



WHITGIFT SCHOOL

LOWER SCHOOL

CURRICULUM BOOKLET

2015 ~ 2016

Curriculum subjects offered:

The Lower School consists of the non-public examination years. The fundamental objective is to ensure that our pupils work to their full potential and develop essential study skills in preparation for the academic rigour and demands of the curriculum in the Upper School. To this end, the progress of all is carefully monitored.

In the First Form, all subjects are taught in sets, although there is no streaming by ability.

In the Third Form, all subjects are also taught in sets, however setting by ability takes place in Mathematics and Computer Science. Some limited setting takes place in Science for which the majority of groups are parallel and of equal ability.

Lower First Form

All pupils study the following subjects:

Art, Design Technology and Engineering (DTE), Drama, English, Games, Geography, History, Computer Science, Italian, Languages Awareness, Mathematics, Music, Physical Education (PE), Personal, Social, Health & Economic Education (PSHEE), Science, and Theology & Philosophy.

Upper First Form

All pupils study the following subjects:

Art, Design Technology and Engineering (DTE), Drama, English, three Foreign Languages (French or Spanish, Japanese or Mandarin Chinese, Latin or German), Games, Geography, History, Computer Science, Mathematics, Music, Personal, Social, Health & Economic Education (PSHEE), Physical Education (PE), Science and Theology & Philosophy.

Lower Third Form

All pupils study the following subjects:

Art, Design Technology and Engineering (DTE), Drama, English, two Foreign Languages (French, Japanese, Latin, Mandarin Chinese, German or Spanish), Games, Geography, History, Computer Science, Mathematics, Music, Personal, Social, Health & Economic Education (PSHEE), Physical Education (PE), Science and Theology & Philosophy.

Upper Third Form

All pupils study the following subjects:

Biology, Chemistry, two creative subjects (Art, Design Technology and Engineering (DTE), Drama or Music), English, two or three Foreign Languages (French, Japanese, Latin, Mandarin Chinese, German, Spanish or Greek), Games, Geography, History, Computer Science, Mathematics, Critical Reflection, Physical Education (PE), Physics and Theology & Philosophy.

CAREERS

The objective of the Careers Department is to provide information and advice to support the boys in any decisions they need to make, which might affect their future career options. The Careers Library is available to all students and is open from 9.00 a.m. - 4.30 p.m. daily. Staff are on hand to assist boys (and their parents).

CRITICAL REFLECTION

Critical Reflection is a bespoke curriculum, unique to Whitgift, incorporating Citizenship, Ethics and Critical Thinking; boys begin to study Critical Reflection in the Upper Third. It involves discussing, reflecting on and reasoning about our values, with the aim that boys will develop into active citizens in society. The boys are exposed to a range of views when considering political, social, ethical and moral problems. They are encouraged to make judgements with integrity and consistency, to substantiate and justify their ideas with clear reasoning, while having an intelligent understanding of why others hold alternative views. This enables our boys to explore and engage critically with the diverse ideas, beliefs, cultures, identities and values we share as citizens of the UK and the world. As part of Critical Reflection, boys investigate moral frameworks, medical ethics, the functioning of democracy and social issues such as criminal justice. The lessons incorporate debate and presentations, innovative learning tasks and thinking skills to develop higher cognitive and reasoning abilities.

EAL - ENGLISH AS AN ADDITIONAL LANGUAGE

Lower School

International students are assessed for their level of English when they join the school. Based on this information, extra support is offered to ensure they reach their full potential in all subjects. Currently, we offer language support classes within the timetable and if necessary one-to-one sessions. In addition, there is the option to attend a film or reading club at lunchtime to build up their confidence and range of language.

LEARNING SUPPORT

Across the school we use prior data, our screening, teacher referrals and observations to inform our decisions as to a students' needs and strategies to support them. This occurs throughout the year, is monitored regularly and shared with staff and parents.

Lower School

Dependant on need we offer small intervention literacy, numeracy, study skills and social skills groups. The groups take place in the mornings and/or during Period 5 to avoid any withdrawal from lessons. These groups usually start after the first half term to allow students to settle and in order to identify appropriate plans for individual needs, however some support may start immediately. A support homework club is available by invitation on Mondays and Wednesdays from 3.45-4.45.

The department is always available before and after school as well as at break and lunchtimes to support students with academic as well as social issues.

In this booklet the subjects are listed alphabetically.

ART

Lower First Form

The primary aim of this year is to excite and inspire our pupils and to help them to develop a delight in the artistic creative process. Students will follow a carefully structured course in which a rigorous attitude is nurtured and developed.

The year is viewed as a foundation course for Lower First Form pupils in preparation for all they will learn in successive years. Basic principles taught in the Lower First Form, will be re-taught in the Upper First Form to ensure that boys arriving in the school at this stage also receive a thorough grounding in the subject. At the end of the Lower First Form students should be able to:

1. Confidently use materials they are given to work with and utilise the skills they are taught in inventive ways:
2. Communicate their thoughts about their own work as well as that of others using appropriate artistic vocabulary:
3. Understand the importance of sequential development of skills in order to ultimately create a successful piece of work:
4. Put the work of the artists they are shown in context historically and culturally:
5. Create personal and meaningful (to them) art work.

ICT – Students will cover certain skills using Photoshop, layering, artistic techniques, creating opacity in images, and cutting and pasting.

Upper First Form

This year could be the first year of formal art teaching for some students entering Whitgift, whilst other will have been taught by specialist art teachers at their previous schools, or at Whitgift in the Lower First year. The Upper First year aims to give pupils a thorough grounding in a range of activities, employing pupils' natural creativity and developing their artistic discipline by following a range of skill based carefully planned projects. At the end of the Upper First Form, each student should be able to:

1. Understand the purpose of the tasks they have been asked to follow:
2. Use visual and written information (specifically relating to process instructions and information on artists) to aid them in the production of their art pieces:
3. Review and refine their work through the process of creating it:
4. Manipulate their given materials to communicate their personal responses to the tasks set:
5. Put artists they research into context and understand and use appropriate art vocabulary:
6. Confidently use the Computer Science skills covered over the skills such as scanning and manipulating images.

Lower Third Form

This year broadens the artistic experience of our pupils, introducing them to a new range of activities as well as developing and stimulating their skills, creativity and knowledge. At the end of the Lower Third Form students should be able to:

1. Select and use visual and other information in developing their work:
2. Understand purpose:
3. Manipulate materials and processes to communicate ideas and meanings and make images and artefacts:-
4. Match visual and tactile qualities to their intentions:-
5. Analyse and comment on methods and approaches used in the work of others and their own:-
6. Adapt and refine work in view of purpose and meaning:-
7. Understand codes and conventions in art practice:-
8. Recognise change/ differences in artists and crafts people from the western World and the wider world.

Students will also be expected to cover Photoshop skills such as layering, cutting and pasting, using opacity tools and artistic techniques, and layering and curves.

As students can opt to continue or not continue with Art in the Upper Third Form, the primary aim of this year will also be to give students an understanding of what is involved in the Art and Graphics GCSE course run in the Fifth Form, especially the differences between Art and Art Graphics, so they can make informed decisions.

The projects set out below are, broadly broken down into 4 project areas that will be covered in the Lower Third Form.

