STRATHEARN SCHOOL

GCSE SUBJECT CHOICE BOOKLET 2018

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
Biology
Chemistry
Physics
Science (Double Award)

Group 2
French
German
Spanish

Group 3
Art
Biology
Business Studies
Chemistry
Digital Technology
Drama
Food and Nutrition
French
Geography
German
History
Home Economics: Child Development
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 a 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. 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 Starter' and 'Career Ideas' can be accessed on the computer in School; 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 Mrs Quinn, Mrs Hearst 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.

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. (We do not offer Physical Education at ***A-level***.)

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 have any questions about careers, please speak to Mrs Hearst, Mrs Quinn or any members of the Careers Department as soon as possible.

Useful Career Websites:

www.ucas.com

http://bestcourse4me.com

http://russellgroup.ac.uk

www.nidirect.gov.uk/careers

www.careersbox.co.uk/

http://ccskills.org.uk/careers

www.notgoingtouni.co.uk/

http://careersthatmove.co.uk/

http://hospitalityguild.co.uk/uksp

http://investigatecareers.com (password: amazon)

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

What will I study?

During GCSE Art you will be taught practical activities in photography, textiles, drawing, painting, print-making, ceramics and mixed media alongside investigating and engaging with the Creative and Cultural Industries.
This will help you:

- Research artists'/ designer's work to inspire your own Art
- Experiment with a wide range of materials and learn new techniques
- Refine your drawing and recording skills
- Develop your work

You can obtain a high grade in GCSE Art by:

- Engaging with Art & Design by visiting exhibitions, craft outlets, studio's and fairs
- Working at your skills in the formal elements of tone, form, colour, texture etc
- Producing exciting and personal final outcomes
- Learning to understand artists'/ Designer's 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

Coursework consists of A: an **exploratory portfolio of work** based on theme(s) set by the school's Art Department. 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 lead-in 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 Porfolio ;	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.

Who can I get more information from?

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 biology-based issues which affect our lives. Examples include heart disease, healthy eating, genetic engineering, pollution and the greenhouse effect.

Practical skills

You will learn to plan and carry out experiments, analyse information, draw conclusions and make decisions. Studnets 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 these practicals 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 teacher 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 behavior 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%)

- 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%)

- 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

Who can I get more information from?

You can obtain more information from Mrs McDonald or http:/www.ccea.org.uk/businesstudies

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. 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 and 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 hr

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 hourr and is based on practical skills (see above)

Who can I get more information from?

If you would like more information about the GCSE Chemistry course you should speak to Miss Stewart, Mrs McCracken 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.

Who can I get more information from?

Mrs D Martin, Head of ICT (dmartin927@c2kni.net)

DRAMA

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: Scrip[ted 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 examinations 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. Both components allow for other options apart from acting to be explored including costume and set design.

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.

For further information, please speak to Ms Ferris or Mrs Ingram. 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. You will complete two different tasks under controlled conditions:

- a study of spoken language; and
- a study of a literary text.

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.

Who can I get more information from?

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.

Who can I get more information from?

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

Food and Nutrition

NB: To allow for progression at KS5 pupils may not choose to study both Food and Nutrition and Home Economics: Child Development

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?

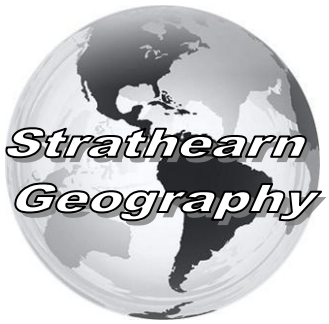
The exam board used in Strathearn for Food and Nutrition is CCEA.
There is **one written Paper (50%)**: 2 hours

Who can I get more information from?

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."

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.

Who can I get more information from?

For more detailed information, please contact Mr. Stevenson (Head of Geography)

HISTORY

The GCSE History revised qualification introduced in September 2017 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?

<u>Unit 1</u> 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:

- *Hitler takes political control, 1933–34*
- *Control and opposition*
- *Life for workers in Nazi Germany*
- *Life for women and the family in Nazi Germany*
- *Life for young people in Nazi Germany*
- *Life for the Jewish community and minorities in Nazi Germany*
- *Germany at war*

<u>Unit 1</u> 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:

- ***The partitioning of Ireland***
- ***From Irish Free State to Éire***
- ***The Economic War***
- ***Northern Ireland and World War II***
- ***Éire's neutrality and its impact on relationships during the war***
- ***German attacks and their impact on Britain, Northern Ireland and Éire***
- ***Life in post-war Northern Ireland and Éire, 1945–49***
- ***Constitutional changes and effects on relationships***

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

In Year 12 students focus on the significant events and developments associated with the Cold War and the new 'war on terror'. 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 'war on terror'. Areas covered include:

Co-operation ends and the Cold War begins

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

Emerging superpower rivalry and its consequences,1945–49

- The USSR takeover of Eastern Europe

Flashpoints in Europe and the impact on international relations

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

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

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

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?

