

# **MIDDLE SCHOOL YEARS**

**2021-2023**

**An introduction to  
GCSE Courses**

## MIDDLE SCHOOL YEARS

As you go through RGS, you follow three stages of educational studies. In Years 7, 8 and 9 you follow Key Stage 3 courses. Many subjects also begin preparation for GCSE in Year 9. Years 10 and 11 are Key Stage 4 courses and lead to the GCSE examination, which you will take in May and June 2023. Finally, there is the two-year A level course in the Sixth Form.

We expect you will take final GCSE examinations in 10 full subjects at the end of Year 11.

Your core Middle School curriculum comprises: Maths, English, a Modern Language, and the three Sciences. You must also study either History or Geography and a further two options. In addition, you will do general Religious Studies, Physical Education, Games and PSHCE (currently modules in Careers, Relationships, Citizenship, Mindfulness, British Values and Economic Awareness). In the letter that accompanies this booklet you will find details of the option subjects available.

You will need to consider three factors before you make your choices:

1. Which are the subjects in which you think you will achieve your best results?
2. Which are the subjects you are most interested in?
3. Do you have a career in mind?

In this booklet we provide more detailed information on all Key Stage 4 subjects. Your classes are based on mixed ability groupings in all subjects apart from Mathematics and, sometimes, French. In Mathematics (and French) pupils are put into sets based upon internal School exam results in Year 9.

All GCSEs are linear (no interim exams) and will be graded from 9 (highest) to 1 (lowest).

### Co-Curriculum

We also regard all other aspects of School life as important. We expect you to develop your talents to the full and provide opportunities in many different fields, to an extent, we believe, unparalleled in most State Schools.

It is your responsibility to make the best use of the activities that are offered to you and thus continue to develop the transferable skills which future universities and employers value highly.

In Games in Year 10 and Year 11 you can take part in rugby, hockey, indoor rowing, fitness, invasion games, badminton and table tennis in the winter months. In the Summer Term cricket, tennis, athletics, softball, ultimate Frisbee, fitness, badminton and volleyball are all on offer.

On Thursday afternoons, in what is known as TAA, you may join the CCF, do Social Service or take part in one of the many activities designed to enrich the curriculum and develop your additional skills or interests. We currently offer:

Art	Badminton
Basketball	Boardgames
CCF – Army	CCF – Navy
CCF – RAF	Chinese
Cookery	Creative Writing
Drama	Fitness
Fives	Football
French Cinema	Japanese
Library	Media Studies
Music	Social Services
Squash	Stage Lighting
Table Tennis	Tennis

You will make your TAA choices later in the Spring term.

We encourage you to join clubs and societies, go on expeditions and trips, and participate fully in the various activities of the School community.

Photographs of some opportunities open to you in the Middle Years at the RGS.



Table Tennis



Art



Stage Sound and Lighting Team



Music

## THE MIDDLE SCHOOL (KEY STAGE 4) CURRICULUM AND CAREERS

As a Year 9 pupil at the end of your third year in the School, future careers seem a long way away. However, it is never too early to acquire ideas and information. Here is a summary of our system. We encourage you to use it.

The School has a Careers Room where you can find current information on careers and higher education. In Years 10 and 11, as part of the PSHCE programme, there are two modules of Careers Education and another focusing on Economic Awareness. There is a monthly Careers bulletin and access to Careers Fairs attended by employers and Higher Education Institutions. You are encouraged to organise Work Experience, which will enable you to gain a real insight into the world of work.

The RGS Curriculum ensures a broad and balanced choice of subjects so no career options are closed to you at this stage. You should choose the subjects you enjoy and will perform best in. If you wish to discuss options and possible careers, please contact Mrs Sadia Azad, the Director of Careers and Higher Education.

Looking ahead to the Sixth Form these are the A levels we currently offer:

Ancient History	Geography*
Art*	German*
Biology*	History*
Business Studies	Latin*
Chemistry*	Mathematics*
Computing*	Music*
Design Technology*	Physics*
Economics	Politics
English Literature*	Psychology
French*	Spanish*
Further Mathematics*	Sport (BTEC)

\*You must have studied the corresponding GCSE for entry to these subjects

## ENGLISH LANGUAGE and ENGLISH LITERATURE

You will continue with English until you sit two GCSEs in Year 11: English Language and English Literature. Both GCSEs require the full range of reading, writing and speaking skills you developed in the lower School.