Upper Third Form

Students will commence the GCSE Unendorsed Art course in their Upper Third year. Starting the GCSE course in the Upper Third year will allow students to lay the foundations for the work they go on to create in the Lower and Upper Fifth years and enable them to build their skill base in this subject over a longer period of time. If students continue to study Art beyond the Upper Third year, they will be able to use some or all of the work they do in this year towards their final GCSE mark in the Upper Fifth. Students will be taught specific skills in a series of exciting workshops that will vary in length depending on the area being covered. Some of these workshops will include:

Drawing and Painting Workshops
Printing Workshops
Three Dimensional Workshops
Photography/ Computer skills and Graphic Design Workshops

COMPUTING AND ICT

The course consists of a number of exercises which are designed to provide an introduction to Computing as a discrete subject; teaching skills such as programming, website authoring and to provide an introduction to the IGCSE in Computer Science.

The core of the course covers:

- Binary arithmetic – why binary is used by computers, how to convert binary to denary, how to make sense of hexadecimal and examples of where binary is used in the real world.
- Algorithms – an introduction to what algorithms are, how they can be implemented on a computer, how to plan an algorithm, the use of flowcharts to develop solutions and the use of Flowol software to enable simulations through flowcharts
- Robolab Robotics - This introduces the Lego Mindstorms control system, enabling students to build a robotic buggy to follow a line and demonstrating advanced control of output devices.
- Python Programming – an introduction to programming languages, Python programming, creation of small programs, core constructs in programming and developing programs to overcome real world problem.
- Website Authoring – how to make more advanced pages, the use of forms, and considerations for the use of images.
- AppInventor – how to design a mobile phone application, the technology behind mobile phones, creation of a mobile phone user interface, programming a mobile phone application

The Computing department also has a strong role in the STEM cub activities, where pupils learn how to program robotics, remote control train sets and how to program Raspberry Pi computers.

DESIGN, TECHNOLOGY & ENGINEERING

The core experience in Design, Technology & Engineering is about providing opportunities for pupils to develop their interest in the technological world we live in and provide a capability in design and make tasks through the creation of quality products. They do this by combining their design and manufacturing skills with knowledge and understanding. A strong emphasis is placed on quality, as there is great benefit in pupils experiencing success and handling well made products. In addition, we see the development of pupils' technological understanding as a central activity within the subject.

The subject teaches the benefits of the design process to analyse a problem, produce a range of solutions and evaluate the best idea for further investigation. Focused practical tasks are used to develop a range of skills and apply the broad theory knowledge learnt in lessons. This includes materials recognition and properties, components, mechanical and electrical control systems, basic electronics, structures, computer aided design and manufacture and health & safety.

Short, focused tasks in such wide ranging areas as computer aided design (CAD), electronics, mechanisms, sketch modelling and working in a range of resistant materials are undertaken. In-depth analysis techniques are employed using the internet to understand how contemporary products have evolved, are marketed and manufactured while taking into consideration such issues as costs, materials and the

environment. Moreover, future design problems are discussed, analysed and evaluated. Computer programs used include: Techsoft 2D Design, Solidworks and Corel Draw.

Lower First Form

Pupils study a range of subject areas such as resistant materials (wood and plastic), computer aided design and manufacture (CAD/CAM) and graphics in a series of short projects aimed at enthusing and exciting each individual. Projects include plant boxes, plasma cut signs, Christmas decorations, door wedges, race cars and laser cut key rings.

Upper First and Lower Third Forms

The students start to be challenged further in these years by expanding their knowledge of the design process, materials and manufacturing techniques. All three material groups (metal, plastic and wood) are manipulated in different projects which change regularly to keep them relevant and exciting. In the Lower Third the boys start their first cross curricular S.T.E.M Project where they use the work they have done in Science, Maths and Computer Science as research for the development of a compressed air powered vehicle.

The subject provides excellent opportunities for pupils to apply value judgements of an aesthetic, economic, moral, social and technical nature in their designs and existing products.

Upper Third Form

The Upper Third Form course is a very popular creative option subject. The course is fast paced and challenges the students to push their abilities across all aspects of the subject and prepares and provides guidance to students wishing to study the subject at GCSE although it can stand comfortably in its own right. The emphasis of the course has been shifted towards a more academically challenging content but maintains a considerable amount of design and manufacture activities. The range of experiences vary from students creating their own logo/brand to learning about contemporary design movements and their effect on society and making contemporary clocks, passive amplifiers and programming simple robots. The range of experiences encountered is both rigorously challenging and a great deal of fun.

S.T.E.M

As a major part of the School's STEM initiative all Upper Third pupils will take part in an eight week STEM project run in the Michaelmas or Lent terms on consecutive Thursday lunchtimes. There will be several opportunities to explore a Technology or Engineering topic in depth. Projects have included F1 aerodynamics, 3D printing in education and development of an electric powered race car.

DRAMA

Lower First to Lower Third Form

Pupils study a wide variety of practical and theoretical aspects of drama, including History of Theatre. Considerable emphasis is placed upon improvisation and role play which allows the boys to use their imagination, confront a range of serious and humorous issues and build personal and performing confidence in a supportive, relaxed but mature environment. Thus, while the craft of practical theatre is addressed in these lessons there is also considerable attention placed on the PSHEE aspects of drama and the help in personal, imaginative and spiritual development this subject can provide. Above all, it is hoped that boys will enjoy these lessons and realise the central role that drama can take in their lives.

Upper Third Form

This is a course which will prepare pupils for the very specific demands of GCSE Drama and also better equip them to take a full and expert part in the broader dramatic activities at Whitgift. The main focus will be Stagecraft, including improvisation, and an introduction to the technical aspects of theatre: sound, lighting and so on. In addition, attention will be paid to the study of play texts and the relationship of the actor to these texts. Boys will also reflect on and evaluate their own work – and that of others – in more detail.

ENGLISH

The overall aim in Lower School English teaching is to create an inquiring enthusiasm for English through the use of exciting, relevant and challenging literature, writing, discussion and drama. At the same time, it is ensured that they have an understanding of, and are competent users of, English language.

Lower First Form

The course provides a lively introduction to the subject. Each form studies a selection of novels, poetry and drama during this year. In addition to this, pupils are encouraged to read in their own time; one period per week is a timetabled Library lesson of reading. We add to our varied and challenging book list every year, ensuring that boys read new writers as well as classic literature and non-fiction. All boys are issued with a journal in which to keep a record of their reading.

Boys are introduced to the varying styles, tones and purposes of writing including media writing, the necessity of drafting and editing written work. They are also taught spelling and punctuation rules. The emphasis is to teach English in a stimulating way that will facilitate a lifelong interest in language.

There are many opportunities for the development of speaking and listening skills. Pupils are encouraged to discuss, to investigate and to question through group and pair work, debating or whole class discussions. Lower School productions provide further opportunities for the development of speaking and acting skills.

For those whose enthusiasm and aptitude for the subject has been particularly evident, we run a residential trip to the Hay Festival in the summer as well as a Literary Festival in the autumn, open to all boys.

Upper First Form

Pupils develop and expand their reading with class and timetabled private reading as well as a Reading Challenge in which each class participates. Each form reads a range of novels, poetry and drama. Pupils are encouraged to record their responses to their reading, and to discuss literature. All boys are issued with a journal in which to keep a record of their reading.

Existing writing skills are built upon with revision of spelling and punctuation rules. The development of a sensitive, creative and critical approach to language, to media and to literature through written work is developed. Pupils are taught to use research facilities to inform their responses to their texts. As with their writing, we aim to build on their existing speaking, listening and role play skills so that they come to express themselves with clarity, confidence and pleasure. Pupils are encouraged to visit the theatre and there is an English Society group who meet regularly to take part in creative writing, wider reading and occasional trips.

For those whose enthusiasm and aptitude for the subject has been particularly evident, we run a residential trip to the Hay Festival in the summer as well as a Literary Festival in the autumn, open to all boys.

