



# Curriculum Guide Year 10

# **Vision and Values**

# Shared vision: have a voice and access to leadership

**all:** be inspired by your school experience

Achievement is for

Ben name, greatest

Enjoyment for all: be happy and encouraged to participate.

Well-being:

feel safe, be supported and have a champion.

Personalised learning: eceive regular feedback on your progress and next steps guidance.

High standards and expectations: seek challenging, meaningful and manageable learning.

Mutual respect:

**Confidence:** 

develop resilience, self

belief and aspiration.

be polite, tolerant of others and celebrate diversity.

> Life-long learning: have guided future pathways and develop independence and wider employment skills.

A pride and place in our community: take responsibility and act as role models and

A pride and place

# **Curriculum Vision**

Our mission is to ensure every student leaves Great Sankey articulate, resilient, compassionate and culturally aware. That they are inspired to contribute to society, are able to pursue careers they are passionate about and live, healthy, happy and fulfilled lives.

Our ten school values fall into *three pillars of community, learning and self* and these thread their way throughout our curriculum. We believe that if children understand the purpose of what they are learning and why they are learning it; not only will they be more engaged but they are much more likely to remember what they have learnt and be able to use it again in the future.

We also recognise the huge impact that learning beyond the classroom can have but appreciate we don't know which moment at school will inspire a child or resonate with them later in their life. It could be the inspirational careers speaker, a museum or gallery visit, the Duke of Edinburgh's Award expedition, a science experiment, or be on the sports field or theatre stage. What we do know is that if we ensure children seize as many opportunities as they can something has more chance to stick and act as a catalyst.

To achieve all of the above we have designed a knowledge based, word rich curriculum and we evaluate what knowledge and skills pupils have gained (at each stage) against expectations. The impact of innovations such as knowledge organisers and student self-selected KS4 target grades, will be reviewed regularly and remodelled to help all pupils perform well. We also won't be shy about investing in our staff to ensure they are using the most effective techniques to help students secure what they learn in class is committed to their long term memory, regardless of their starting point. Furthermore, we understand that those extra important details such as careers guidance, RSE, PHSE, British Values and enrichment should not just be bolted on but play an integral part of 'what we do' as a school community. We are already the largest provider of the Duke of Edinburgh's Award in the North West and the largest provider of the John Muir environmental award nationally and are planning to create a bespoke approach to encouraging and recording participation in extra-curricular provision.

All of these plans and actions are evidence-based and research-driven.

In short, our ambition is to create a dynamic learning culture and deliver a bold curriculum and personal development programme that ensures that both students and staff have the courage and determination to **dare for greatness**.

# **Curriculum overview – Year 10**

# What will my child study?

In year 10 students begin courses which will lead to formal qualifications. Our curriculum is broad and balanced; we place great value on academic, creative and technical subjects. Students study the core subjects of English, maths, science, PE and PSHE and are able to select from a large range of options subjects. The following pages provide an overview of what students will be studying each term.

KS4 Options				
GCSE courses Vocational courses				
Art and Design	Food Preparation and Nutrition Spanish BTEC Tech Award in Creative Media Product		BTEC Tech Award in Creative Media Production.	
Business	Geography	Psychology	Graphic Design V Cert	
Design and Technology	History	Religious Studies	Information Technology Cambridge National Award	
Drama	French	Textiles	BTEC Sport Studies	
Electronics	German	Music	Music Technology V Cert	

# How is the curriculum sequenced?

Research around memory and how children best learn has been used to inform our curriculum planning. Subject specialist staff have thought carefully about the curriculum we deliver. Knowledge and skills are sequenced so that these are taught in a sensible order allowing for regular revisiting of knowledge and retrieval as complexity and depth build.

# How will my child be assessed?

Regular assessment and high quality feedback are essential for students to learn effectively. Students are given clear, regular feedback following each assessment they complete which consists of what went well, and areas that could be even better. Students then address the areas that could be better through Dedicated Improvement and Reflect Time (DIRT) opportunities This information should be clearly identified on green paper in student's books. Students complete formal assessments towards the end of each term, which like in earlier years assess all of the knowledge and skills taught to students up to that point. By the time students reach the end of year 10 they will be completing full past papers to help with preparation for formal exams at the end of year 11. Formal 'mock' exams take place in June of year 10. Each term teaching staff report an 'on track for' GCSE grade from 9-1. In vocational subjects a pass, merit or distinction is reported.