English Language requires writing in various styles, reading a range of different text types and understanding their stylistic features, debating, discussion and presentation of ideas in front of a whole class. Perhaps most importantly, it requires you to demonstrate an awareness of the ‘mechanics’ of the language and this skill is a key component of your Literature GCSE too.

In both English Language and Literature, at the end of each unit studied in Year 10 and Year 11, there will be a common assessment completed. This assessment will be completed under timed conditions during an English lesson. Although the result of each assessment will not directly affect the overall GCSE result, it will reflect your progress within each unit. Likewise, both the Year 10 and 11 mock exams will contain exam-based tasks. There is a ‘Speaking and Listening’ component to the Language GCSE but it is separately awarded and does not contribute to the overall Language GCSE grade.

### **Literature:**

Paper 1: Shakespeare and the 19<sup>th</sup> Century Novel (40%)

Paper 2: Modern texts and Poetry (60%)

Set texts are chosen by the individual subject teacher and may vary across classes. The set text titles are sent out at the beginning of Year 10.

### **Language:**

Paper 1: Explorations in creative reading and writing (50%)

Paper 2: Writers’ viewpoints and perspectives (50%)

Component 3: Speaking and Listening Test (separately endorsed 0% weighting of GCSE)

### **Method of Assessment:**

English Language: 100% exam – externally assessed

English Literature: 100% exam – externally assessed

Speaking and Listening Test – teacher assessed, then internally moderated

**Exam Board:** AQA

**Specification:** 8702 (Literature)

8700 (Language)

## MATHEMATICS

As this subject is integral to so many other areas of study, as well as every aspect of life itself, you will continue to study Mathematics to the end of Year 11. A large cohort then decide to pursue the subject to a higher-level post 16 and this is enthusiastically encouraged.

In Year 10 you will be split into two parallel halves of the year and each of these is then further divided into **four** sets. These sets allow the Mathematics Department to cater for your needs throughout these two very important years. If you are in the **top** sets you will complete your higher tier GCSE course in Year 10 and will move on to study the AQA Level 2 Certificate in Further Mathematics in Year 11. If you are in one of the other sets you can work at a steadier pace on the higher-level GCSE course, enabling you to have every opportunity of attaining a top grade in the GCSE exam taken in the Summer of Year 11. If you are in Set 2 you may also be given the opportunity to study the AQA Level 2 Further Mathematics course in Year 11 and take the exams in the Summer of Year 11.

The Mathematics GCSE course encompasses many areas, giving a thorough grounding in numerical skills, algebra, mensuration, trigonometry, statistics and probability. There are extensive opportunities for you to explore around the set topics, with problem solving skills and logical thinking encouraged using open ended tasks and investigations. There are also occasions when you will make use of ICT in understanding and exploring mathematical theory.

The AQA Level 2 Certificate in Further Mathematics course is designed as an enrichment programme for those students who have a thorough knowledge of the content of the Higher Tier Mathematics GCSE course, and is designed to stretch and challenge high achieving Mathematicians. It places an emphasis on higher order technical proficiency, algebraic reasoning and problem-solving skills. As a high achieving student, it gives you an introduction to topics that will help you develop skills in Algebra, Geometry, Calculus, Matrices, Trigonometry, Functions and Graphs. The redeveloped specification has been designed to provide you with a coherent course of study to develop mathematical understanding and provides you with an excellent opportunity to experience the Mathematics studied at post-16 level, including GCE Mathematics and Further Mathematics.

However, if you do not study Level 2 Certificate in Further Mathematics, you will not be prevented from studying Mathematics or Further Mathematics at A Level.

**Method of Assessment:**

**GCSE Mathematics**

Grades available: 4, 5, 6, 7, 8, 9

Paper 1	1½ hours non-calculator (out of 80)	33⅓%
Paper 2	1½ hours with calculator (out of 80)	33⅓%
Paper 3	1½ hours with calculator (out of 80)	33⅓%

**Exam Board:** AQA

**Specification:** 8300

**Level 2 Further Mathematics**

Grades available: 5, 6, 7, 8, 9

Paper 1	1¾ hours non-calculator (out of 80)	50%
Paper 2	1¾ hours with calculator (out of 80)	50%

**Exam Board:** AQA

**Specification:** 8365



## SCIENCES

### BIOLOGY

This course builds upon the biological principles established in Years 7, 8 and 9 by considering genetics, natural selection, diseases and medicine development in Year 10. You will then learn about animal co-ordination, ecosystems and plant structures in Year 11.

#### Method of Assessment:

Examinations of the different modules will be taken at the end of Year 11. These take the form of 1 hour 45 minute exams, consisting of a mixture of short and extended writing questions. You will complete several core practical tasks during Biology GCSE and skills acquired from these tasks will be tested in the written examinations.