Lower Third Form

The literature in Lower Third Form English is increasingly challenging. As in the First Form all pupils read novels, poetry and one Shakespeare play. There are many opportunities to practise formal and informal debating, public speaking, performance or discussion.

Creative responses to the literature studied are encouraged and more emphasis is placed upon formal composition, evaluation of texts, detail and style in written work using literature and media articles as stimulus. Spelling and grammar rules continue to be revised and more advanced elements are taught. The aim is to develop existing writing and drafting skills further in a positive and challenging way.

All pupils participate in the Lower Third Shakespeare Evening through which we aim to ensure that the first formal encounter they have with the Bard's writing is a lively and active one. Pupils study one play, and perform selected extracts from it in public. Every pupil is involved in the production; they can act or direct, design costumes or design an advertising campaign for their production.

The English Society for the Lower Third exists to gather and guide those boys with a particular aptitude and enthusiasm for English.

Upper Third Form

The Upper Third Form English curriculum is a preparation in several ways for the GCSE syllabus begun in the Lower Fifth Form. Emphasis is placed on the planning, structuring, editing, and evaluation of written and oral work. Class texts are more complex than those studied in the First to Lower Third Form, and textual analysis becomes more focused and detailed. A body of core texts in the three genres of fiction, drama, and poetry is studied. Examples of these are:

Lord of the Flies

All Quiet on the Western Front

1984

I'm the King of the Castle

Richard III

Up the Line to Death - WW1 Poetry

Touchstones poetry

They are examined on their ability to write an analytical essay in response to an extract from a prose text they have studied.

The English Society for the Upper Third exists to gather and guide those boys with a particular aptitude and enthusiasm for English.

GEOGRAPHY

Lower First Form: "My local area and beyond"

Highlights of the course include a field trip to London to investigate evidence for its site and development; plucking up courage to ask the public questionnaires in South Croydon; making a presentation to the class of their own solutions to local traffic problems. Finally, boys research and write a project using the internet to discover the Antarctic continent, focussing on the pristine environment and the problems it faces.

Upper First Form: “The wonderful world around me”

Boys will spend the Michaelmas term learning about the fundamentals of Geography and the skill of how to use maps. By the end of the term they should be experts in using maps, finding grid references and relating maps to aerial photographs and satellite images, as well as know about the human and physical.

In the Lent term boys will learn about the British Isles, this will include the both physical and human elements. The boys will be able to explain how the British Isles were formed as well as learning its key physical features. They will then focus on the human elements and will be introduced to the socioeconomic and political differences across the United Kingdom. In the second half of the term the boys will focus on glaciation and how the Ice age sculpted and defined the UK physical characteristics.

In the Trinity term, the boys will learn about the continent of Africa and will study its diverse range of physical and human geography, with a particular focus on the Horn of Africa. Later in the term the boys go on the “North Downs walk” field trip which is a 7 mile walk across 200 million years of geological time, our very own Jurassic Park! It forms the basis for learning about the amazing natural history of the landscape in the South East of England where dinosaurs roamed in shallow lagoons and swamps 130 million years ago.

Lower Third: “Human impacts on the planet”

The European Union is a controversial institution which is full of intrigue and cultural interest. Boys discuss the purpose of the EU, the different countries involved and the advantages and disadvantages of membership. They write a project on one member state of their choice and find out how it has benefited from membership. We also debate why some countries, like Turkey, might be less welcome to join. We will also study some of the contemporary issues affected the UK and Europe such as; migration, EU referendum, the Eurozone crisis.

The boys will then focus on the Weather and Climate with a particular focus on European climates. Questions will be answered such as ‘Why is it hotter at the Equator than the Poles?’, ‘Why does it rain so much?’, ‘How do ocean currents affect the weather?’ Boys will collect micro-climate weather data around the School site using accurate digital gauges. They will then map the data using a “GIS” software package which draws digital maps of the results. This will lead onto a contemporary issue study of the Warming Planet and the role we play in creating the problems and solutions to the Global warming problem. Boys study the threats and possible solutions to these environmental crises on some of the world’s most valuable ecosystems. They also look at resource use, the problems associated with fossil fuels and possible solutions.

After Easter, boys will have the opportunity to attend a Geography enrichment trip to the Jurassic coast, where we will be investigating the geology of the world heritage site and will be undertaking fossil hunting! Boys then undertake a study of Asia. They look at development indicators, trade, aid, debt and poverty, and then a more in depth study of China. After the summer examinations we will be focusing on a study of the Rio Olympics and Brazil.

Upper Third: “How to save the earth”

Boys will start using GCSE texts in the Upper Third Form and study an abridged version of the Tourism and Biodiversity GCSE modules before starting the GCSE course proper. Threatened global environments are also studied. Rainforests are threatened by various human impacts, not least global warming. The boys will then

begin the AQA GCSE course study the causes and consequences of tectonic hazards. They will investigate examples of earthquakes and volcanoes and find out how they affected people and how people respond to these events.

HISTORY

The aim of the Lower School History curriculum is to foster a lifelong interest in the subject and to develop the necessary skills to prepare boys to take GCSE History.

Upper First Form

The course is designed to be an introduction to British History based upon the period from the Battle of Hastings to the Wars of the Roses. Although there is a chronological theme, the course is topic-based so that students develop a broad overview of political, economic, social and cultural aspects of the period as well as an awareness of key themes and events.

The course is designed to encourage the development of historical skills through a wide variety of exercises. The first term includes a visit to Whitgift by a medieval re-enactment group. The students study the Battle of Hastings and William the Conqueror's control over England, including an in-depth study of castles. Other themes studied in the first two terms include the Crusades, crime and punishment, village and town life, the Black Death and the Peasants' Revolt.

In the third term, students are introduced to a number of topics from the later Medieval and early modern periods.

This blend of outline and depth study allows a great variety of activities and exercises. During the year, students produce mock newspaper articles, posters, wall charts, document work and mini-projects. They will experience the use of role-play, video stimulations and computer work. They will find that the historical theme is often carried into other subjects such as Art, English and Theology and Philosophy.

All the boys take part in a day visit to the Tower of London to increase their understanding of the period.

Lower Third Form

The course is designed to encourage a development of study skills in preparation for the Upper School. The period studied covers 1485 – 1900, but it is a thematic course focusing upon the idea of continuity and change over time. The main theme in the first term is the religious and political conflict of the later 16th and 17th Centuries from the reign of Henry VII to the end of the English Civil War, including a detailed study of Elizabethan England.

The focus in the second term changes to Britain's political, social and economic development from 1650 – 1900, covering aspects of the Industrial Revolution and imperial expansion.

This broad syllabus allows for a great variation of subject and incorporates political, social, economic and cultural aspects of a period in British History and World History. The students experience a wide variety of activities and materials and develop skills which are important to all humanities subjects.

All the boys will visit Hampton Court palace as part of their study of Tudor Monarchy and Life.

Upper Third Form

Britain's role in the two great conflicts of the twentieth century is the focus for the course. The aftermath of the First World War and the origins of the 1939 – 1945 conflict provide the focus for the second term. Themes are also explored across the period, such as the role of war, civilian involvement in war, key political and economic changes over the period, the social changes of the period. There is also a three day educational visit to the Ypres Salient and the Somme to bring the First World War to life.

ANCIENT HISTORY

Lower First Form

The main text book is the *Cambridge Latin Course (CLC)*, Unit 1. This is sufficiently self-contained to be a course in its own right, as well as providing a good introduction and sound base for subsequent years.