PAPER ONE: External written examination over 1 hour 45 minutes
There are two sections and the paper includes short response questions, source-based questions, structured questions and an essay question.
PAPER TWO: External written examination over 1 hour 15 minutes
The paper includes source-based questions, a structured question and an essay question.

Pupils will complete three areas of study over two years assessed in two examination papers.
In GCSE History pupils are taught skills in verbal and written communication and critical analysis of the validity and reliability of information. Pupils learn a skills set that provide the opportunity to access a wide range of careers in every sector of higher education and employment. Our departmental staff utilise strategies to continually review and monitor progress and pursue ways of learning to improve pupil 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.

Who can I get more information from?

http://www.thecompleteuniversityguide.co.uk/courses/history/7-reasons-to-study-history/
http://strathearn.org.uk/studying/history.php
https://successatschool.org/advicedetails/210/Why-Study-History%3F,
http://www.ccea.org.uk/history/

HOME ECONOMICS: CHILD DEVELOPMENT

NB: To allow for progression at KS5 pupils may not choose to study both Food and Nutrition and Home Economics: Child Development

Home Economics combines aspects of science, nutrition, cooking, parenting skills and finance. Students learn about the inter-relationships between diet, health, family, home and choice and the management of resources.

The Child Development course focuses on the study of the physical, social, intellectual and emotional development of young children from conception to the age of five years.

What will I study?

The specification aims to encourage an understanding of pregnancy, the responsibilities of being a parent and the overall needs of young children. It also emphasises how important it is to maintain a healthy lifestyle. Content includes the study of:

Unit 1: Parenthood, Pregnancy and the Newborn baby

- The family and parental responsibilities
- Reproduction
- Pregnancy
- Diet and lifestyle in pregnancy
- Birth
- The newborn baby
- Feeding the newborn baby

Unit 2: The Development of the child (0-5 years)

- Dietary needs of the child (0-5 years)
- Child health and education
- Child development; physical, intellectual, emotional, social and communication

Controlled Assessment

Controlled Assessment Task comprises 40% of the total marks for the subject. There is 1 controlled assessment task in the Child Development course:

- In this unit, students carry out a task that develops unique transferable skills. Students use the given task title to choose one issue for further research. They plan and carry out activities to produce an outcome and then evaluate all aspects of the task.

What exams will I take?

The exam board used in Strathearn for Child Development is CCEA.
There are **two written Papers (60%)**: 1 hour 15 minutes for each paper

Who can I get more information from?

Further information may be obtained from Mrs Blayney (Head of the Home Economics Department) or from the CCEA website.

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 including working with whole numbers, decimals, fractions and percentages; estimation; problem solving; financial capability; indices; surds.

ALGEBRA which includes sequences, patterns, algebraic notation, conventions and manipulations; factorising, removing brackets; the rules of indices; deriving and using formulae; solving equations and inequalities; drawing and interpreting graphs of straight lines and curves; direct and inverse proportion.

SHAPE, SPACE and MEASURES involves working with 2-D and 3-D shapes, knowing their properties, memorising formulae, understanding symmetries and using appropriate mathematical language; constructions and loci; transformations of shapes; Pythagoras' Theorem; trigonometry, sine and cosine rules; similar triangles; transformations of shapes; perimeter, area and volume of a variety of regular and irregular shapes; compound measures; dimensions of formulae.

HANDLING DATA is Statistics and Probability. Pupils should be able to collect, record, represent, analyse and interpret data in a variety of ways. Probability of one or a combination of events including dependent and independent events and the use of tree diagrams.

* 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 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 either be an M3 or 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.

M3/M7 gives access to a Grade B, 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 Form 4 Summer exam.

Who can I get more information from?

- 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%)
Applications: 2 hours (50%). Students will choose 2 Sections from a choice of 3

Who can I get more information from?

- 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 syllabus 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 verbs which is 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 level. The vast majority of girls will be entered at higher level 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.

Who can I get more information from?

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 Mrs Eakin or your language teachers if you have any questions. More information is also available at www.ccea.org.uk/qualifications/revision.

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, application of IT, 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 will involve 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 will 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 will not be 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

Who can I get more information from?

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 difficulties with our sight?

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. 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 practicals from a list of prescribed practicals. This is carried out in class. An external exam will include questions set in a practical context.

What exams will I take?

Physics GCSE is assessed by CCEA in 2 terminal, written papers, each lasting 1 hour and 30 minutes. In addition, there is a 1 hour 15 minute assessment of Practical Skills.

