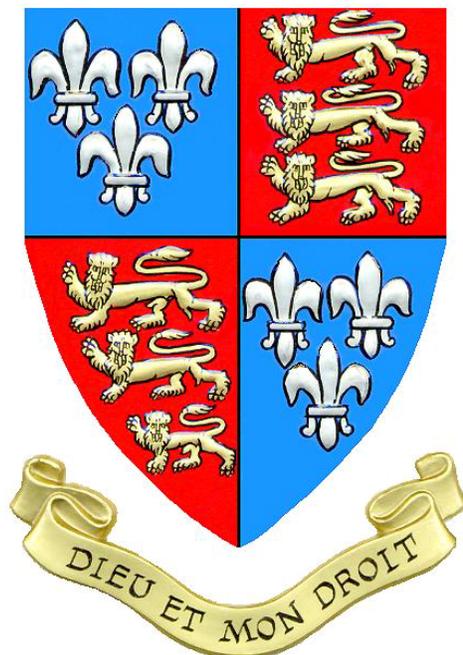


# KING EDWARD VI GRAMMAR SCHOOL



## GCSE OPTIONS BOOKLET

For students starting Y9 in

September 2020



***“Encouraging Excellence, Nurturing Talent”***  
**King Edward VI Grammar School**

*“The school’s vision to nurture talent and encourage excellence has become a reality”*  
*An Ofsted outstanding school*

Dear Student

Throughout KS3 we have provided you with a broad course of study covering a variety of subjects. You have now reached the point where you will need to make significant choices about the subjects you wish to study at KS4.

The KS4 curriculum contains compulsory core subjects together with an element of choice:

- The core curriculum will include GCSEs in English, English Literature, Mathematics and at least two GCSEs in Science.

In addition, there are two routes that King Edward’s students follow through the 3 years of KS4. We will advise you which route is best for you. In addition to the core curriculum studied by everyone you will study either Route 1 or Route 2:

Route 1

- GCSE RE (studied in Y9 and Y10)
- At least one Modern Foreign Language (French or Spanish)
- Either Geography or History
- 2 option subjects of your choice (it is possible to study both Geography and History, and indeed to study both French and Spanish if you wish)

Route 2

- Level 2 BTEC in Money and Finance Skills (studied in Y9 and Y10)
- 4 option subjects of your choice (which might or might not include Geography, History, French or Spanish)

In making your choices, it is important for you to bear in mind what you enjoy, the skills you will develop, what you are good at and what your career plans are. You should aim to achieve a broad and balanced set of choices which will form a sound base for your post-16 studies.

We are hosting a Y8 Progression Evening for you and your parents on **Thursday 26 March**. There will be two parts to this evening. In addition to the usual Parents’ Evening that night I will be giving talks regarding the GCSE Options process. When you are making the teacher appointments for your parents please ensure that you leave a 30min space for one of my talks. These talks will be scheduled at 5:15, 5:45, 6:15, 6:45 and 7:15.

At the Progression Evening you will be given an Options Form which asks for your choice of GCSE subjects. Clearly we cannot guarantee to accommodate all the top four combinations that are requested and it is therefore useful for you to have considered two reserve choices. All students in Y8 need to return their Options Form to their tutors by **Friday 3 April**.

By the end of this term you will therefore have chosen your GCSE subjects. In three years’ time you will be choosing your A level subjects. In four and a half years’ time most of you will be applying for University. To inspire you in terms of what you might be doing at University I have included a list of the destinations of last year’s Y13.

This booklet aims to inform you about the GCSE subjects that are taught here and I hope that it will help you to make your choices. Please do not hesitate to contact me if you or your parents have any questions.

Yours faithfully

Mark Hunkin – Deputy Head  
[mark.hunkin@kevigs.lincs.sch.uk](mailto:mark.hunkin@kevigs.lincs.sch.uk)

# **ART & DESIGN**

## **Why is this subject important?**

Art and design is a very important subject. In fact it is one of the biggest earners for this country. Art and Design provides you with a wide range of creative, exciting and stimulating opportunities to explore your interests in ways that are personally relevant and truly developmental in nature.