# Homework

In English, maths and science students will be set 3 homework activities per fortnight. In all other subjects they are set two homework activities per fortnight. Homework will consist of a range of activities from using GCSEpod to completing exam questions or essays. GCSEpod homework will be set during week B.

# How can I support my child?

# 5 Top Tips

1. Encourage students to use their revision guides (KS4) to regularly review knowledge using techniques such as read, cover, write, check.

- 2. Attendance and punctuality directly relate to student attainment, avoid non-emergency medical appointments during the school day for example.
- 3. Talk to your child about what they have been learning at school, this helps reinforce understanding.
- 4. Download the SIMS app so you can monitor attitude to learning scores in lessons and homework deadline.

5. Support us and your child by attending parent consultation evenings.

If you would like to know more about our curriculum please contact Mrs C Kane, Deputy Head, christina.kane@greatsankey.org

#### Art Curriculum Vision:

In the Art department we aim to create an environment in which every child can feel confident and succeed. To encourage individual creativity and nurture a passion for the subject. We aim to enable our learners to develop an understanding and appreciation of the diversities of life, be it cultural, geographical, social, economic or skill. Our schemes of learning cover a vast array of inspirational starting points allowing our learners to critically reflect and gain knowledge & understanding not only from those around them but from those who have gone before. Students are encouraged to take this knowledge forward whilst problem solving, skilfully creating, experimenting and finally producing their personal outcome. Underpinning the practical element of our teaching and learning is a focus on building self-confidence. When our learners participate in individual, group actives or critical reviews, the feedback they give builds self-respect by teaching them to accept constructive criticism and praise from others. This in turn develops character, acceptance, resilience and supports good mental health; invaluable life skills our learners will take forward into adulthood. The Rt Hon Jeremy Wright MP addressed the need to teach these life skills to ALL in his 'Value of Culture' speech in January 2019.

"Skills of self-confidence, teamwork and dedication are eminently transferable, and they are learned through the opportunities arts and culture can offer"

(The Rt Hon Jeremy Wright's speech Jan 2019.

#### Year 10 Art Curriculum Aims:

At the start of year 10 pupils will be completing baseline project covering observational drawing, colour and analysis. From here pupils will work through the four assessment objectives each project, these objectives will be revisited each project from years 10 to 13. Assessment objective 1- Artist analysis, AO2-experimenting with materials, AO3- Drawing, ideas and images, AO4- Final outcomes and evaluation. The development throughout the projects build on confidence and the overall aim of working independently to create an Art outcome based on a question of their choice.

Year 10 Art	Topics	Key Knowledge
Curriculum		
Term 1	Working safely with the practical space. Our first project about is about Structures and includes baseline drawings to start.	Pupils begin with initial project that includes observational drawing, colour, tone and analysis and starts our journey working with Art techniques. Our first project is Structures, looking at imagery and layering. Pupils will learn how to participate in practical lessons safely when working as a team or independently. Each project learners will work through our four assessment objectives building further on their understanding and skills. Pupils will deepen their understanding of the GCSE Art process and learn new skills and techniques that will broaden their opportunities for becoming independent.
Term 2	Our second project will include more new techniques and further understanding of working in a variety of mediums. Producing final outcomes to show progress.	This term will begin with producing their final outcomes from their first project. Pupils will consolidate their learning and showcase their skills, evaluating the piece against the assessment objects and discussing their progress from baseline. Personalised targets will then be set to ensure greater progress as we start our project development.
Term 3 – lead in to Term 1 of Year 11	Starting our third project on a project researched and chosen independently by pupils.	Pupils will start their final project (April) based on a chosen question, evaluating and setting personalised targets ready for our final assessment piece in year 11. Our end of year exam covers all 4 assessment objectives; pupils will showcase the progress they have made across the 4 assessment objectives.

#### What enrichment opportunities are available and how do these support learning?

Art club is available after school; pupils need to speak to their teacher for further details. Regular homework tasks are set to strengthen understanding and improve control with the mediums. Follow Art@GSHS on - <u>https://www.pinterest.co.uk.</u>

https://www.wjec.co.uk/students/index.html

#### Where can I visit to help with my learning?

https://wmag.culturewarrington.org/whats-on/ https://www.tate.org.uk/visit/tate-liverpool https://www.liverpoolmuseums.org.uk/walker/ https://www.whitworth.manchester.ac.uk/ http://manchesterartgallery.org/

Head of Department: Mrs Lorna Philcock. lorna.philcock@greatsankey.org

# Year 10 Textiles Curriculum Aims:

At the start of year 10 pupils will be completing baseline project covering observational drawing, colour and analysis. From here pupils will work through the four assessment objectives each project, these objectives will be revisited each project from years 7 to 13. Assessment objective 1- Artist analysis, AO2-experimenting with materials, AO3- Drawing, ideas and images, AO4- Final outcomes and evaluation. The development throughout the projects build on confidence and the overall aim of working independently to create a textile outcome based on a question of their choice.