**Exam Board:** PEARSON EDEXCEL

**Specification:** 1BIO

### PHYSICS

Physics is taught by a combination of practical work, demonstration, discussion and numerical analysis. Physics demands and develops your ability to grasp abstract concepts and apply them to practical situations – often using Mathematics to assess their usefulness. As such the skills you learn in Physics will be readily applicable to a whole range of subjects and careers from engineering, commerce, health, and research to disciplines which involve making sense of data and communicating it.

Topics include: Waves, Electricity, Forces and Motion, Nuclear Physics, Astronomy, Matter and Energy.

#### Method of Assessment:

Assessment will be by examinations at the end of Year 11. These papers will include questions on the practical tasks that are a compulsory part of the course.

**Exam Board:** PEARSON EDEXCEL

**Specification:** 1PH0

## CHEMISTRY

The GCSE Chemistry course enables you to:

- Develop scientific knowledge and conceptual understanding of Chemistry
- Develop an understanding of the nature, processes and methods of Chemistry through different types of scientific enquiries which will help you answer questions about the world around you
- Develop and learn to apply observational, practical, modelling, enquiry and problem-solving skills in the laboratory and in other learning environments
- Develop your ability to evaluate claims based on Chemistry through critical analysis of the methodology, evidence and conclusions, both qualitatively and quantitatively

### Method of Assessment:

Paper 1            1 hour 45 minutes        50 % of mark

Paper 2            1 hour 45 minutes        50 % of mark

Both papers are a mixture of different question styles, including multiple-choice questions, short answer questions, calculations and extended open response questions. Questions also cover practical procedures.

**Exam Board:**    PEARSON EDEXCEL

**Specification:**  1CH0

## MODERN LANGUAGES

Why learn one or more foreign languages?

The advantages to learning a foreign language are well-documented from the point of view of future career prospects, understanding of a culture and communication but did you know there are incredibly important physiological benefits to learning a foreign language too? Here are just some of the advantages:

- You build multi-tasking skills
- You become more perceptive
- Your decision-making skills improve
- Your memory improves
- You improve your English

If you enjoy studying languages, then you should certainly consider taking up more than one foreign language at GCSE level. Take a closer look at the individual languages and you will find that there are clear advantages to studying the same topics and sitting an identical exam (albeit in a different language).

### FRENCH

As French is the first language of many of our nearest European neighbours and widely spoken as a second language across the globe, second only to English, it is a very important qualification that can help you stand out from the crowd.

Gaining a GCSE qualification in French will greatly enhance your future choices and opportunities in terms of both further study and employment. You will instantly become more attractive to any employer and you will be more sought after by universities and further education institutes. Studying French will develop not only your linguistic skills but will help you gain many of the desired skills of the multilingual world we live and work in today. In addition, you will learn about the different cultures of French speaking countries.

The number of professional linguists may be small, but the number of journalists, computer operators, engineers and scientists with some knowledge of a foreign language which they can use in their jobs is much greater and is a very valuable skill. Furthermore, the demand for linguistic skills is continually increasing; from the financial sector to marketing and sales, language skills are a much-appreciated talent.

## **GERMAN**

Students who have studied German in Year 8 and Year 9 can continue the subject in Years 10-11 and take the GCSE at the end of Year 11.

Here are good reasons for studying German: German is an important language in the scientific and engineering field. A GCSE qualification in German will give communication skills that can increase chances in the job market. If you are planning a career in medicine, for example, the process of learning how to communicate in a foreign language allows you to develop skills that will be useful when communicating with patients. There are many specific career opportunities in Germany and the UK for English speakers.

In the two years of GCSE study, you will cover a range of topics about German, Austrian and Swiss identity and culture. Our aim is for you to get to a level of German so you can communicate with German speaking people on a range of topics such as hobbies, lifestyle and culture, local, national, international and global areas of interest, school life, studies and the world of work.

In Year 10, we can hopefully offer a week-long exchange to Osnabrück, Germany, where you will be living with a German family, experiencing family life and visiting the local area. This will depend on restrictions related to Covid. You will also have an opportunity to take part in competitions run by the University of Oxford or the Goethe Institut, a world-wide non-profit organisation.

## **SPANISH**

If you studied Spanish in Year 8 and Year 9 you can carry on with the subject in Years 10 and 11.

Spanish is the third most spoken language in the world with approximately 437 million native Spanish speakers in 24 different countries. It has also become increasingly important in certain areas of the United States.