## **What topics will I study?**

You will be introduced to a variety of experiences exploring a range of fine art media, techniques and processes, including both traditional and new technologies. You will have the opportunities to extend skills learnt at key stage 3 and to learn new processes such as batik, working with plaster, photography and painting on canvas. You will learn how to annotate work, how to research and work independently. You will explore relevant images, artefacts and resources relating to a range of Fine Art, from the past and from recent times, including European and non-European examples.

## **What skills do I need to succeed in this subject?**

A reasonable amount of artistic skill is required for this course but because you can work in a range of media, you do not always have to be an excellent 'drawer' to succeed. You will have to be able to research a given topic and develop a theme resulting in a final piece of work; recent topics have included Gustav Klimt, Pop art and non-Western art. You will need to have the ability to work independently.

## **What careers might this subject lead to?**

This course can lead to a variety of different opportunities including any type of design career including fashion, textiles, graphics, architecture, television and media, landscape gardening, hair and beauty and interior design. It can also lead to careers in teaching, art therapy, illustration and photography.

## **What A levels might this support?**

Art and Design, Graphics, Textiles, Photography and Media.

# **BUSINESS STUDIES**

## **Why is this subject important?**

Whatever you intend to do when you leave school you will come into contact with businesses. Some of you may be budding business people intending to set up your own business, whereas many of you will work for small, medium or large scale businesses. It is therefore important to have an understanding of the ways in which businesses are structured and how they function.

## **What topics will I study?**

The subject content is divided into two units of study (each examined by a 1.5 hour formal written exam) and these are listed below:

Unit 1: Business Activity, Marketing & People - This unit examines the objectives of businesses and the alternative forms of business organisation available to entrepreneurs. It focuses on the processes a business goes through to successfully meet the needs of consumers and investigates the concept of enterprise and the importance of business plans. This unit also looks at how businesses recruit, train, manage and reward their workforce

Unit 2: Operations, Finance and Influences on Business Production - This unit focuses on the methods used by a business to produce goods, to control stock and to ensure a quality product or service is produced. It also considers the most appropriate sources of finance in different business contexts, as well as investigating the ethical and environmental considerations of businesses.

## **What skills and attributes do I need in order to succeed in this subject?**

No specific skills and attributes are required, although you should be willing to develop skills in relation to:

Improving your own learning and performance  
Problem solving  
Working both independently and with others  
Information Technology

## **What careers might this subject lead to?**

Major areas of employment for students studying Business include:

Accountancy and Taxation  
Marketing  
Banking and Financial Services  
The Media  
Human Resources Management  
Insurance  
Management Consultancy  
The Civil Service  
... and of course, you could always set up your own business!

## **What A levels might this subject support?**

This course should help to facilitate the study of Business Studies and Economics courses in particular.

# **COMPUTER SCIENCE**

## **Why is this subject important?**

In 1943, Thomas Watson, Chairman of IBM, allegedly made the remark that he thought that, "there is a world market for about five computers." Considering such recent developments as the "Internet of Things", a figure in the billions might be more accurate (Oracle Corporation asserts that over three billion devices run its programming language Java). Understanding not just how to use computing devices but how they operate is an important skill for the 21<sup>st</sup> century.

## **What topics will I study?**

At the heart of the Computer Science GCSE is programming and you will become fluent in the C# language (chosen because it provides a good springboard into other C derived languages and makes use of the object oriented paradigm). As well as programming, you will study systems architecture, wired and wireless networking, systems software and moral, legal and environmental issues.

## **What skills or attributes do I need in order to succeed in this subject?**

Success in this subject will require enthusiasm and tenacity in equal measures. Students will be expected to complete programming activities in their spare time, above and beyond regularly set homework. Becoming an accomplished programmer is somewhat like learning a musical instrument; it requires time, patience and practice. You will need excellent problem solving skills and be prepared to invest the hours in gaining fluency.

Since this course is likely to be oversubscribed, students wishing to embark on this GCSE will be invited to take a programming aptitude test as part of the Year 9 examinations. This does not require any formal revision but will enable the school to make a decision as to whether this subject is a good fit for a particular student.

