100 marks)</p>
Controlled Assessment
<p>Component 3: Individual Performances in Physical Activities and Sports (50%)</p> <p>(a) Students are assessed on the quality, efficiency and effectiveness of their performances in physical activities and sports.</p> <p>Students perform three physical activities or sports. (3 x 50 marks)</p> <p>They are assessed on their ability to perform efficiently, effectively and consistently the skills, strategies, tactical or compositional principles used in physical activities or sports and to consistently maintain appropriate fitness levels, desirable attitudes, behaviour and the rules of their physical activities or sports.</p> <p>For one physical activity or sport, the assessment may be based on the consistent quality, efficiency and effectiveness of the student's performance as an event manager.</p> <p>Practical activities will usually be selected from the range studied at Key Stage 3 and may include: Hockey, Netball, Athletics, Tennis, Fitness or Swimming.</p> <p>Candidates with a proven ability in other practical areas within the specifications may be taken into consideration. It is essential that students are continuing to participate and compete in at least two of the practical areas they will be assessed in.</p> <p>(b) Students are assessed on the quality of their analysis and evaluation of their own and others' performances. (50 marks)</p>
What exams will I take?
CCEA Physical Education
Where can I get more information?
Ms S Young – Head of Physical Education Mrs N Grundie - Teacher of Physical Education Mrs B Crawford – Teacher of Physical Education

*Please note, Physical Education may not be offered at **A-level**.

RELIGIOUS STUDIES

GCSE level Religious Studies aims to encourage students to:

- develop their interest in, and enthusiasm for, the study of religion; adopting an enquiring, critical and reflective approach
- explore religions and beliefs, giving them opportunities to reflect on fundamental questions, to engage with them intellectually and to respond to them personally
- enhance their personal, social and moral development, along with their understanding of different cultures locally, nationally and in the wider world, so they may contribute to social and community cohesion

Why study Religious Studies?

Religious Studies encourages pupils to develop a wide range of skills and personal qualities including critical thinking, extended writing, empathy, enquiry and scholarly debate. Pupils who have studied Religious Studies at GCSE and A-level have gone on to undertake a wide range of undergraduate courses including law, primary/secondary education, nursing, psychology and business management.

What will I study?

Candidates for GCSE Religious Studies will study **two** units over the two years as follows:

1. An Introduction to Christian Ethics – This unit aims to introduce students to ethics within the study of religion. Students explore personal and family issues, matters of life and death (abortion, euthanasia and capital punishment), developments in bioethics, the ethics of modern warfare and contemporary issues in Christianity (prejudice, discrimination and social justice). Study will include investigation of biblical teaching and Christian belief/practice as well as reference to non-religious viewpoints.

2. An Introduction to Philosophy of Religion – This unit aims to introduce students to philosophical ideas surrounding the study of religion. It enables students to explore issues surrounding the existence of God, the nature of God, how human beings experience God, the problem of evil/suffering and issues of life after death. Study will include an exploration of the belief/practice of different world religions with regard to these questions, along with consideration of non-religious view points.

Candidates for GCSE Short Course Religious Studies will study **one** unit over the two years as follows:

An Introduction to Christian Ethics (see above for elaboration)

Coursework / Practical

There is no coursework requirement for either GCSE Religious Studies or GCSE Short Course Religious Studies.

What exams will I take?

GCSE Religious Studies candidates will sit **two** written examinations (one on each of the units studied) at the end of Form 5. Each examination will represent 50% of the final mark awarded.

GCSE Short Course Religious Studies candidates will sit **one** written examination at the end of Form 5. This examination will represent 100% of the final mark awarded.
The examination board for this course of study is CCEA.

Where can I get more information?

Mr C Jellie (Head of Religious Studies)

SCIENCE – DOUBLE AWARD

This Science course aims to allow pupils to acquire sufficient knowledge and understanding to become confident, self-reliant citizens in a technological world, able to develop an informed interest in matters of scientific importance.

This subject is ideal for the pupil who:

- has an interest in all three sciences
- also has an interest in many non-science subjects
- wishes to keep her future options open.

What will I study?

The Topics covered include:

Biology

Cells
Ecology
Animal Systems
Genetics & Reproduction
Photosynthesis
Food, energy & digestion
Osmosis & Plants
The Circulatory System
Health

Chemistry

Structures
Trends
Chemical Reactions I
Chemical Reactions II
Organic Chemistry
Materials

Physics

Force & Motion
Energy
Moments
Radioactivity
Waves, Sound & Light
Electricity
Earth and Universe

Practical Skills

Unit 3 is a practical skills assessment worth 25% towards your final mark.

Practical skills therefore play an important part in the overall final grade of the candidate.

Candidates will be assessed in 2 Skill Areas:

Part A Practical Skills 7.5% assessed in a laboratory during F5

Part B Written Exam (1.5 hours) on practical skills, assessed in the examination hall, worth 17.5%.

What exams will I take?

There will be six written papers sat in May/June of the second year.

Biology: B1 & B2 25%

Chemistry: C1 & C2 25%

Physics: P1 & P2 25%

Where can I get more information?

Further information can be obtained from any of the Science Staff.

TECHNOLOGY & DESIGN

Through studying GCSE Technology and Design, students have opportunities to:

- use imagination and develop skills of creativity and critical analysis;
- communicate design ideas and decisions;
- use a broad range of materials, components and technologies to develop and produce high quality, imaginative and functional prototypes;
- consider aesthetic, technical, economic, environmental, ethical and social dimensions when engaged in design and making;
- consider the costs in the making and marketing of products;
- apply health and safety procedures;
- analyse and develop existing products;
- develop decision-making skills;
- apply appropriate technology and design terminology;
- understand that designing and making reflect and influence cultures and societies, and that products have an impact on lifestyle; and
- combine skills with knowledge and understanding to make quality products.

What will I study?

Unit 1: Technology and Design Core- 25%

Students study design principles, manufacturing, electronics, mechanical control systems, computer control systems and pneumatic systems and control.

Unit 2: Systems and Control – 25%

Students study electronic and microprocessor control systems. They will consider the control systems that underlie modern products, and will learn how to program microprocessor systems to allow them to design working electronic products.

Unit 3: Design Project – 50%

Students must demonstrate their ability to **design** and **manufacture** a product under controlled conditions. From a range of themes, the pupil must explore solutions and create a working prototype to fulfil a brief. They will design the electronic system and the product casing showing their design work in a design portfolio.

Coursework / Practical

Students will complete a Systems Design and Manufacturing Project. This controlled assessment is worth 50% of the overall GCSE qualification.

What exams will I take?

Students will sit two 1 hour 30 minutes external examination papers, each worth 25% of the overall GCSE qualification.

Where can I get more information?

Mr Atkinson or Miss Newburn