Who can I get more information from?

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?

Component 1: Factors Underpinning Health and Performance (25%)
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.
Students complete **one written question paper lasting 1 hour 15 minutes.** (100 marks)

Component 2: Developing Performance (25%)
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.
Students complete **one written question paper lasting 1 hour 15 minutes.** (100 marks)

Controlled Assessment

Component 3: Individual Performances in Physical Activities and Sports (50%)
(a) Students are assessed on the quality, efficiency and effectiveness of their performances in physical activities and sports.
Students perform **three** physical activities or sports. (3 x 50 marks)
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. 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**.

Practical activities will usually be selected from the range studied at Key Stage 3 and **may** include: Hockey, Netball, Athletics, Tennis, Fitness or Swimming.
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.

(b) Students are assessed on the quality of their analysis and evaluation of their own and others' performances. (50 marks)

What exams will I take?

CCEA Physical Education

Who can I get more information from?

Ms S Young – Head of Physical Education
Mrs N Grundie - Teacher of Physical Education
Miss B Brittain – Teacher of Physical Education

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 Anderson (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	Chemistry	Physics
Cells	Structures	Force & Motion
Ecology	Trends	Energy
Plant & Animal Systems	Chemical Reactions I	Moments
Genetics	Chemical Reactions II	Radioactivity
Micro-organisms	Organic Chemistry	Waves, Sound & Light
	Materials	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 on practical skills, assessed in the examination hall worth 17.5% and lasting 1 ½ hr

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%

Who can I get more information from?

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

TECHNOLOGY & DESIGN

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

- Analyse products and systems;
- Develop practical solutions to consumer needs, wants and opportunities;
- Design and make quality products and systems;
- Understand that designing and making reflect and influence cultures and societies;
- Develop creativity and critical analysis skills;
- Make links between existing solutions, technological knowledge and the principles of good design;
- Explore the aesthetic, technical, economic, environmental, ethical and social dimensions interact to shape designing and making; and
- Gain insight into related sectors such as manufacturing and engineering.

What will I study?
Unit 1: Technology and Design Core Students study manufacturing, electronics, mechanical control systems, computer control systems and pneumatic systems and control. **Unit 2: Systems and Control** Students study electronic and microelectric control systems **Unit 3: Design Project** Students must demonstrate their ability to **design** and **manufacture** a product under controlled conditions.
Coursework / Practical
Students will complete 1 piece of controlled assessment. 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 25S% of the overall GCSE qualification.
Who can I get more information from?
Mr Atkinson/Miss Newburn

UK Labour market Information:
From the Careers of the Future Publication (Dec 2014)

We have included the following information which we hope you may find useful.

A full copy of the document can be viewed on:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/391911/15.01.05._UKCES_Career_Brochure_V13_reduced.pdf

About the data

For each job we have included an 'at a glance' panel that details vital statistics about each job. We have also included a table of background data on the 100 jobs.

- How many work in this job? The number of jobs, employment or size in 2012, the base year of the 2012-20122 employment projections.
- Job openings 2012 – 22: The projected number of job openings that we expect to see taking into account net growth/decline in the number but also the projected number of workers leaving the occupation due to retirement and other reasons.
- Employment change 2012-22: The projected net change in the number of jobs from 2012 to 2022.
- Starting salary: The estimated salary level that one can expect to receive when starting a job. The information is taken from the National Careers Service website and is **intended as a guideline only.**
- Average gross salary: For the job profiles this is the median annual gross pay for the job earned by employees, taken from the 2013 results of the Annual Survey of Hours and Earnings, published by the Office for National Statistics. For the table of background data the mean figure is used.
- Weekly gross pay: The median weekly gross pay for the job earned by employees, source as per average gross salary figure.
- Average hours (full time): The mean weekly paid hours worked by employees in full-time jobs, source as per average gross salary figure. This figure does not include unpaid overtime, which is a common feature of some jobs.

Additional Labour Market Information can be found on our Strathearn website under the Careers section.