Year 10	Topics	Key Knowledge
Textiles		
Curriculum		
Term 1	Working safely with the	Pupils begin with initial project that includes observational drawing, colour, tone and analysis and starts our journey working with Textile techniques and using
	practical space. Baseline	the sewing machine. Our first project is Natural Forms, looking at imagery and layering. Pupils will learn how to participate in practical lessons safely when
	activities, followed by the start	working as a team or independently. Each project learners will work through our four assessment objectives building further on their understanding and skills
	of first project about Natural	and adapting this now to include textile techniques.
	Forms.	Pupils will deepen their understanding of the GCSE Textiles process and learn new skills and techniques that will broaden their opportunities for becoming
		independent. Starting their second project titled 'Under the Sea'.
Term 2	Our second project will include	This term will begin with producing their final outcomes from our second project. Pupils will consolidate their learning and showcase their skills, evaluating the
	more new techniques and	piece against the assessment objectives and discussing their progress from baseline. Personalised targets will then be set to ensure greater progress as we start
	further understanding of	our third project which will be independently chosen by our pupils.
	working in 2d and 3D. Final	
	outcome for second project.	
Term 3 – lead	Starting our third project on a	Pupils will start their final project based on a chosen question, evaluating and setting personalised targets ready for our final assessment piece. Our end of year
in to Term 1	project researched and chosen	exam covers all 4 assessment objectives, pupils will showcase the progress they have made in research, drawing, composition and tone.
of Year 11	independently by pupils.	

#### What enrichment opportunities are available and how do these support learning?

Art club is available after school; pupils need to speak to their teacher for further details. Regular homework tasks are set to strengthen understanding and improve control with the mediums.

Follow Art@GSHS on - <u>https://www.pinterest.co.uk.</u> https://www.wjec.co.uk/students/index.html

Head of Department: Mrs Lorna Philcock. lorna.philcock@greatsankey.org

# **BEICT Curriculum Vision:**

"To prepare all learners at Great Sankey High School for the changing world of work through developing engaging curriculum and outstanding teaching."

The faculty will help pupils to develop skills that will serve them well at A-Level and beyond, irrespective of the course and career they pursue after GSHS. In particular, pupils will learn how to consider human behaviour, use theory and analytical techniques and evaluate alternatives in the face of uncertainty. As well as improving their ability to interpret and present data in various forms, pupils will benefit from opportunities to progress other key skills such as Communication and Information Technology. Although many pupils will ultimately pursue careers in some area of business and therefore gain a direct benefit from having studied this subject, even those headed for less obvious commercial areas will benefit from an understanding of issues that are common to any organisation, such as motivation, project planning and budgeting.

During Business and Economics learners will pick a multitude of skills and knowledge that will not only benefit them in the academic lives but also in their personal ones. As we look at a constantly changing picture in Business, Economics and Computing it allows us to monitor and evaluate the world as it changes in front of our eyes. Leaners will acquire skills such as analysis and problem solving through looking at current events and picking out the different ways that a business or government could tackle these issues. Leaners who don't go on to study either discipline after key stage 4 or 5 will have a much deeper understanding of the working word and the economy which will place them in a much stronger position to make well informed decision as adults. Our wish for all learners is that they become lifelong learners with a thirst to learn more.