LANGUAGES

Lower First Form

In the Lower First all pupils study Italian alongside a tailor-made Languages Awareness course. The Italian course includes culture and history as well as the language and ties in with the exciting Lower First study trip to Lake Garda. Pupils tend not to have studied Italian before and so this course offers them a chance to start fresh and on the same footing as one another. There is a focus on grammar and language acquisition skills which lays the foundations for their language-learning from the Upper First.

The Languages Awareness course introduces pupils to simplified linguistics, teaching them about the origins of language, universal grammar, the phonetic alphabet, how languages develop over time and interact with one another. Pupils will also learn key skills which will enable them to learn languages more effectively in the future – parsing, strategies for vocabulary learning etc.

CHINESE (MANDARIN)

Upper First Form

Boys follow a course, which puts equal emphasis on the four skills of reading, writing, listening and speaking. In the early stages, more time is spent on oral work to enable boys to become familiar with the sounds and intonation of Chinese. Written work begins with a careful look at the different types of strokes and the order in which they are written. All written work is very structured and supported, using work sheets where boys can trace and copy characters until they are able to write them independently.

During the first year the topics of greetings, self-introduction (including name, age, residence, nationality), family, pets, hobbies, sports, likes and dislikes are covered. Boys will be able to read approximately 160 different characters and write 80 of these. Naturally, the study of Chinese culture also plays a very important role in lessons, and in their first year boys will learn about family life, Chinese New Year (including lantern making and *hong bao*), the Chinese Zodiac and The Dragon Boat Festival. Videos, stories and individual or group research are all used as a part of cultural learning.

Lower Third Form

Boys continue in the same manner as before, still receiving a lot of support to help them with the learning of new vocabulary and characters. The course will move onto new areas such as food and drink, professions, daily routine, the home, clothing and shopping. Boys will be able to read approximately a further 200 characters of which around 100 will be studied for written work.

The study of culture continues to play an important role, including a look at Chinese eating habits, daily routine at school, traditional leisure activities, housing, currency, Mid-Autumn Festival and a deeper look at Chinese New Year.

Upper Third Form

Over the course of the year pupils will learn to talk about a wide range of topics, including eating out, weather and their school life. A group video project will be required on the topic of 'inviting and visiting', which will be both very valuable and enjoyable.

Students will continue to develop all four linguistic skills, using much more sophisticated sentences and employing a variety of structures. There will be an increasing focus on building up their knowledge of Chinese characters, working towards meeting the GCSE requirements. From the Upper Third, the ability to read and write characters from memory will become crucial.

Culturally, the focus this year is on customs when socialising and making plans, traditional Chinese meals, and renowned tourist spots in mainland China and Taiwan.

FRENCH

Upper First Form

In the Upper First Form, a key focus is placed upon training the students to be able to effectively pronounce the sounds of the French language. There is an emphasis on pronunciation early in the course, which is reinforced throughout the year. Key basic aspects of French grammar, such as the present tense, adjective agreement and prepositions, will be taught through the exploration of topics relating to self and family, school, hobbies, and the local area. Frequent visits to the Language Laboratory are possible and the aim is that pupils will gain in confidence through speaking and listening to the language. All core vocabulary and grammar is contained within the Study Booklets distributed each term, which will also form the basis for revision for assessments.

Lower Third Form

Lower Third Form students of French will build upon the basic foundations from the previous year, consolidating the key basics and expanding both breadth of vocabulary and range of linguistic structures. Topics studied include past holidays and excursions, food, healthy living, fashion and shopping. In addition to regular written tasks, students will also continue to work on their oral proficiency through a range of tasks designed to build fluency and confidence. All vocabulary and grammar is contained within the Study Booklets distributed each term, which will also form the basis for revision for assessments.

The CLIL (Content and Language Integrated Learning) set will be taught almost exclusively in French, and, alongside the core curriculum, will study in greater detail the culture and history of Normandy, preparing the students for possible participation in the Lower Third exchange.

Our exchange is with the Institution St Pierre, a school in Caen, Normandy, which takes place towards the end of Term. Students will have the opportunity to stay with a French student their own age, along with their families, which will give them an immersive and authentic linguistic experience while exposing them to a culturally and historically significant region of Normandy.

Upper Third Form

In the Upper Third, students will continue to consolidate the key aspects of French grammar through the exploration of topics such as daily life and routine (both locally and in the Francophone world), the media, future plans and education. By the end of the year, the course aims to have prepared students for their studies at IGCSE level, through sequential teaching of the main tenses, as well as other key grammatical features of the language. Accuracy is emphasised at all stages, and is assessed through regular written work. Frequent visits to the language laboratory are possible and the aim is that pupils will gain in confidence through speaking and listening to the language. All vocabulary and grammar is contained within the Study Booklets distributed each term, which will also form the basis for revision for assessments.

Students in the CLIL (Content and Language Integrated Learning) set will study aspects of geography in addition to the core components of the course. In addition to allowing students to form a broader understanding of the language, this will also permit them to build a stronger cultural understanding of the French-speaking world.

Pupils have the opportunity to take part in an exchange with Collège Jeanne d'Arc in Albertville, where they will stay with the families of students their own age. This gives boys the opportunity to experience French culture and practise the language in an authentic context, whilst benefiting from the Winter Sports programme available near the town.

GERMAN

Upper First Form

The German course in the Upper First focuses on authentic language put into a cultural context in order to enable the learner to use German in real-life situations. The course has a topic based approach combined with clear grammatical progression. The textbook *Lernpunkt Deutsch 1* is very thorough and stimulating and designed to meet the requirements of the National Curriculum. It is colourful and lively and provides an in-depth introduction to the language and culture of today's German speaking countries via a wide range of differentiated activities that are enjoyable and the emphasis at this stage is on developing all four skills: listening, speaking, reading and writing.

The course also encourages grammatical awareness and more traditional methods of language study such as regular vocabulary learning as well as the practice of relevant role-play tasks. Boys will have many opportunities to practise their newly acquired language skills using many authentic German websites and interactive software.

Lower Third Form

The course builds on the basic skills already acquired with a great emphasis on developing reading and writing in German. Pupils learn to cope with authentic materials and to express their own interests and opinions in German. Pupils have the opportunity to take part in an exchange with the Wilhelm-Löhe-Schule in Nuremberg. The German group visits Croydon in the Lent term for eight days and follows a programme of activities. Whitgift boys visit Nuremberg for eight days at the end of the summer term and stay with German families. This gives boys

the opportunity to experience German culture and practise their German in an authentic context.

Upper Third Form

Pupils continue to add to their range of German vocabulary, as they progress on to new topic areas. The two main topics covered are media and the environment. With increased emphasis on listening and speaking skills, pupils make use of the language laboratory, and gain greater confidence in spoken German. At the same time, reading and writing are developed further, and pupils show much more (grammatical) accuracy in their writing.

Grammatical awareness and accuracy become much more important this year, as the tenses which form the core of GCSE work are covered fully. Alongside the present tense, pupils have to show some competency when using past and future tenses. Tenses are part not only of written tasks, but are also encouraged in oral work. Question and answer sessions and other pair work activities help to reinforce the correct use of tenses.

Pupils have the opportunity to take part in an exchange with the Nymphenburger-Gymnasium, Munich. Whitgift boys visit Munich for eight days in July and stay with local families and the German group visits Croydon for a week earlier in the year. This gives boys a valuable insight into German life and culture, and they are able to use their language in the supportive atmosphere of the host family and school.