## **What careers might this subject lead to?**

Whatever future career in industry or academia you are considering, an understanding of how computers actually work is likely to be beneficial. This is, of course, supplemented by the myriad of information technology, scientific and engineering jobs that require people to actually program devices to produce an end product.

## **What A Levels might this subject support?**

Successful students will become excellent at thinking logically about problems. This GCSE has clear links with both Mathematics and Physics but also has less tangible but very real benefits to a raft of A Level subjects.

# DRAMA

GCSE Drama is an exciting course for students with a genuine interest in Drama and performance. Students are assessed on their practical work and on their written responses too.

The three areas of focus of the Drama course are:

- Component 1: Devising (making an original performance)
- Component 2: Performance from Text (performing an extract from a published play)
- Component 3: Theatre Makers in Practice (studying a full-length play and evaluating live theatre)

Students will be assessed on their performance work and they will also write an exam, which will assess their analytical and evaluative skills. Students' contributions during the preparation period as well as their final performance are assessed. There will be a range of texts to study and opportunities for live theatre visits in preparation for the written exam. Students are actively encouraged to see as many live performances as they can to help develop their own opinions and preferences and evaluation skills.

In GCSE Drama, students will take part in a range of activities during the course, including:

- Improvisation
- Devising work for performance
- Small group practical tasks
- In-role writing
- Solo performance tasks (e.g. performing a monologue to the class)
- Constructive criticism of own and others' work
- Learning about the work of Drama practitioners and how these could inform student work
- Analysis of a play (in a practical way e.g. acting out scenes from the play and also in written tasks)
- Written evaluation tasks, including a detailed Portfolio for Component 1
- Short and long answer questions, preparing for the written exam
- Journal-style writing tasks, keeping a record of the rehearsal process

## **Why study Drama at GCSE?**

In GCSE Drama, students must collaborate with others for both of the practical examination pieces. Cooperative, collaborative and social skills of this nature are useful across all kinds of disciplines, careers and life experiences as is the building of confidence which comes from expressing your opinions in a group and performing in front of an audience.

## **What careers might this subject lead to?**

Career opportunities for students who study Drama at a higher level include: the media, theatre, television, radio, the film industry, arts administration, drama therapy, education.

## **What A levels might this subject support?**

The content of this specification provides a smooth transition to A-level courses in Drama and Theatre Studies.

GCSE Drama could lead on to further study in Drama, Theatre Studies, Performing Arts and Expressive Arts at A-level and above, or other related subjects such as English, Music, Dance, Art and Design.

# **ENGLISH LANGUAGE AND ENGLISH LITERATURE**

Both English Language and English Literature are compulsory subjects at GCSE level, and you shall gain two separate GCSEs at the end of the course.

## **Why are these subjects important?**

English is the basis of ALL subjects: language is the tool we use to make sense of the universe, it is the means we employ to influence others – without language no other subject makes sense. All other academic subjects shall require you to write essays either for coursework or final examinations; some may require oral presentations. These are skills you shall learn and develop in your English lessons.

Literature is the analytical study of what other people have written. This brings about greater understanding of the human condition, empathy, and a wider appreciation of how both historical and current contexts are important.

## **What topics shall I study?**

A variety of non-fiction, media and literary texts including novels, short stories, plays and poems.

English Language and English Literature are fully linear courses with assessment at the end of the course – the content is not divided into modules.

In both English Language and English Literature, students shall be awarded a grade from 1 to 9, with 9 being the highest, and 4 being the equivalent of a “pass”, equivalent to the old grade C. There shall be no tiering, i.e. the subjects will not be split into Higher and Foundation Tiers.

Assessment shall be by speaking and listening tasks and four final, formal written examinations – two for English Language, and two for English Literature.

## **What skills or attributes do I need in order to succeed in this subject?**

To succeed in these subjects you need both imagination and the ability to express your opinions clearly, fluently and accurately. You also need to listen carefully to the ideas and opinions of others. To do really well, regular wider reading – and the re-reading of set texts – is essential.