Year 10	Topics	Key Knowledge
Computer		
Science		
Curriculum		
Term 1	System Architecture Networking	Students will be introduced to a new unit of System Architecture this covers how the computer takes an input, processes it and outputs the relevant information. Students will be familiar with some of the aspects of this unit such as ROM and RAM and Storage devices from their KS3 units of study.
	Ethical and Legal	The Networking unit covered will link heavily to previous units covered in year 8 and year 9, therefore using their prior knowledge as a foundation to explorer client- server and peer-to-peer networks in more detail and how data is transmitted across networks.
		The final section looks at the ethical and legal side to computer science, this has links with the cyber security unit covered in year 8 and year 9 and we look at the following acts: DPA, GDPR, CMA, CD&PA and finally the RIPA.
Term 2	System Software System Security Algorithms	The second term looks at keeping a system safe from threats and applying the best preventions methods. Students will attempt the "hack" a database using an SQL injection statement, this is all completed ethically and cannot be performed on a database outside of the situation provided. Within system software and security students will learn how to optimise a computer and to ensure it is kept running at the highest performance using a
	Programming	range of techniques such as disk defragmentation, backups and anti-malware software. The final unit of term 2 in year 10 looks at preparing the students for their programming project in the last term. This is where student will learn about abstraction and breaking the problem down making links to the PLC covered in year 8. The students will have at this point covered a range of programming languages and skills need to create a solid foundation enabling more advance programing techniques such as procedures and functions to
		be covered in more detail. At the end of this term students will be confident in tackling their programming project.
Term 3	Programming Project	This is a 20 hour programming project, in class timetable, where students will complete a task set by the exam board. Students will be given the opportunity to practice their skills from the previous half terms and previous years

# What resources can my child access for support?

Your child will have access to online resources through Teach-ICT https://www.teach-ict.com/ for which pupils are provided with logins for and BBC Bitesize www.bbcbitesize.com

## What enrichment opportunities are available and how do these support learning?

From year 9 upwards we offer the Cyber Discovery competition, where students are able to put their in class knowledge of cyber threats to the test and complete different challenges against other students across the UK. Students who progress through each round will continue to develop new skills but also have the opportunity to take part in a live simulation down in London. We strive to peak pupils interest in all areas of the BEICT department through experimentation, independent design and working well as a team. And it's incredibly good fun!

Head of Department: Julie Binks email: Julie.Binks@greatsankey.org

Exam board OCR https://www.ocr.org.uk/qualifications/gcse/computer-science-j277-from-2020/

#### **Design and Technology Curriculum Vision**

In GCSE Design and Technology, we aim to prepare students to participate confidently and successfully in an increasingly technological world. Students will gain awareness and learn from wider influences on Design and Technology including historical, social, cultural, environmental and economic factors. Students will have the opportunity to work creatively when designing and making by applying technical and practical expertise. Our GCSE allows students to study a broad range of design processes, materials techniques and to work with a range of equipment. Students will have the opportunity to study specialist technical principles in greater depth.

#### Year 10 Curriculum Aims

Whilst studying AQA Design and Technology students in Year 10 will have the opportunity to produce a range of small products. The students are encouraged to develop their own creative designs and to make these ideas into actual products. The aim of year 10 is to develop skills and knowledge across of all areas of the subject using various materials, tools, machines and processes. This will enable pupils to build confidence in all areas of Design and Technology to ensure Year 11 is successful. Your child will be provided with all the materials and components they need to complete each project.

Year 10 DT GCSE	Topics	Key Knowledge
Term 1	Metals Pupils will research, design, make and evaluate their Key Fob Project Revision for Exam Unit Section One – Key Ideas in Design and	Pupils will develop skills and knowledge of Metals and Alloys whilst making a Pewter Cast Key fob. They research existing products, materials and processes. Students then produce a laser cut mould design in MDF which is then cast in Pewter. The pewter is then finished to a high standard and a hole is drilled for the key ring to be attached. Students will also complete revision for the exam unit using one lesson per week to focus on this. At the end of each unit students will complete an exam. In this term we focus on Technology in Manufacturing, CAD/CAM, Product Sustainability, Social Issues, Products in Society and Powering Systems.
	Technology	issues, Products in Society and Powering Systems.
Term 2	Polymers (Acrylic)	Pupils will develop skills and knowledge of Polymers whilst making a Mobile Phone Holder. They research existing products, materials and processes. Students will produce a range of models and develop their ideas using 2D design, CAD and laser cutter,
	Pupils will research, design, make and evaluate their Phone Holder.	CAM to develop their ideas further until the final prototype is accurate and ready to be produced in Acrylic on the laser cutter. The acrylic is then finished to a high standard and bent using the line bender. The focus of this project is to make a high quality product which demonstrates accuracy and creativity.
	Revision for Exam Unit Section Two – Materials and Systems	Students will continue to complete revision for the exam unit using one lesson per week to focus on this. Students will complete an exam on Properties of materials, Paper, Board, Timber, Alloys and Polymers, Textiles, Manufactured Boards, Electronic and Mechanical systems, Developments in New Materials.
Term 3	Woods and manufactured Boards	Pupils will develop skills and knowledge of Woods and Manufactured boards whilst making a Bird house. They research existing products, materials and processes. Students will use skills and knowledge from the two previous projects to design a creative bird
	Pupils will research, design, make and evaluate their Bird box Project.	house. Students will use a variety of hand tools and machines to create their product. The Wood turning lathe, mortise machine, shaper saw, jigsaw, router and planer will all be introduced during this project. The focus on this project is to allow students to develop skills using various machines and equipment and to become independent learners who understand the capabilities of all
	Revision for Exam Unit	the machines within DT which will enable them to produce a high quality product in their Year 11 coursework.
	Section Three – More about Materials.	Students will continue to complete revision for the exam unit using one lesson per week to focus on this. Students will complete an exam on selecting materials, forces and stresses, scales of production, quality control, quality assurance, production aids and
	Introduction to NEA on June 1 <sup>st</sup> and research	the production of materials.
	is completed in line with topics available.	Coursework topics are released and students begin to research what is required for each project, they will then decide which
	AO1 Identify, investigate and outline design	area they are going to focus on for their NEA. (50% of overall grade)
	possibilities (20 marks)	AO1 Section A - Identifying & investigating design possibilities - 10 marks
		<b>Final Assessment:</b> The students will complete an End of year exam which will mainly focus on the above sections 1,2 and 3. Students also complete a student survey at the end of each term to ensure the course is working for the students. Feedback is crucial to the success of the course.