JAPANESE

Upper First Form

During the first half of the Michaelmas term boys concentrate on learning the hiragana syllabary, along with simple spoken phrases to introduce themselves. By Christmas they are able to read and write short paragraphs in Japanese, and give an oral self-introduction. At the same time, boys start to master some of the kanji characters originating from China, which are artistic and exciting to learn.

Over the next two terms, boys work towards writing essays in Japanese, covering topics such as their likes and dislikes, food and drink, family, school, daily routine, pets and much more. Throughout the year there is a strong emphasis on the spoken language, and there are opportunities to practise with the native Japanese Tutor. Boys are always amazed at how much they learn in such a short time.

Lower Third Form

During the first term boys concentrate on the topic area of school and they learn the third and final script. Katakana is used to write words taken from foreign languages, and so boys are able to learn how to write the names of their favourite pop groups, sports and foods.

Their knowledge of kanji, the Chinese characters, is also developed over the course of the year, with new characters being learnt as the relevant topics are covered. By the end of this second year of Japanese study, boys will know around 90 kanji.

The topics covered in the Lower Third include free time activities and hobbies, physical descriptions and school routine. Three new tenses are learnt, and boys start to use the language in more complex ways in their written work. Throughout the year there is a strong emphasis on the spoken language, with regular work on role plays and dialogues, and there are opportunities to practise with the native speaking Japanese Tutor.

Japanese culture also plays a key role in the course, as boys explore the customs and traditions associated with the topics they are studying, such as the Japanese school day and martial arts.

Upper Third Form

During this year boys learn to talk about a wide range of topics, including fashion, weather, aches and pains, and their daily routine. At this stage they are developing their linguistic skills, communicating using much longer and more sophisticated sentences, using a variety of verb tenses so that they are fully prepared as they approach the start of the GCSE course the following year.

Culturally, the focus this year is on traditional seasonal events, customs and traditions, and they also look in detail at what happens at typical Japanese festivals. The study of kanji characters continues, and by the end of the year boys will know something approaching 150 of the 200 characters that they are required to know for GCSE.

LATIN

Upper First Form

There are two main aims. The first is to teach comprehension of the Latin language for reading purposes. The second is to develop from the outset an understanding of the content, style and values of Roman civilisation. The course presents the language not as an end in itself, nor as an instrument of general mental training, but rather as a means of gaining access to literature and the culture from which it springs.

The material of Unit 1, containing as it does authentic topics and characters, is set firmly in a Roman context and is centred on the family of the banker Caecilius Iucundus, who lived in Pompeii in the first century A.D. The story-line from chapter to chapter gives a very real insight into the social structure and culture of the town in the year before the eruption of Vesuvius (e.g. Education, Daily Life, Slavery, Religion, Political organisation, Gladiators, Baths etc.).

Although the objectives and teaching emphases are quite specific (fluent reading/study of Roman Civilisation), the skills imparted are contrastingly diverse. Linguistic, analytical, dramatic, artistic and inter-personal skills are enhanced through a variety of techniques (translation, role-play, art-work, comparative studies through videos and online resources, etc.) and all these elements interlock in what has proved to be a stimulating and hugely enjoyable course. There is a popular biennial visit to Rome and Sorrento, which complements the above material. Four boys from each set also participate in the regional Latin Reading Competition in March each year. The course is complemented by visits to Fishbourne Roman Palace and Bignor (Roman Villa) in July.

Lower Third Form

The boys who have opted for Latin, continue to read the Cambridge Latin Course (Units IIA and IIB). After the excitement of Pompeii, the survivors of the Vesuvius eruption visit Roman Britain (IIA) and Egypt (IIB). As with Unit 1, the characters and atmosphere are authentic and the story-line, especially in the Alexandria chapters, is extremely compelling.

In Unit II A, the main themes are the 'Romanisation' of a 'new' province, the reaction - and sometimes opposition - of the local kings to the invaders (e.g. Togidubnus, King of the Regnenses), the corruption of the governors and a general analysis of Roman Britain in the first century A.D. The main themes of Unit IIB are racial tension and

conflict in Egypt, Roman Science, Medicine, Eastern cults/Religion and the city of Alexandria.

The skills imparted in the Upper First Form and the emphases of Unit 1 are developed and enhanced by utilising the obvious historical and sociological potential of the above themes. The course is complemented by a visit to the Roman Baths in Bath in July. Many Lower Third Formers also choose to participate in the biennial study-visits to Italy.

Upper Third Form

Students who opt for Latin continue reading the Cambridge Latin Course (CLC).

There are two main aims: the first is to continue to develop each pupil's comprehension of Latin in general, and language in particular. The course itself and the teaching emphases do not present the language as an end in itself nor as an instrument of general mental training, but they enable each pupil to read and understand Latin both for enjoyment and as a preparation for the prescribed GCSE texts encountered later. This, of course, enhances command of grammar and sentence structure, not only enriching each pupil's English vocabulary by showing word origins but also imparting insight into the structure and vocabulary of the Romance languages. The second aim of the Upper Third Form course is to further each boy's comprehension of the content, style and values of Roman civilisation.

The CLC develops both of the above facets (language/culture) by a carefully structured and exciting narrative, telling the story of a small group of Romans who travel extensively around the Empire, from Pompeii via Alexandria and Britain to Rome. Alongside Latin-to-English translation, the study of background material is emphasised and this offers rich potential for artistic, dramatic and technological project work. English-to-Latin translation is also – very gently – introduced in the summer term.

Many students from this year group also chose to participate in the biennial study-visits to Rome and Naples.

GREEK (Third Foreign Language)

Classical Greek is introduced as an option in the Upper Third Form. The vast majority of those taking the GCSE at the end of the three-year course are past German or Latin students. In Greek, as in Latin, the linguistic, literary and cultural areas of the subject are stressed. The textbook used is '*Greek to GCSE*', which uses modern methods and shares the same aims as the Cambridge Latin course. The skills of reading and translating Greek are rapidly developed by meeting both adapted and "pure" Greek passages. Again, the rich scope that the world of Fifth-Century Athens offers (sculpture, architecture, philosophy, tragedy, history, science, etc.) is explored, giving those who opt for Greek a real insight into the bedrock of Western culture, not to mention a concomitant improvement in linguistic/grammatical skills.

Please note that this course is taught off-timetable.

SPANISH

Upper First Form

The main aim of the Spanish department is to ensure that pupils enjoy learning Spanish and consider the knowledge of Spanish as a useful tool for life.

From the beginning, boys are taught in the target language and are then given ample opportunity to practise their language skills. A personalised Whitgift programme of study is followed, and its communicative element encourages the pupils to use Spanish creatively right from the start. The emphasis of this year is not only to lay down a solid grammatical base and increase the boys' range of vocabulary, but also to build up their confidence so that they use the language with enthusiasm. This will stand them in good stead for the wide range of exchanges on offer later on in the School.

Lower Third

In the Lower Third, we continue with an exciting, communicative approach to Spanish. Topics such as going shopping, food, tourism and going out will be discussed and the several verb tenses will be introduced. The Spanish Department place great emphasis on building up confidence in every pupil so that speaking in the target language becomes an enjoyable experience, as well as a productive one. Lower Third students are given the opportunity to take part in a week-long exchange to Zaragoza. This is a great opportunity for the students to experience Spanish culture first hand and practise their Spanish in an authentic context. An integral part of the course is the knowledge of Spanish-speaking countries which they will develop throughout the year.

Upper Third

In the Upper Third we start the IGCSE course. The emphasis is to widen the range of Spanish vocabulary and start developing the skills necessary for coping with the IGCSE. Grammatical accuracy is important and will be focussed upon throughout the year. The main tenses will be covered to lay solid foundations for future success.