If you study Spanish at GCSE you will cover a range of topics about Spanish identity and culture, national and international areas of interest and future study and employment. Our aim is for you to attain a level of Spanish which enables you to competently communicate with Spanish speaking people in a natural way.

We offer you a week long Spanish exchange trip to Barcelona in Year 10 where you will have the opportunity to stay with a family and experience the language and the culture first hand.

## FRENCH, GERMAN AND SPANISH

<b>Theme 1:</b> Identity and culture	Topic 1: Me, my family and friends Topic 2: Technology in everyday life Topic 3: Free-time activities Topic 4: Customs and festivals in French / German / Spanish speaking countries / communities (depending on language being studied)
<b>Theme 2:</b> Local, national, international and global areas of interest	Topic 1: Home, town, neighbourhood and region Topic 2: Social issues Topic 3: Global issues Topic 4: Travel and tourism
<b>Theme 3:</b> Current and future study and employment	Topic 1: My studies Topic 2: Life at school/college Topic 3: Education post-16 Topic 4: Jobs, career choices and ambitions

### Method of Assessment in all Modern Languages:

Pupils take all four papers at either Foundation or Higher tier: Speaking, Listening, Writing and Reading. Each skill is worth 25%.

**Exam Board:** AQA

**Specification:** 8658 (French)  
8668 (German)  
8698 (Spanish)

## ART and DESIGN

There are two AQA courses which run simultaneously alongside each other: FINE ART and GRAPHIC COMMUNICATION.

### ART AND DESIGN (Fine Art)

Art and Design is an incredibly broad and exciting GCSE which emulates the richness and variety of the Creative Industry through its openness and research focused approach. The course encapsulates a range of subjects that share the common ground of creativity, expression, function and composition. In simple terms this includes: the fine arts (painting, printmaking, sculpture, installation); computer-aided design or visual communication through print, animation; three-dimensional design. There are also many specialist fields including photography, public art, film and TV. The course encourages students to explore and resolve findings of their own devising.

### ASSESSMENT

The course itself is divided into two areas for assessment:

- **Unit 1: Portfolio of Work.** This is marked out of 96 and carries 60% of the total marks available and will include work done in Year 10 and 11.
- **Unit 2: Externally Set Task.** This is a project carried out over 9 weeks. It is marked out of 96 and carries 40% of the total marks available.

### What is meant by a 'portfolio'?

A 'portfolio' is another word for a collection of coursework. It can include work of any scale, so it does not have to fit into a designated size of folder. It can include work such as drawing and painting; large scale 3D installations; digital or lens-based work; responses to visits and workshops; experimental and developmental work as well as finished pieces; research into sources such as the work of artists, craftspeople and designers; sketch books as well as mounted work – in fact anything that reflects the breadth of the course that you have taken and any work that you have done on a personal level.

### COURSE REQUIREMENTS:

1. Coursework Portfolio – 2 units of work (media studies and final pieces)
2. Final Examination – preparatory work and final test piece

We believe this reflects the current growth in the creative industry and enables the students a wider scope to be experimental and expressive. An expected amount of 45 minutes to an hour of additional study at home per week, will enable the students to successfully cover the course requirements.

## Fine Art Timetable

### YEAR 10

<b>AUTUMN TERM Coursework</b>	<b>UNIT 1: Theme – Natural Forms</b> <ul style="list-style-type: none"> <li>• Direct observational drawing</li> <li>• Exploration through mixed media techniques</li> <li>• Design work for sculpture</li> <li>• How to use and develop a sketchbook</li> </ul>
<b>SPRING TERM Coursework</b>	<b>UNIT 1: Theme – Natural Forms Personal Investigation</b> <ul style="list-style-type: none"> <li>• Visit to Kew Gardens</li> <li>• Personal explorative work in response to Kew Gardens and previous studies</li> <li>• Development of individual ideas</li> </ul>
<b>SUMMER TERM Coursework</b>	<b>UNIT 2:</b> <ul style="list-style-type: none"> <li>• In depth exploration in a wide range of media</li> <li>• Creation of final response</li> <li>• Mock Examination (2 days) Create final outcome</li> </ul>