# What resources can my child access for support?

When completing homework and research tasks <u>www.technologystudent.com</u> is an excellent resource and there are many books in the LRC that can help. GCSE Pod is also an excellent resource especially for the exam component of the course.

You can also find out more about the Design and Technology GCSE qualifications at www.aqa.org.uk/designandtechnology.

# What enrichment opportunities are available and how do these support learning?

-

Throughout the two years' students can visit Jaguar Land Rover to see how the Automation and assembly line works. We also have visits to companies in the area for example IKEA and Alucan.

# Head of Design and Technology – Julie Attwood

julie.attwood@greatsankey.org

# **Electronics GCSE Curriculum vision:**

This course is ideal if you are interested in a career in electronic or electrical engineering. It allows you to learn, develop and practice the knowledge and skills required for further education in this area and employment in the electrical/electronic engineering sector.

# Year 10 Curriculum Aims:

**Discovering Electronics**: Our aim is to instill a sound foundation of knowledge in the area of electronics from the very basics to more complicated digital systems and micro controllers. It is important to incorporate cross curricular subjects such as Computing, Mathematics and Physics. We also wish to make electronics fun and accessible for all who have an interest in the subject.

#### Subject content

Students have 5 lessons per week which will include a balance of theory backed up with practical simulations and hands on circuit building to test out the theory and cement the knowledge gained. Activities prepare students for the demands of the unit 1&2 exams (80% of total mark) and unit 3 which is the practical investigation.

Year 10 Electronics	Topics	Key Knowledge
Term 1	Chapter 1 - Electronic systems and subsystems Chapter 2 - Circuit Concepts	Students will recognise that electronic systems are assembled from sensing, processing and output sub-systems, including: Sensing units: light, temperature, magnetic field, pressure, moisture, sound, rotation sub-systems. Signal processing: individual logic gates, latch, time delay, comparator. Output devices: lamp, buzzer, solenoid, LED, actuator (servo), motor, loudspeaker.
Term 2	Chapter 3 – Resistive components in circuits Chapter 4 - Switching circuits	Learners should be able to: Describe the effect of adding resistors in series and use equations for series and parallel resistor combinations Select resistors for use in a circuit by using the colour and E24 codes for values, tolerances and power ratings Use photosensitive devices, ntc thermistors, pressure, moisture and sound sensors, switches, potentiometers and pulse generators in circuits Design and test sensing circuits using these components by incorporating them into voltage dividers Design and use switches and pull-up or pull-down resistors to provide correct logic level/edge-triggered signals for logic gates and timing circuits. Select and apply the voltage divider equation in sensing circuits for a voltage divider Determine the value of a current-limiting resistor for LEDs in DC circuits.
Term 3	Chapter 5 - Application of diodes Chapter 6 - Combinational logic systems	Learners should be able to: Recognise 1/0 as two-state logic levels Identify and use NOT gates and 2-input AND, OR, NAND and NOR gates, singly and in combination Produce a suitable truth table from a given system specification and for a given logic circuit Use truth tables to analyse a system of gates Use Boolean algebra to represent the output of truth tables or logic gates and use the basic Boolean identities A.B = A+B and A+B = A.B Design processing systems consisting of logic gates to solve problems Simplify logic circuits using NAND gate redundancy Analyse and design systems from a given truth table to solve a given problem Use data sheets to select a logic IC for given applications and to identify pin connections Design and use switches and pull-up or pull-down resistors to provide correct logic level/edge-triggered signals for logic gates and timing circuits