## **What careers might this subject lead to?**

For the majority of careers and a place at university at least a grade 5 – the equivalent of a grade C – in GCSE English is required.

## **What A-levels might this subject support?**

All A-levels require you to have the ability to read, write, speak and listen well.

# **GEOGRAPHY**

## **Why is this subject important?**

Geography helps you to be more aware of the everyday life and problems of the people who live around you, in other parts of Britain and across the world. When you see magazine or TV reports about new shopping centres and factories, unemployment, arguments about new roads, exciting changes or disasters in Asia and Africa, your Geography course will help you to make sense of what is going on.

Geography also cares about how we use the world's natural resources. So you will also find out about recreation, tourism, the need for conservation and the fight against pollution.

## **What topics will I study?**

### **Living with the Physical Environment**

Section A: The challenge of natural hazards

Section B: The Living World

Section C: Physical landscapes of the UK

### **Challenges of the Human Environment**

Section A: Urban Issues and challenges

Section B: The changing economic world

Section C: The challenge of resource management

### **Geographical Applications**

Section A: Issue Evaluation

Section B: Fieldwork

## **At GCSE you will extend your knowledge of the following:**

- 1) Maps, Fieldwork and Geographical Skills. There will be the requirement to go on 2 fieldtrips – a human based study and a physical based study. Please bear in mind there will be a cost associated with these.
- 2) Place: processes and relationships to look at a range of elements in the Geography of the UK
- 3) Physical geography: processes and change to possibly include Geomorphic processes and landscape and/or Changing weather and climate.
- 4) People and environment: processes and interactions to possibly include Global ecosystems and biodiversity and/or Resources and their management
- 5) Human geography: processes and change to possibly include Cities and urban society and/or Global economic development issues.

## **What skills or attributes do I need in order to succeed in this subject?**

If you are enjoy studying Geography and are good at it - carry on studying it! You are more likely to obtain your best results in a subject you enjoy and are good at! Do you think you can develop the following skills?

- Collecting, analysing and synthesising information
- Research, thinking and organisational skills
- Communicating ideas and information orally and through writing
- Problem solving and decision making skills

### **What careers might this subject lead to?**

For many jobs it is a real help if you have taken Geography - so think seriously about the subject if you are interested in any of these types of work:

Agriculture and forestry	Armed services	Local government
Nature conservancy	Estate management	Transport
Architecture (designing buildings)	Landscape architecture	Police
Cartography (map-making)	Leisure industry	Surveying
Town and country planning	Nature conservancy	Civil aviation
Travel agency and tourism	Sale and Marketing	Estate agency

### **What A levels might this subject support?**

Geography A level can be successfully combined with a wide range of other A level subjects including Maths, Biology, Chemistry, Physics, Politics, History, Economics, Business Studies, English and Modern Foreign Languages.

# **HISTORY**

## **Why is this subject important?**

The study of History helps you to develop an enquiring mind, to be a reflective and critical thinker and to develop knowledge and understanding of interesting and important periods of the past. The subject is also very important in helping you to develop your literacy skills and to help your personal development as responsible citizens and to make sense of the world around you.

## **What topics will I study?**

You will study three eras of history; Medieval, Early Modern and Modern.

Topics include;

- A period study; Germany 1890-1945, Democracy and Dictatorship
- Wider world depth study; Conflict and Tension, 1918 – 1939
- Thematic study; Britain: Power and the people, 1170 to the present day
- British depth study; Elizabethan England, 1568-1603

## **What skills or attributes do I need in order to succeed in this subject?**

History is, above all else, an academic subject. Literacy and communication skills are very important and you will be encouraged to develop speaking and debating skills. Analytical skills are also important: you will develop your ability to select relevant material and to apply it to the question, to summarise arguments, and to evaluate and assess critically a variety of historical sources and the views of others.

## **What careers might this subject lead to?**

The analytical skills developed by the study of the past are useful for any career and an A level in History is a still a very highly regarded academic qualification for a wide range of degree courses. The skills acquired in studying History are especially relevant to careers in the Law, local government, politics, the civil service, human resources, teaching, the media, journalism, the library service, archaeology, and in the archive, museum and heritage site work.