### YEAR 11

<b>AUTUMN TERM Coursework</b>	<b>UNIT 2: MOCK EXAMINATION PROJECT</b> <ul style="list-style-type: none"> <li>• Choice of questions</li> <li>• Visit to a London gallery</li> <li>• Research/Development studies</li> <li>• Final piece (10 hours) in November</li> </ul>
<b>SPRING TERM Coursework</b>	<b>UNITS 1 and 2</b> <ul style="list-style-type: none"> <li>• Presentation of coursework portfolio (plus any other personal work)</li> </ul>
<b>Final Exam</b>	<ul style="list-style-type: none"> <li>• <b>FINAL EXAM PAPER (February)</b></li> <li>• Choice of questions</li> <li>• Research/Development studies</li> <li>• Final exam (10 hours) just before Easter holidays</li> </ul>
<b>SUMMER TERM Coursework</b>	<b>UNITS 1 and 2</b> <ul style="list-style-type: none"> <li>• Completion and presentation of coursework</li> </ul>

% of Overall Mark



60%

40%

Exam



**Exam Board:** AQA

**Specification:** 8202 (Fine Art and Graphic Communication)

## ART AND DESIGN (Graphic Communication)

Students will explore the way Graphic Design reflects and influences contemporary tastes and styles and has connections to the wider historical context of Art and Design. Students will produce work that has visual clarity, impact, originality and a high standard of technical finish as well as fulfilling its specific function (usually predetermined by a design brief). The portfolio and exam work will be created using a range of techniques and processes including computer assisted graphics. The areas of study will cover a selection from below.

- **communication graphics**
- **design for print**
- **advertising and branding**
- **illustration**
- **package design**
- **typography**
- **interactive design (including web, app and game)**
- **multi-media**
- **motion graphics**
- **signage**
- **exhibition graphics**

### ASSESSMENT

The course itself is divided into two areas for assessment:

- **Unit 1: Portfolio of Work.** This is marked out of 96 and carries 60% of the total marks available and will include work done in Year 10 and 11.
- **Unit 2: Externally Set Task.** This is a project carried out over 9 weeks. It is marked out of 96 and carries 40% of the total marks available.

### COURSE REQUIREMENTS:

1. Coursework Portfolio – 2 units of work (media and digital studies and final pieces)
2. Final Examination – preparatory work and final outcome created during exam conditions.

We believe this reflects the current growth in the creative industry and enables the students a wider scope to be experimental and expressive. An expected amount of 45 minutes to an hour of additional study at home per week, will enable the students to successfully cover the course requirements.



## Graphic Communication Timetable

### YEAR 10

<b>AUTUMN TERM Coursework</b>	<b>UNIT 1: Theme – Typography – an exploration of type through a series of workshops</b> <ul style="list-style-type: none"> <li>• Exploration through mixed media such as collage and photo montage</li> <li>• Digital work for a specific brief using photoshop</li> <li>• How to use and develop a sketchbook</li> </ul>
<b>SPRING TERM Coursework</b>	<b>UNIT 1: Theme – Kew Gardens Brief – a personal investigation. Letter stencils and show and light through photography</b> <ul style="list-style-type: none"> <li>• Visit to Kew Gardens</li> <li>• Personal explorative work in response to Kew Gardens. Digital and non-digital studies</li> <li>• Development of individual ideas in response to the graphic brief</li> </ul>
<b>SUMMER TERM Coursework</b>	<b>UNIT 2:</b> <ul style="list-style-type: none"> <li>• In depth exploration in a wide range of media – digital and non-digital responses</li> <li>• Creation of final response in a series of graphical outcomes</li> <li>• Mock Examination (2 days) Create final outcome</li> </ul>

% of Overall Mark



60%

40%

Exam



### YEAR 11

<b>AUTUMN TERM Coursework</b>	<b>UNIT 2: MOCK EXAMINATION PROJECT</b> <ul style="list-style-type: none"> <li>• Choice of questions</li> <li>• Visit to a London gallery</li> <li>• Research/Development studies – digital and non-digital</li> <li>• Final piece (10 hours) in November</li> </ul>
<b>SPRING TERM Coursework</b>	<b>UNITS 1 and 2 - Presentation of coursework portfolio (plus any other personal work)</b>
<b>Final Exam</b>	<ul style="list-style-type: none"> <li>• <b>FINAL EXAM PAPER (February)</b></li> <li>• Choice of questions</li> <li>• Research/Development studies</li> <li>• Final exam (10 hours) just before Easter holidays</li> </ul>
<b>SUMMER TERM Coursework</b>	<b>UNITS 1 and 2</b> <ul style="list-style-type: none"> <li>• Completion and presentation of coursework</li> </ul>

## CLASSICS

### LATIN

Latin is a useful foundation for English, History and Modern Languages. However, many pupils take it for its intrinsic worth and because of their enjoyment of the subject.