Pupils also have the fantastic opportunity to participate in a language exchange in Toledo which gives the boys the chance to practise Spanish in an authentic context and to experience Spanish life.

BILINGUAL TEACHING

Whitgift has an established tradition of bilingual or CLIL (content and language integrated learning) teaching. This exciting approach involves teaching the culture, history and geography of French, German or Spanish speaking countries through the medium of those languages. The aim is to bring the pupils up to a high level of fluency and increase the breadth and depth of their engagement with the countries whose languages they are studying.

The success of this approach is reinforced by the numerous opportunities boys have to spend time in German, French or Spanish cities and regions. All boys studying in the bilingual sets are encouraged to take part in the multitude of trips and exchanges offered by the Languages Department. They also use modern information technologies to work on projects with students abroad adding a real sense of purpose to their language studies.

Bilingual sets are formed at the beginning of the Lower Third in consultation with the Upper First teachers, who consider performance throughout the Upper First, including but not limited to, pupils' achievement in the End of Year examination.

SECTION FRANÇAISE

In September 2009 Whitgift introduced a unique programme for French native speakers, which was established with the cooperation of the French Embassy. This programme, called Section Française, is aimed at boys with a French-speaking background who are brought up bilingually and are fluent in French and English.

The aims of the section are twofold: firstly we want to maintain and develop both French and English at mother-tongue level, making sure the boys become truly bilingual; secondly we want to offer boys the chance to study for the Bilingual International Baccalaureate in the Sixth Form, a rare and very desirable qualification.

Boys will follow the Whitgift curriculum in all subjects in English apart from French, where they will follow the type of curriculum promoted by the French Ministry of Education. Boys will be taught by native speakers and study grammar, literature and cultural studies. There will also be the option to study French history and geography through a distance-learning course with a prestigious school in France.

MATHEMATICS

There are two broad aims in the Lower School. The first is to instil a familiarity with the main ideas of Number and Shape and Space. This includes a feeling for prime and composite numbers, squares, cubes and number patterns, together with decimals, fractions and percentages, and also good spatial awareness in two and three dimensions. The second aim is to introduce some of the ideas of more Formal Mathematics, in particular using a letter to stand for a number and solving linear equations. Mental Arithmetic plays a large part in the Lower School curriculum and calculators are not used regularly until the Lower Third Form. We recommend the Casio FX range and in particular the silver Casio fx-991 ES Plus.

Lower First Form

Much work is done to improve pupils' skills when working with numbers, measurements or shapes. The concept of replacing numbers by letters is used, particularly when searching for number patterns. An introduction to basic algebra is also included. Measurements of time, angle, length, area, volume and mass are introduced and used in practical situations including a statistical survey and scale drawings. Symmetry and congruence of 2D and 3D shapes together with the introduction of coordinate systems form the basis of the geometrical part of the course. How the probability of an event occurring can be measured is also considered. The current text used is *Maths on Target* by Elmwood Press.

Upper First Form

We aim to reconcile the many different previous experiences and levels of skills of the pupils in Mathematics. This is achieved through an emphasis on mental arithmetic, basic manipulative skills, simple structured projects and puzzles. By the end of the year pupils should be completing level 6 of the National Curriculum and therefore be confident in the use of any type of number, in algebraic formulae and simple equations, in the geometry of triangles, and in the handling and display of statistical data including ideas of correlation and simple probability. There is no setting in this year group. The current text used is *Essential Maths 7H* by Elmwood Press.

Lower Third Form

By the end of this year, pupils should be able to carry through substantial tasks and solve quite complex problems by breaking them down into smaller, more manageable tasks. They should be able to justify their generalisations or solutions, showing some insight into the mathematical structure of the situation being investigated whether it be theoretical or practical in nature.

This is achieved through a greater emphasis on learning and applying more advanced techniques, whether they are arithmetic, algebraic or geometric. In Arithmetic, proportional and percentage changes and techniques of estimation and approximation are studied. In Algebra, the solution of simultaneous equations, inequalities, the use of brackets and harder graphs are all applied to the solution of problems. In Geometry, we study the circle and polygons including the special quadrilaterals. We also introduce basic set theory. The boys are placed in either an upper or lower set – both sets cover the same syllabus. The current text used is *Essential Maths 8H* by Elmwood Press.

Mathematics lies at the core of many areas of Science, Technology and Engineering. In the Lower Third Form Mathematics some fundamental principles are established for the application of Maths to a variety of different contexts. These include a consideration of estimation methods and degrees of accuracy, understanding of compound measures (rate of flow, speed, density) and appropriate units and unit conversions, use of practical formulae and the construction and interpretation of graphs in practical situations. This is part of the STEM initiative.

Upper Third Form

Many of the principal GCSE topics are introduced for the first time in the Upper Third Form. These include: Trigonometry, rearranging formulae, ideas of similarity and further development of algebraic skills to include treatment of quadratic functions; the text used is the *Edexcel IGCSE Maths Specification A Student Book 1*. The boys are placed in sets according to ability – currently there are 12 sets (6 in each block). The syllabus is the same for all boys in the year, but those in the top sets are given additional extension material. It is possible to make a change of set, as appropriate, following internal assessments and in discussion with both a boys' teacher and the Head of Maths.

MUSIC

The foremost of our aims is that we want every boy in the school to find enjoyment and confidence through musical expression. The Lower School curriculum is designed to give every boy opportunities to do this via a thorough grounding in musical performance, composition, listening, singing and theory. The emphasis is always on practical music-making and the development of understanding through participation and a focus on musical skills. The course is project-based and boys explore music of different styles from a broad variety of musical cultures, both contemporary and historical. Each boy will have the opportunity to use a wide variety of instruments including pianos and keyboards, tuned and untuned percussion, acoustic guitars, and genuine Ghanaian djembes.

In addition all boys will engage with Music Technology and where appropriate learn to compose and structure their music using a variety of software to edit and manipulate sound, record performances and produce high quality musical scores.

Pupils' live performances are recorded and used to aid appraisal and assessment. At all times the boys are supported in developing the ability to reflect about the music

they hear and create, and to be able to talk about this with clarity and conviction and a natural sense of the visceral aspects of the subject.

Music plays an important part in the lives of every boy in the School and so in addition to the curriculum; each boy has the opportunity to learn a musical instrument for at least a term during their Lower School years. Every boy will take part in at least one major concert during the year.

Lower First Form

Central to the Lower First curriculum is singing. This develops a boy's ear and enables him to learn the skills required for high quality musical performances. The boys engage in a variety of projects that develop performance, compositional and listening skills. The emphasis at this stage is on the development of a strong sense of pulse and rhythm. Through detailed study of the instruments of the orchestra, pupils explore timbre as a starting point for understanding music and create a variety of simple compositions. They engage with basic staff notation and with graphic notations and use a variety of percussion and keyboard instruments during the year.

Upper First Form

Singing is a central element to the course and the boys build upon the skills established during the Lower First. They learn to control the sound with greater confidence and take a leading role in performance. Boys expand their understanding of music, and the elements that combine to create it, by developing musical skills in a variety of performance intensive projects including jazz improvisation and African drumming. They study a variety of classical, popular and world music and analyse the way in which it is put together. During the year they work on the computers and learn to use Sibelius notation software to input music and create scores of their work and Garageband to arrange musical patterns and record simple keyboard melodies.