## **What A levels might this subject support?**

Any! Pupils who have studied GCSE History have gone on to study the full range of A levels offered by this school. Apart from A level History a GCSE in this subject is also an especially suitable preparation for studying A level Government and Politics, Economics, Psychology, English Literature and Geography.

# MATHEMATICS

## **Why is this subject important?**

An ability to follow set routine procedures and perform calculations with accuracy and care are skills relevant to almost any walk of life and it is important to get a minimum of a grade 5. Many universities also ask for a minimum grade, and a grade 7 or better is advised for entry to the A Level Mathematics course. To apply to the best universities and to be considered for courses such as Medicine or Veterinary Science you will require one of the top three grades.

## **What topics will I study?**

Algebra, Problem Solving, Ratio, Rates of Change, Trigonometry, Statistics, Numbers and Shape.

## **What skills or attributes do I need in order to succeed in this subject?**

- Attention to detail
- Willingness to follow set routine procedures
- Ability to retain knowledge of taught material
- Problem solving and tenacity
- Processing skills
- Number manipulation

Mathematics was one of the first GCSEs to be changed under a new system that will see grades A\* to G replaced with the numbers 9 to 1 (with 9 being the highest). The new Mathematics GCSE demands deeper and broader mathematical understanding and includes greater coverage of key areas such as ratio, proportion and rates of change. It will require more application of knowledge to construct mathematical arguments and provide a greater challenge for the most able students. Because of these increased demands, Year 9 students have already embarked on the GCSE course.

## **What careers might this subject lead to?**

Almost all career path choices are keen to see a high grade in GCSE Mathematics, since it proves to prospective employers that you are numerate. Careers in Science, Engineering, Medicine and Finance will require a very good grade at GCSE and probably further study at A Level.

## **What A Levels might this subject support?**

Number processing skills and/or forming and solving equations are required elements in the following A Level subjects:

Sciences (especially Physics)

Geography

Economics

Whilst students can be successful in these subject areas without taking A Level Mathematics, their prospects are likely to be enhanced by combining the subject choice with Mathematics.

# **MEDIA STUDIES**

## **Why is this subject important?**

Media is a truly contemporary subject which is relevant to all our pupils' lives. The media saturates everything we do in the developed world in the 21<sup>st</sup> Century. Giving pupils the tools to analyse and critique the media affords them the chance to see the ways in which the media pervades their lives.

Media Studies is a genuinely vocational subject, which involves pupils making their own films, writing their own newspapers, setting up their own websites, creating their own music videos – it is extremely hands-on. Pupils interact with modern technology in lots of ways, using all the customary IT programs such as word processing and presentation software as well as video and sound editing software.

## **What topics will I study?**

In Media Studies you will cover a range of different elements of media including documentaries, film genres, popular music, celebrity, soap operas, sports and the media, news, advertising, and video games. You will be taught the theory behind media production and produce a practical personal response using skills acquired in lesson. You will also look into the academic theory behind media and develop analytical skills when looking at elements from current media such as television shows, websites and magazines.

## **What skills or attributes do I need in order to succeed in this subject?**

You will need to be a focused and dedicated student willing to put the time and effort into a subject that is both academically challenging and has a practical portfolio of work. Students will need a willingness to work with others for practical elements of their work and will need to be willing to explore all aspects of media to successfully complete this GCSE.

## **What careers might this subject lead to?**

In today's society media is one of the growth industries. A small number of possible careers include: Multimedia specialist, programme researcher, broadcasting/film/video, public relations officer, social media manager, television/film/video producer, web content manager, broadcast journalist, editorial assistant, event manager, film manager and magazine journalist.

## **What A levels might this subject support?**

This will support A-levels in Media Studies, Art and Photography.

# MODERN FOREIGN LANGUAGES

## FRENCH      SPANISH

### **Why are these subjects important?**

One or more languages at GCSE is your passport to other cultures, new friends and exciting job opportunities. Many universities look for proof of language skills on applications, even for non-language based courses, and many of our former students find themselves having to do a language module as part of their degree. Employees with more than one language can earn considerably more money.