The *Cambridge Latin Course* continues to concentrate on both Latin language and Roman life. The focus moves to the city of Rome and the régime of the Emperor Domitian. During Year 10 you will be gradually introduced to original Latin literature and, by the end of Year 10, you will have covered the language syllabus for GCSE. In Year 11 you will be reading genuine works from a variety of writers such as Vergil, Cicero and Tacitus, and selections from these authors will be prepared as set texts at GCSE.

The final assessment comprises both unseen translation and comprehension, and questions on the verse and prose set texts. There is no requirement for you to translate from English into Latin, although there is an option to do this if you want to. It should be noted, however, that while Roman life topics may be taught alongside the Latin, these do not currently form part of the exam; if you are interested in this element you should consider GCSE Classical Civilisation as well as, or instead of, Latin.

#### **Method of Assessment:**

100% end of course exam.

**Exam Board:** OCR

**Specification:** J282

### CLASSICAL CIVILISATION

This course is open to you regardless of whether you have studied Classical Civilisation in Year 9; no previous knowledge of Latin or of the Classical world is required.

The course is made up of a series of topics on the social life, culture and literature of the ancient Greeks and Romans; this year, the focus has been on religion, myth and life in the city. Emphasis is laid upon the study and interpretation of the ancient evidence; this evidence includes both visual and written materials. You do

not need to have a knowledge of Greek or Latin since all written sources are studied in translation. You will be encouraged to make reasoned comparisons between the ancient and modern worlds, and, where you find differences, to show an understanding of and sympathy with ancient behaviour, attitudes and ways of thinking.

Among the topics currently available are: Myth and Religion, Roman City Life, The Homeric World, and War and Warfare, two of which will be studied for GCSE. During study of these topics, you will be expected to consider physical evidence (such as archaeology and art) and written evidence (such as letters, plays, literature, and historical accounts). Thus, this course has a wide scope and caters to a range of different interests.

### **Method of Assessment:**

Component 1	Thematic Study	1½ hours, 90 marks, 50%
Component 2	Literature and Culture	1½ hours, 90 marks, 50%

**Exam Board:** OCR

**Specification:** J199

## **CLASSICS AND CAREERS**

Pupils and their parents often ask why one should study Classical subjects or how these can assist in a future career. The high educational value of Classical subjects is acknowledged by universities and employers, both for their intellectual rigour and for their breadth of view. Surveys show that Classics graduates can be found working in a very wide range of jobs in business and commerce, advertising and marketing, computing and IT, politics and the Civil Service, the law, education, and public services such as the Police. The subjects are also valued for the way in which they encourage accuracy, analytical thinking and persuasive communication of ideas and, thus, open the door to many and varied future career pathways.

# COMPUTER SCIENCE

GCSE Computer Science encapsulates a range of topics related to the study and application of computational thinking and algorithm design. You will be taught a high-level programming language which is used as an industry standard. The course offers you an introduction and gateway to the study of Computer Science at A level, degree level and beyond. The course gives you an opening into a career in a dynamic industry which is still growing. There are opportunities related to hardware, software, system development, programming and networking.

## Component 1 – Computer Systems

This component is focused on computer systems. You will cover the physical elements of computer science and the associated theory.

## Component 2 – Computational Thinking, Algorithms and Programming

This component is focused on the core theory of computer science and the application of computer science principles.

## Component 3 – Programming Project

This component is the non-exam assessment where you will be challenged by a range of exciting and engaging tasks to apply your knowledge and skills.

### What will I study?

Component Title	Component Overview	Assessment
Computer Systems	<ul style="list-style-type: none"><li>• Systems architecture</li><li>• Memory</li><li>• Storage</li><li>• Wired and wireless networks</li><li>• Network topologies, protocols and layers</li><li>• Network security</li><li>• System software</li><li>• Moral, social, legal, cultural and environmental concerns</li><li>• Data representation</li></ul>	80 marks 1½ hour exam 50% of the final exam
Computational Thinking, Algorithms and Programming	<ul style="list-style-type: none"><li>• Translators and facilities of languages</li><li>• Algorithms</li><li>• High- and low-level programming</li><li>• Computational logic</li><li>• Data representation</li></ul>	80 marks 1½ hour exam 50% of the final exam

**Exam Board:** OCR

**Specification:** J277

## DESIGN AND TECHNOLOGY

Design and Technology is an inspiring, rigorous and practical subject. Using creativity and imagination, you will design and make products that solve real and relevant problems within a variety of contexts, considering your own and others' needs, wants and values. You acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art, and you will learn how to take risks, becoming resourceful, innovative, enterprising and a capable citizen. Through the evaluation of past and present design and technology, you develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Design and Technology is an ideal subject if you are considering a career in either an area of engineering, product design, architecture, or if you are someone who simply enjoys D&T while having a strong aptitude for the subject.