Lower Third Form

The Lower Third curriculum begins to develop more harmonic awareness, building on the boys' knowledge and experience of rhythm and melody from the Upper First. This is achieved through a series of projects containing listening, composing and performing tasks. During the year all boys learn to play chords on both the acoustic guitar and the piano and learn how to structure those chords into progressions. Alongside this, they further develop their improvisation skills over chord patterns through a variety of projects including the Blues. The boys examine the ways in which variations in music occur and they develop their Computer Science and notation skills using Sibelius to create their own set of variations. Using Garageband software they learn to make an Afro-Cuban arrangement that has interesting textures by manipulating a combination of audio loops and their own recorded material.

Upper Third Form

In the Upper Third, in which Music becomes an optional creative subject, boys continue to expand and refine the skills they have developed earlier in the course. They are given more autonomy to select the music they wish to learn during the Song writing project where they form bands and work to make their own cover version of a song. Later they apply what they have learnt to create their own songs which can be recorded and mixed using Logic Pro. Club Dance music is explored and boys create compositions using Logic Pro. They also learn about Minimalist techniques in music and explore a variety of musical styles that have been used with the moving image from classical to atonal and electronic. This is done using acoustic instruments and their Computing Science skills.

By the end of the year they should be confident at composing music on their own as well as in group situations and be confident and adept at analysing and discussing the music they hear using detailed musical vocabulary.

PERSONAL SOCIAL HEALTH AND ECONOMIC EDUCATION (PSHEE)

All pupils in the Lower First Form, Upper First Form and the Lower Third Form have two lessons of PSHEE per two week cycle. The subject is taught in timetabled lessons by teachers who have received appropriate training. In the Upper Third, PSHEE content is delivered through Critical Reflection, which happens once per fortnight. In addition, one form time in two weeks is dedicated to PSHEE content. This is delivered by the Form Tutor.

The syllabus has been devised to complement other curriculum subjects providing pupils with the opportunity to develop key skills. The course is divided into three main areas: self-awareness, citizenship and health. Pupils are encouraged to reflect on their learning at the end of each module of the course.

The course is supplemented by presentations from outside speakers on the following topics:

Upper First: Personal Safety, Substance Misuse

Lower Third: Robbery/Burglary

Upper Third : Alcohol and Drugs, Self Esteem

PHYSICAL EDUCATION AND GAMES

There is an extensive Physical Education programme in the Lower School which forms part of the weekly curriculum. The Physical Education syllabus should not be viewed in isolation: there is a broad House and sports club co-curricular programme where other activities such as badminton, cross-country, fives, golf, and judo can also be enjoyed. Regular Saturday school fixtures for A, B, C and D teams, as well as the Sports Development Programme for the First Form enhance the opportunities still further. It is hoped that all boys can find their particular sporting interests at whatever their level.

The programme is designed to develop core skills in body management and hand-eye co-ordination coupled with basic health and fitness understanding including the development of a fitness profile. Towards the end of each course there is an opportunity for some ability grouping and assessment at teacher and pupil level. Topics are covered in half term blocks.

Lower and Upper First Form

Areas covered include: free dynamic activity (educational gymnastics); free movement using apparatus (including basic floor exercises); elementary ball skills including racquet work; small theme based team games (benchball, ball skills, fun games); circuit training; athletics; track and jumping events, swimming.

Lower Third Form

The syllabus follows that of the First Form, however, it also encourages boys to be more self-critical of their levels of performance particularly in gymnastics and basketball. Opportunities for creativity exist during circuit training where individuals are involved in effective construction of fitness sessions.

Upper Third Form

Areas covered include health and fitness, basketball, badminton, short tennis and athletics (track and field). At the start of the year boys are inducted into the fitness suite and in particular the weights machine area. This enables them to safely use the mechanically controlled machines and increase their awareness of body weight exercises. Boys also cover certain anatomical and physiological aspects of sport: the need for warm ups and cool downs, muscle groups being used, etc.

Swimming

In this programme the general aim is to ensure each pupil develops the highest possible standards of watermanship skills. Lower First Forms are given a thorough background to hygiene and safety, stroke drills and mini-polo fun games. Confidence in the water is considered a priority; boys with particular difficulties are given specialist help.

Water safety skills are covered in the Upper First Form along with basic diving skills. Non-swimmers continue to have personal help. It is hoped that, by the time they reach the Lower Third Form, all boys can pass the Whitgift Swimming Test where the programme is extended still further with more intense stroke drills and an introduction to medley swimming. Water polo and effective racing diving along with preliminary resuscitation skills provide further challenges.

The swimming curriculum for the Upper Third Form revolves around the development of the four major strokes, and the progression of water skills by introducing water-polo, diving and life saving.

Outside of the timetable there are opportunities for squad swimmers to train at least eight times a week, for recreational swimmers to participate in at least three extra lessons, and for non/progressive swimmers to develop their confidence.

GAMES

This programme complements the P.E. and swimming activities, offering in the Lower School a firm foundation in rugby, hockey and cricket. Other activities are also arranged such as association football, tennis, badminton, squash and fencing.

In the Upper Third Form a wide range of activities is provided. The core sports are rugby, hockey, association football and cricket and, if required by the school team, the boy will pursue that sport. However, for those not involved in these core sports there are opportunities to try rowing, swimming, athletics, badminton, basketball, fencing, fives, outdoor pursuits, squash and tennis.

The activities are devised to enable the boys to have an extended programme of study so that by the time they leave the school they are able to pursue a healthy lifestyle through physical activity, having the necessary knowledge and understanding of a wide range of sports.

Lower School SCIENCE

A key skill that develops throughout their journey in science: How Science Works

Pupils are introduced to the role of Science in society. They investigate how scientific evidence is collected, and its relationship with scientific explanations and theories. They study how scientific knowledge and ideas change over time, and how decisions about science and technology are made in different situations, including contemporary situations and those raising ethical issues. They are then able to evaluate the impact of scientific developments on individuals, communities, or the environment.

Junior Science: Lower First Form

The course is divided into five topics:

Lab safety and combustion includes the study of fuels, combustion and combustion products, combined with learning how to work safely in a laboratory. *Space and Beyond* allows students to explore how the seasons occur, what makes up the solar system and why eclipses occur. Historical studies of how ideas about the solar system have changed and how telescopes were invented are also covered. *Water and Solubility* is a chemistry-based topic, where the physical and chemical properties of water are investigated as well as uses and treatment of water. The *Ecology* topic includes the study of living organisms in their environment and makes use of a variety of plants, animals and habitats that we have on the school site. *Forensic science* is a topic that draws on analytical techniques and observation skills, learnt throughout the year and links them to real life applications.

Junior Science: Upper First Form

Pupils start the course working in laboratories where they will meet a whole range of equipment and develop proper rules of laboratory practice both in the interests of safety and for better learning. The varied activities are important in the development of practical skills and investigational processes in science and the more abstract skills of observation, fair testing, hypothesising and predicting.

The course involves experimental work, discussion and reporting, and is intended to develop skills such as observation, the drawing of conclusions, co-operation and communication (both written and oral). The content of the course is based on the National Curriculum and the department's ideas of what constitutes useful scientific learning. Topics covered include amongst *Acids and Alkalis, Light, Cells Energy Resources, Reproduction, Chemical Reactions and Sound*.

Separate Sciences: The journey continues in the form of Biology, Physics and Chemistry

Lower Third Form

Pupils are taught all three sciences via a bespoke curriculum with an emphasis on designing practical experiments, controlling variables, carrying out fair tests, collecting and analysing data via graphs or other forms of data analysis. Conclusions can then be drawn and experiments evaluated – employing the full scientific method. We finish the year with some extensive practical work where skills learned can be fully employed.