### **What topics will I study?**

At GCSE you will build on the topics already covered in KS3.

Theme 1: Identity and culture

Theme 2: Local, national, international and global areas of interest

Theme 3: Current and future study and employment

### **What skills and attributes do I need in order to succeed in this subject?**

Learning vocabulary and grammar is a high priority, as is independent preparation, especially for the final exams. However, the very best results are attained by those who treat their language as they do English, by watching films, surfing the Net, playing games and listening to music in that language.

### **What careers might this subject lead to?**

One or more languages will be an asset in any career! Engineering, accountancy, law, anything! Businesses never work in isolation and need good communicators. Your GCSE will prove that you have these skills and the ability to understand and use another language will be hugely valuable to you. Of course there are some careers which are purely language based, such as translating, interpreting and teaching.

### **What A levels might this subject support?**

Many students understand that an A Level in a language is an excellent and worthy subject to support any combination, for all the reasons set out above. Students of Psychology, History and English will find many of their research and essay writing skills mirrored in their foreign language studies. However, Science and Maths students often welcome a change in study skills too!

### **Which language should I choose?**

You will have to choose one foreign language at GCSE level, but you may choose to do two. If just one...which one? This should depend on your confidence and ability in that language, how often you visit or intend visiting the country or maybe there is a specific link with that language in a chosen career or course. We do not recommend you choose or reject a language because of a teacher, as there are no guarantees that that teacher will or will not teach you at GCSE. We are happy to help you to decide!

# MUSIC

## **Why is this subject important?**

This subject involves a good deal of mental stimulation through harmony exercises and composition, but yet provides scope for creative development in both performance and composition. You will also gain invaluable social skills by working with others in ensemble performance and you are welcome from any musical persuasion – pop, folk, jazz and classical alike.

## **What topics will I study?**

You will study your main instrument's evolution, history and development and will write a composition for that instrument. Dance Music, Descriptive Music and World Music will be studied. One of these styles of music is used as the starting point for the second composition. You will also be given the chance to study and take the Grade 5 Theory examination and we now offer 50% funding of a half hour lesson for GCSE students.

## **What skills and attributes do I need in order to succeed in this subject?**

By the end of the course, you need to perform to a minimum Grade 4 standard on any instrument or voice.

A willingness to work with others and participate in the various choirs, orchestras and bands in the school is expected.

The course allows a smooth transition from Key Stage 3 Music and provides flexibility in meeting the needs of individuals in the areas of performing and composing.

## **What careers might this subject lead to?**

The GCSE Music qualification is valuable for those who wish to pursue a career in journalism, broadcasting, performing, arts administration, composing, music therapy, studio and recording work, media studies and performing arts. It is an asset for would-be primary school teachers.

## **What A levels might this subject support?**

An 'essay based' subject works well to develop the analytical and contextual parts of the course. There has long been a proven link between Maths and Music, particularly in the study of theory, harmony and counterpoint.

English Language  
English Literature  
History  
Maths

# **PHYSICAL EDUCATION**

## **Why is this subject important?**

You will take part in a number of different sports and activities in different roles and positions. You will use methods of practice to improve your performance. Most importantly, you will learn how to be physically active as part of a balanced healthy lifestyle. You will strengthen this with the theoretical knowledge of the demands of physical activity.

Core topics are:

- Applied anatomy and physiology with physical training
- Sport psychology
- Socio-cultural influences
- Health fitness and well-being

## **What topics will I study?**

You will study different games and activities and will be assessed on how well you perform. As a Performer you will be assessed in your **3** strongest sports. These must comprise of 2 team and one individual or 1 team and 2 individual activities. These can be sports that you play in school (e.g. Rugby, Netball, Football, etc....) or outside (e.g. Swimming, Boxing, Rowing, Horse Riding etc...). You will complete one analysis task based on the self-assessment of your own strengths and weaknesses in a sport of your choice. You will develop an awareness and appreciation of your own and others cultures in relation to PE. This will help you underpin your practical performances with theoretical knowledge.

## **What skills or attributes do I need in order to succeed in this subject?**

Pupils considering this subject must be competent in at least 3 activities (a minimum grade of 10 out of 20 in their strongest 3).