You begin Year 10 with a small, focused practical project aimed at developing a variety of manufacturing and design skills, while also studying the theory elements of the subject. From early June, you will start the coursework element of the course following the release of a range of context areas from which to choose provided by AQA. There is an element of Applied Mathematics included within the written exam worth 15% and covering elements of the KS3 and KS4 (foundation level) Mathematics syllabus.

If Design and Technology is oversubscribed, places will be offered to those who have previously demonstrated a good standard of ability and effort, meeting all homework deadlines and acquiring the necessary design, practical and Computer Aided Design (CAD) skills taught over KS3.

### **Method of Assessment:**

Written examination (2 hours): 50% of GCSE

Coursework: 50% of GCSE

(approximately 35 hours / 20-page design folder and practical manufactured product)

**Exam Board:** AQA

**Specification:** 8552

## GEOGRAPHY

Geography is the study of the real world and at GCSE we build on the knowledge and skills you gained at KS3 such as collecting information from a wide range of sources.

The course is examined by 3 papers:

- Paper 1 - Global Geographical Issues
- Paper 2 - UK Geographical Issues Global Geographical Issues
- Paper 3 - Making Geographical Decisions

For the Global Geographical Issues paper, you study:

- Hazardous Earth including climate change, tropical cyclones and tectonic hazards
- Development Dynamics
- Challenges of an Urbanizing World

For the UK Geographical Issues paper, you study:

- The UK's evolving physical landscape including elements of rocks and geology, glaciation, coasts and rivers
- The UK's evolving human landscape
- Geographical investigations – fieldwork on flood management and environmental quality of an urban environment

For the “Making Geographical Decisions” paper you study:

- Consuming Energy Resources
- Forests under threat
- People and the Biosphere

The aim throughout is to study relevant contemporary issues.

The style of question is like the Year 9 end of unit tests: starting with short, fact based or multiple-choice questions, working up to questions worth 8 or 12 marks, which require you to have a greater depth of understanding and case study knowledge.

Fieldwork will be examined within the UK Geographical Issues exam paper. We use the 2 Activity days in the summer to conduct fieldwork within High Wycombe on flood management on the River Wye and the environmental quality of the High Wycombe area.

In addition, hopefully you will be offered the opportunity to take part in a 4-day field trip, to a coastal area of North Devon, to support the work on geology, coasts and rivers. We collect fieldwork data in an activity-based context, such as longshore drift from a surf board and river flow from a canoe.

**Method of Assessment**

Paper 1 - Global Geographical Issues	1 ½ hour end of course exam
Paper 2 – UK Geographical Issues	1 ½ hour end of course exam
Paper 3 - Making Geographical Decisions	1 ½ hour end of course exam

**Exam Board:** PEARSON EDEXCEL B

**Specification:** IGBO

## HISTORY

History is an extremely popular subject at the RGS, both at GCSE and at A Level. It offers you the chance to acquire the crucial skills of communication, detecting bias and making sound judgements. These are particularly valued in a wide range of professions, such as politics, the law, business and personnel management, the Civil Service, accountancy, marketing, journalism and education. In addition, History provides an important foundation for all citizens living in a democracy.

Every year the History Department offers you the opportunity to take part in one of our exciting adventures! We have visited Berlin, Krakow, Istanbul, New York, Washington and the D-Day beaches of World War Two. We also organise enriching visits closer to home, including RAF Hendon.

The GCSE History course is very exciting and includes a selection of modules covering medieval, early modern and modern periods. This will ensure you develop into a well-rounded historian. Topics include Crime and Punishment, c1150–present day; Henry VIII and his ministers; Weimar and Nazi Germany; Superpower relations and the Cold War.

### Method of Assessment

End of course examinations

Paper 1:	Thematic Study and Historic Environment	1hr 15 mins
Paper 2:	Period Study and British Depth Study	1hr 45 mins
Paper 3:	Modern Depth Study	1hr 20 mins

**Exam Board:** PEARSON EDEXCEL

**Specification:** 1H10



## MUSIC

The Edexcel GCSE Music syllabus aims to inspire all students with a true passion for Music by advancing the three main areas of Performing (30%), Composing (30%) and Listening (40%). As well as catering for those who are already advanced musicians you can also be accommodated if you have enjoyed KS3 classroom music. However, if you want to take this subject you must be able to play an instrument or sing to Grade III standard by the beginning of Year 10. In addition, you will be expected to have attained a standard (playing an instrument of your choice or singing) approximating to Grade V by Easter of Year 11, although it is not necessary for you to take the exam.