Upper Third Form

All science courses will now follow the Edexcel IGCSE course. We run a linear course which is only examined in the summer of the Upper Fifth – there are no modules spread throughout the Lower and Upper Fifth years. There is no coursework assessment, although practical work will be a feature of the new course and practical principles will be tested in the examination papers. The science that boys study in the

Upper Third provides a foundation for the courses that will deliver the required syllabus content from the beginning of the Lower Fifth in Chemistry and Physics. Biology will begin to pick up IGCSE curriculum topics in Upper Third. An outline of IGCSE science in time line format would look like the following:






- ▶ Upper Third: Pupils build up foundational science knowledge in classes taught by subject specialists. The emphasis being on fundamentals – an enjoyment of the sciences based on understanding key principles. Biology will begin to teach IGCSE topics. Pathway assessment will give an indication of what route pupils might be heading towards in Science.
- ▶ End of year exam in Upper Third moderated by teacher recommendations leads to the formation of Lower Fifth science sets
- ▶ Lower Fifth: All sets study EDEXCEL IGCSE sciences – pupils complete internal end of unit tests which are used to track progress. Set changes are rarely made at this stage.
- ▶ End of year exam in Lower Fifth leads to adjustment of sets as necessary. Approximately 40% of pupils will go on to study Double Award with 60% taking up Separate Sciences.
- ▶ Upper Fifth: Pupils in Double Award sets will be taught Double Award material only; still targeting a maximum A*A* grade if possible. For those doing Separate Sciences the January mock exams will be used as a final measure to confirm the optimal pathway towards good grades. Pupils who are struggling to achieve an A grade in all three sciences will enter a review and discussion process that is likely to result in Double Award entry.
- ▶ May/June of Upper Fifth: 60% of Whitgift pupils will sit 2 exams in each science, achieving 3 IGCSE's. 40% of pupils will sit 1 exam in each science to gain 2 IGCSE's worth of science.

EDEXCEL IGCSE Biology

Topics covered in Biology

- Adaptations
- Lung and heart
- Diffusion
- Digestion
- Plant biology
- Ecology

The aims of this course are:

-  To give students a knowledge and understanding of biological facts, concepts and principles To develop an appreciation of the significance of biological facts, concepts and principles and the skills needed for their use in new and changing situations;
-  To develop an appreciation of the importance of accurate experimental work in scientific method and reporting;
-  To enable students to form hypotheses and design experiments to test them;
-  To sustain and develop an enjoyment of, and interest in, the study of living organisms;
-  To enable students to evaluate, in terms of their biological knowledge and understanding, the benefits and drawbacks of









scientific and technological developments, including those related to social, environmental and economic issues.

EDEXCEL IGCSE Chemistry

The topics covered are






- Particle Theory
- Common Chemical Reaction
- Rates of Reaction
- Atomic Structure, Ions and Formulae
- Evaluation Skills
- Investigation


The aims of this course are:

-  .To develop students' understanding of the unifying patterns and themes of chemistry;
-  To further students' appreciation of the practical nature of chemistry and develop experimental and investigative skills based on correct and safe laboratory techniques;
-  To develop an appreciation of the importance to scientific methods of accurate experimental work and reporting;
-  To develop students' ability to form hypotheses and design experiments to test them;
-  To develop a logical approach to problem-solving in a wider context;
-  To develop an understanding of the widespread importance of chemistry and the way materials are used in the world;
-  To show how the work of the chemist has social, industrial, technological, environmental and economic consequences for the community;
-  To prepare students for more advanced courses in chemistry or courses which require them to have a knowledge of chemistry.

EDEXCEL IGCSE Physics

The aims of this course are:

-  To impart a systematic body of scientific knowledge and the skills needed to apply this in new and changing situations in many domestic, industrial and environmental contexts;
-  To foster an appreciation of the practical nature of physics, and develop experimental and investigative skills based on correct and safe laboratory techniques;
-  To develop an appreciation of the importance of accurate experimental work and reporting to scientific method;
-  To enable students to form hypotheses and design experiments to test them;
-  To enable students to evaluate, in terms of their scientific knowledge and understanding, the benefits and drawbacks (including social, environmental and economic) of scientific and technological developments;

 To enable students to select, organise and present information clearly and logically, using appropriate scientific terms and conventions.

As a major part of the School's STEM initiative all Upper Third pupils will take part in an eight week STEM project run in the Michaelmas or Lent terms on consecutive Thursday lunchtimes. There will be wide-ranging opportunities to explore a science topic in depth under the guidance of a science.

STUDY SKILLS

As part of the school-wide programme of academic enrichment and support, boys in the Upper First, Lower Third and Upper Third Forms participate in a Study Skills programme. The boys become aware of how we learn things and how we might learn things better. The sessions focus on the importance of following instructions, how our diet affects our ability to learn, different learning styles and how to solve problems systematically and creatively. Developing an awareness of how we learn is a great foundation as we look to equip the boys with the skills to become effective and independent lifelong learners as they progress through Whitgift.

THEOLOGY AND PHILOSOPHY

The Department of Theology and Philosophy at Whitgift is committed to teaching pupils to explore the key existential questions:

Who am I?

How do I relate to others?

How do I relate to the world?

Pupils are asked to consider and develop their world-view, be it secular, post-modern or theistic. The theistic world-view is taught with reference to the major world religions, with recognition of the importance of Christianity for western faith and civilization. The aim of the department is to give pupils the opportunity to look, question, understand and discover truth for themselves. Academic rigour is maintained at all times through the development of the subject specific skills of critical thinking, analysis and empathy.

The courses contribute to the moral and spiritual development of pupils by allowing them the opportunity to discuss their own experiences of faith and religion. This enables them to grow in self-confidence and develop positive attitudes towards people who might hold beliefs different to their own.

Lower First Form

The aim is to give pupils knowledge and understanding of why people are religious and how religion began. Pupils are made aware of the fact that religion is ancient, possibly starting with early man worshipping the moon, sun and subsequently other forces of nature. This leads to a study of animism, tribal religions, polytheism and finally the emergence of monotheism, within Judaism, the cornerstone of western civilization.

Upper First Form

The course starts with an introductory unit on the life of Socrates which covers the career of Socrates as depicted in the major works of Plato and introduces boys to logical reasoning. Boys then complete a unit examining the idea that there are broadly

speaking three competing worldviews – theistic, secular and post-modern. They will learn key features and assess the relative merits of these different outlooks. In the Lent term they complete a theological investigation into the Life of Jesus. This is then followed in the Trinity Term with a further Theological unit reflecting on Christian Doctrine through the Narnia stories.

Lower Third Form

The aim is to study three of the world faiths: Islam, Hinduism and Buddhism. World religions are dealt with individually, and seriously, as believers approach them this way. History, themes, beliefs and practices are all comprehensively covered to provide the pupils with knowledge and understanding of what it means to be a religious believer. This is specifically explored through visits to places of worship.

Upper Third Form

In the final year before GCSE we seek to develop conceptual awareness and skills through a Philosophy of Religion course. The scheme of work focuses attention on the issue of God's existence. It tries to do so by addressing itself to the question "Can you prove to me that God exists?" It is an exploration of the religious concerns of the pupils, which also has the advantage of being cross-cultural.

The course firstly examines the nature of explanation as found in science and religion. Secondly it considers the various historical attempts that have been made to provide the evidence that would either prove or disprove God's existence. We look at what is generally agreed to be the ambiguous nature of this evidence and the course tries to make clear how religious and non-religious people make decisions about God's existence within this ambiguity. Thirdly the course explores issues relating to God and suffering in the world and finally, we consider death and life after death.