Background Data

Title	Current Employment (000s)	Projected net change in employment (000s)	Projected job openings (000s)	Mean Earnings (£)*
Actuaries, economists and statisticians	35	7	22	61,584
Advertising accounts managers and creative directors	33	7	21	37,636
Air-conditioning and refrigeration engineers	17	-1	4	28,770
Aircraft maintenance and related trades	33	-3	8	34,511
Aircraft pilots and flight engineers	18	3	10	78,482
Architects	57	11	36	44,024
Arts officers, producers and directors	63	9	36	35,825
Barristers and judges	26	5	17	45,571
Biological scientists and biochemists	87	18	46	37,627
Boat and ship builders and repairers	14	-1	3	28,032
Book-keepers, payroll managers and wages clerks	446	-25	161	20,646
Brokers	47	8	26	37,139
Business and financial project management professionals	217	43	137	50,038
Business sales executives	163	28	90	32,880
Buyers and procurement officers	66	11	36	31,454
Care workers and home carers	729	196	530	12,804
Carpenters and joiners	235	15	94	24,029
Chartered and certified accountants	221	44	140	37,850
Chartered surveyors	71	14	45	35,480
Chemical scientists	32	7	17	35,492
Childminders and related occupations	125	34	91	12,949
Civil engineers	81	17	43	38,236
Cleaners and domestics	594	-9	206	8,067
Conservation professionals	16	3	8	28,956
Construction and building trades supervisors	60	4	24	33,036
Construction project managers and related professionals	64	13	41	42,066
Customer service managers and supervisors	155	32	87	28,718
Dental practitioners	40	10	27	53,567
Design and development engineers	76	15	40	39,890
Educational support assistants	132	36	96	11,569
Electrical engineers	47	10	25	44,439
Electricians and electrical fitters	297	-23	70	30,055
Electronics engineers	40	8	21	36,751
Elementary storage occupations	429	-7	149	18,430
Environment professionals	40	8	21	33,220
Estimators, valuers and assessors	71	12	39	32,185
Farmers	162	-16	66	24,520
Finance and investment analysts and advisers	188	32	104	46,797
Financial accounts managers	133	23	74	40,952
Financial and accounting technicians	31	5	17	44,038
Gardeners and landscape gardeners	172	-17	70	17,595
Hairdressers and barbers	192	16	108	10,174
Health and safety officers	51	9	28	33,445
Higher education teaching professionals	135	14	73	39,076
Human resources and industrial relations officers	132	23	73	28,999
Insurance underwriters	34	6	19	40,723
IT business analysts, architects and systems designers	113	23	60	43,848
IT engineers	39	-3	9	27,064
IT operations technicians	111	10	45	29,815
IT project and programme managers	72	15	38	49,128
IT specialist managers	210	43	111	48,384

Title	Current Employment (000s)	Projected net change in employment (000s)	Projected job openings (000s)	Mean Earnings (£)*
Journalists, newspaper and periodical editors	74	15	47	35,117
Large goods vehicle drivers	319	-1	136	25,602
Legal associate professionals	66	11	37	29,492
Management consultants and business analysts	174	34	110	42,811
Marketing associate professionals	168	29	93	30,051
Mechanical engineers	94	19	50	44,176
Medical practitioners	253	63	172	70,648
Medical radiographers	30	7	20	31,505
Metal machining setters and setter-operators	64	-5	15	27,223
Metal working production and maintenance fitters	214	-16	50	29,173
Midwives	44	11	30	30,020
NCOs and other ranks	76	-7	12	35,082
Nursery nurses and assistants	194	52	141	11,580
Nurses	628	157	427	26,158
Nursing auxiliaries and assistants	314	84	228	15,618
Pharmacists	58	15	40	36,739
Physical scientists	25	5	13	52,470
Physiotherapists	51	13	35	27,814
Pipe fitters	11	-1	3	36,637
Plumbers and heating and ventilating engineers	181	12	73	27,832
Police officers	193	-17	31	39,346
Precision instrument makers and repairers	30	-2	7	29,334
Primary and nursery education teaching professionals	409	41	222	29,268
Production and process engineers	53	11	28	38,475
Programmers and software development professionals	277	56	146	40,165
Psychologists	33	8	22	34,174
Public services associate professionals	98	17	54	28,430
Quality assurance and regulatory professionals	77	15	48	42,898
Quantity surveyors	43	8	27	38,855
Research and development managers	42	9	22	49,590
Sales accounts and business development managers	436	74	241	47,862
Secondary education teaching professionals	420	42	228	33,407
Senior professionals of educational establishments	103	10	56	49,495
Ship and hovercraft officers	17	3	9	44,283
Skilled metal, electrical and electronic trades supervisors	47	-4	11	35,316
Social and humanities scientists	17	3	9	29,984
Social workers	102	20	65	28,182
Solicitors	135	27	85	44,787
Taxation experts	29	5	16	45,360
Taxi and cab drivers and chauffeurs	230	-1	98	16,416
Teaching assistants	364	98	265	11,796
Telecommunications engineers	68	-5	16	32,253
Train and tram drivers	29	0	12	45,489
Van drivers	213	-1	90	18,744
Vehicle technicians, mechanics and electricians	231	-18	54	25,238
Veterinarians	18	5	12	32,374
Vocational and industrial trainers and instructors	167	28	92	26,490
Web design and development professionals	70	14	37	29,870
Welding trades	70	-5	17	26,735