For the composing side of the course, any style is acceptable, and recent candidates have made increasing use of modern technology to improve and present their work. A knowledge of traditional music theory is a great help to all aspects of the course and, if this is a weakness, we can arrange extra theory support throughout Year 9 and above to help you feel comfortable with Year 10 content.

The Listening paper is the only written paper taken in the Summer of Year 11 and tests your knowledge and awareness of different styles and techniques from across the centuries and across the world. Performing, Composing and any musical activity will contribute to this paper, which is why GCSE students need to be furthering their participation in ensembles/groups both inside and outside RGS. You should also listen to as much music as you can throughout the course. Indeed, the vast majority of GCSE students simply have a passion for Music and enjoy the specialised support on offer at GCSE level that enables them to really further their musicianship (indeed the Music Department has a consistently high track record of students attaining 9-7 grades at GCSE, proving excellent preparation for continuing Music into A-Level if desired).

### **One-year Accelerated GCSE Course**

If you would like to do a GCSE course in Music but not as part of the options scheme, the alternative is to do it after-school on Wednesdays (4-5pm), in an accelerated one-year course. As the time frame is so limited, this should only be considered **if** you are a good enough performer (Grade V standard is normally expected at the beginning of Year 10) and an able candidate that is prepared to compose much more independently than in the standard 2-year course. There is a modest charge for this course (currently £12.00 a session, usually about 30 sessions overall). Please contact Mr Mullaly for further details ([fxm@rgshw.com](mailto:fxm@rgshw.com))

**Method of Assessment:**

Composing (30%) and Performance (30%) are treated as coursework and marked internally

The Listening paper is worth 40% and marked externally.

**Exam Board:** PEARSON EDEXCEL

**Specification:** 1MU0

# PHYSICAL EDUCATION

GCSE Physical Education is intended for those pupils who have a passion for Physical Education, physical activity and sport. The ability to perform sport to a high level is advantageous but not a necessity.

## **Aims and Requirements of the Course:**

- Demonstrate, apply, analyse and evaluate knowledge and understanding of the factors that underpin performance and involvement in physical activity and sport.
- Demonstrate, apply, analyse and evaluate relevant skills and techniques in performance, physical activity and sport.

## **Externally Examined Assessment (Theory):**

### **Paper 1: The human body and movement in physical activity and sport**

- Applied anatomy and physiology
- Movement analysis
- Physical training
- Use of data

### **Method of Assessment:**

Written exam: 1 hour 15 minutes

Mixture of multiple choice/objective test questions, short and extended answer questions

78 marks

30% of the GCSE

### **Paper 2: Socio-cultural influences and well-being in physical activity and sport**

- Sports psychology
- Socio-cultural influences
- Health, fitness and well-being
- Use of data

### **Method of Assessment:**

Written exam: 1 hour 15 minutes

Mixture of multiple choice/objective test questions, short and extended answer questions

78 marks

30% of the GCSE

### **Internally Examined Assessment (Practical):**

Contributes 40% of total GCSE specification and will be split into the following:

- 30% - Practical performance in 3 different physical activities in the role of player/performer – one in a team activity, one in an individual activity and one in either a team or in an individual activity
- 10% - Analysis and evaluation of performance to bring about improvement in one activity

### **Method of Assessment:**

Assessed by teachers

Moderated by the Exam Board AQA

100 marks

40% of the GCSE

**Exam Board:** AQA

**Specification:** 8582

## RELIGIOUS STUDIES

Religious Studies has become an increasingly important area of study. The subject develops a deep understanding of two religions as well as key skills in critical thinking and analysis. There is also an opportunity for you to explore current affairs in components, studying four themes.

Year 10: Component 1 - the study of two religions (50% of GCSE)

- Christianity - beliefs, teachings and key practices
- Islam – beliefs, teachings and key practices

Year 11: Component 2 - the study of four themes (50% of GCSE)

- Religion in relationships and families
- Religion - human rights and social justice
- Religion - peace and conflict
- Religion - crime and punishment

### **Method of Assessment:**

Component 1 exam: 1 hour 45 minutes

Component 2 exam: 1 hour 45 minutes

**Exam Board:** AQA (Religious Studies A)

**Specification:** 8062