You need to have an interest in physical activity. You also need to be a talented and confident performer in sport. (*Please ask for a comprehensive list of the sports you can be assessed in*). Development of some of these roles will be essential for progress through the course.

## **What careers might this subject lead to?**

There are many varied careers available in sport and sport related subjects: E.g. Coaching, professional player, manager, dietician, sports nutritionist, sports psychologist, personal trainer, leisure centre instructor, PE teacher, physiotherapy, design work for new technology in sport, lifestyle coach, sport science research and sports logo designers, community sports development, injury and sport therapist.

## **What A levels might this subject support?**

Physical Education GCSE can lead to a wide range of subject disciplines e.g.

Biology  
Chemistry  
Sport Studies  
Sociology  
Psychology

# SCIENCE

Science is a core subject which all students take, over twelve periods per fortnight. This will be taught as separate sciences by specialist teachers and will be suitable for students who may wish to take A Level Science courses in the Sixth Form. During the three year course students will be entered for either:-

## **Combined Science: Trilogy or Biology, Chemistry and Physics (Separate Sciences)**

The decision as to which course students will be entered for will be made after the Christmas term during Year 10.

## **Combined Science: Trilogy (Double Award)**

This double award is equivalent to two GCSEs.

Students studying Combined Science: Trilogy will cover the three science disciplines in the traditional fashion. The subject content and the practicals also appear in the separate Biology, Chemistry and Physics GCSEs. This means that students studying the Combined Science (Double Award) will still be able to access the A level Science courses.

## **Practicals**

We know that practical's are not only one of the most engaging parts of a science education but are also essential for students' understanding of scientific theory. There are 16 required practicals.

## **Exams**

Six papers: two biology, two chemistry and two physics. Each will assess different topics.

Duration: all the papers are 1 hour 15 minutes.

Tiers: Foundation and Higher.

## **Biology, Chemistry and Physics (Separate Sciences)**

Studying the separate sciences means students will cover more content than GCSE Combined Science, but this will not take up more curriculum time than the Combined Science route.

## **Practicals**

There are eight required practicals for each of the separate sciences.

## **Exams for each separate science.**

Two papers: each paper will assess knowledge and understanding from different topics.

Duration: both papers are 1 hour 45 minutes.

Tier: Foundation and Higher.

## **Why is this subject important?**

All the GCSE Science courses contain a high proportion of practical work to develop scientific skills. Learning opportunities include instruction, group discussions, practicals and personal study using a wide range of resources. The courses are designed to stimulate curiosity, interest and enjoyment in science and its methods of inquiry and to develop abilities useful for a career in science. We also hope our students will become confident citizens in a technological world and will be able to recognise that the study of science is very relevant to everyday life.

## **What topics will I study?**

Biology • Cell biology • Organisation • Infection and response • Bioenergetics • Homeostasis and response • Inheritance, variation and evolution • Ecology

Chemistry • Atomic structure and the periodic table • Bonding, structure, and the properties of matter  
• Quantitative chemistry • Chemical changes • Energy changes • The rate and extent of chemical change • Organic chemistry • Chemical analysis • Chemistry of the atmosphere • Using resources

Physics • Forces • Energy • Waves • Electricity • Magnetism and electromagnetism • Particle model of matter • Atomic structure

### **What skills or attributes do I need in order to succeed in this subject?**

In order to be successful when studying science, you will be required to:

- Extract information from tables, graphs and charts
- Draw Graphs from given data
- Work out means, percentages, decimals and scales
- Use formulae
- Measure rates and percentage change
- Write text which is legible, with clear punctuation and grammar
- Make effective use of ICT
- Develop a critical approach to scientific evidence and methods
- Acquire and apply skills, knowledge and understanding of how science works and its essential role in society
- Acquire scientific skills, knowledge and understanding necessary for progression to further learning.

### **What careers might this subject lead to?**

Science is the ideal foundation for anyone who is seriously intending to follow a science related career, particularly important for:

Medicine, Dentistry, Veterinary Science, Physiotherapy, Biochemistry and Engineering.

### **What A levels might this subject support?**

All the science related A levels such as:

Biology, Chemistry, Physics, Geography, Psychology, Sports Studies and Mathematics.



## King Edward VI Grammar School



### Y13 Leavers' Destinations - 2019

<b>Name</b>	<b>Destination</b>	<b>Studying</b>
Mehreen Ahmed	University of Nottingham	Neuroscience
Esmee Alex	CAE Oxford	Commercial Pilot Training with easyJet
Kirsty Allison	Nottingham Trent University	Policing
Lewis Andrew	Loughborough University	Economics
Elorm Avevor	Churchill College, University of Cambridge	Engineering
Sam Bailey	CAE Oxford	Pilot Training
Alex Baker	University of Lincoln	Business
Eleanor Bareham	Durham University	English Literature
Jess Barkhouse	Gap Year	
Matthew Barmby	University of Sheffield	Mechanical Engineering
Rebecca Bench	University of York	English Literature
Emily Blades	Gap Year	
Alice Bockock	Gap Year	
Bethany Buckley	Coventry University	Graphic Design
Isobel Bunting	Nottingham Trent University	Zoo Biology
Theya Burnby-Crouch	Gap Year	
Emily Cole	Apprenticeship	
Beth Cooper	University of Lincoln	Child Nursing
Jacob Croft	Georgia Scholarship USA, then University of Hull	British Politics and Legislative Studies
Matthew Cutts	University of Leeds	Biochemistry
Harvey Dales	Gap Year	
Will Dennis	Catterick Garrison	Army Training
Harriet Dixon	Gap Year	
Oliver Drewett	Northumbria University	Science Foundation Course
Emily Dunn	Nottingham Trent University	Creative Writing
Lucy Fraser	Nottingham Trent University	International Business
Madeline Gallant	University of Liverpool	Architecture
Lucy Gash	School of Oriental and African Studies, University of London	Japanese
Kayatre Giritharadas	Queen Mary's, University of London	Medicine
James Graham	Norwich University of the Arts	Animation

Toby Grantham	University of Hull	Geography
Oliver Haines	Gap Year	
Georgia Heatlie	University of Liverpool	Law
Calanthe Hendrikse	St George's, University of London	Biomedical Sciences
Haydn Hopkinson	Leeds Beckett University	Filmmaking
Hannah Johnson	University of Birmingham	Law
Sam Johnson	Gap Year	
Maddison King	Gap Year	
Lubna Latif	University of Birmingham	Medicine
Mia Law	Gap Year	
Thomas Lee-Skudder	Goldsmiths, University of London	Politics and International Relations
Sally Leonard	Gap Year	
Charlotte Lowther	University of Reading	English Literature
Taylor Malkinson	University of Lincoln	Business and Marketing
Thomas Malloch	University of Warwick	Mathematics
Philip Moore	University of Sunderland	Business Management
Sam Oxborrow	University of Newcastle	Mechanical Engineering
Amy Page	Gap Year	
Jordan Partridge	University of Leeds	Mechatronic and Robotic Engineering
Oliver Pearce	University of Leeds	International History and Politics
Abigail Poppleton	University of Newcastle	Biology
Reagan Richardson	University of Lincoln	Business and Events Management
Ciara Ringland	Nottingham Trent University	Psychology
Harry Scott	Leeds Beckett University	Music Performance and Production
Jasmine Skeath	Leeds Arts University	Photography
Scott Smith	University of Leeds	Financial Mathematics
Tabitha Smith	BAE Apprenticeship	Aircraft Maintenance
Theo Taylor	Gap Year	
Olivia Tinker	University of Nottingham	Medicine
Yue Yue To	Goergis Scholarship USA then University of Leeds	Economics
Henry Topley	University of Leeds	Physics with Astrophysics
Mollie Tunnicliffe	University of Reading	Human Geography
Jodie Unwin	University of Nottingham	Mental Health Nursing
Tilly Varrall	University of Sheffield	History and Politics
Lucy Wherry	Bishop Grosseteste University College	Primary Education with QTS
Naomi Wilson	University of York	Biomedical Sciences