# What resources can my child access for support?

There are a few BBC bite sized exercises along with the new GCSE POD but mainly in the Physics area. There is also a very good eBook on the exam boards website which can be accessed here https://resources.eduqas.co.uk/Pages/ResourceSingle.aspx?rlid=938

# What enrichment opportunities are available and how do these support learning?

There are a couple of robotic related competitions for the keen electronics engineer, these are the First Lego League robotic challenge and the VEX robotic challenge.

# Head of Electronics:

Exam board WJEC https://www.wjec.co.uk/qualifications/electronics/eduqas-electronics-gcse-from-2017/

L Welsh Lee.welsh@greatsankey.org

#### **English Curriculum Vision:**

A 'Great Sankey English student' will have a passion for reading for pleasure. They will appreciate a wide variety of fictional genres and explore the conventions of each, developing a clear understanding of how narrative, characters and themes are constructed, and why reader empathy is evoked in different contexts through authorial intent. Students will be able to use their knowledge of literary and dramatic conventions to craft their own creative texts, developing imaginative extended pieces of writing whilst refining their technical accuracy with spelling, grammar and punctuation. Students will explore a plethora of poetry from across the ages, ranging from 16<sup>th</sup> century Shakespearean sonnets to the most recent work of our poet laureate. They will also have an appreciation of non-fiction texts, understanding their function in society. They will develop their expertise in constructing transactional pieces, such as articles and letters, for a range of purposes and audiences. Students will actively seek to edit and improve, understanding that skilled writers will always reflect in a constructively critical manner on their work. They will strive to use ambitious and precise vocabulary in all areas of written and verbal communication. When presenting, students will adapt their register, tone and vocabulary choices accordingly for the audience and purpose. They will understand the value of effective communication through reading, writing and oracy as an integral part to success in any future career.

#### Year 10 English Curriculum Aims:

Throughout year 10, students will continue to build on their knowledge of literary devices, language techniques and writer's craft as they prepare the foundations for their GCSE English Language and English Literature courses.

Year 10	Topics	Key Knowledge
English		
Curriculum		
Term 1		At the start of Year 10, pupils will complete a knowledge base line assessment to recap prior learning from the previous year. Similarly, to year 9, the course is taught as an integrated course as a number of the skills required for both disciplines are transferable. At the start of every lesson, students will be expected to complete a recall activity based the either English Language skills or English Literature skills.
	Unseen poetry	Pupils will retrieve prior learning from their previous engagement with poetry. Pupils will apply their knowledge and understanding of poetry by analysing poetry for meaning. Comparing the form of a variety of poets including literary canons and contemporary poets.
	Eduqas Anthology poems cluster 1	Pupils will thematically analyse the first four poems from the Eduqas anthology, focusing on the writers' craft and writing critical analysis of the poems' theme, form and language.
	19 <sup>th</sup> and 21 <sup>th</sup> century Non- fiction reading	Pupils will analyse non-fiction articles as a stimulus to create their own non-fiction writing. Pupils will experiment with features of the English language and the functions of persuasive techniques.
Term 2	Transactional writing	Pupils will be exploring how to present viewpoints and perceptions, using features of rhetoric, Standard and non-Standard English in different forms of writing. Pupils will work on their skills of narrative writing; learning how to use sophisticated vocabulary, syntax and structure for effect.
	Speaking and Listening assessment	

		Pupils will deliver a class presentation on a topic of their choice for final assessment in communication.
	Narrative writing	Pupils will work on their skills of narrative writing; learning how to use sophisticated vocabulary, syntax and structure for effect.
	Eduqas anthology poems cluster 2.	Pupils will thematically analyse the second four poems from the Eduqas anthology, focusing on the writers' craft and writing critical analysis of the poems' theme, form and language.
	Macbeth	Pupils will study Macbeth in preparation for their GCSE Literature exam. They will focus on identifying the conventions of Aristotelian drama, analyse setting, character, and study the writers' craft – specifically the study of meter.
Term 3	Macbeth	Pupils will continue to study Macbeth in preparation for their GCSE Literature exam. They will focus on identifying the conventions of Aristotelian drama, analyse setting, character, and study the writers' craft.
	20 <sup>th</sup> century reading	Pupils will be exposed to a range of different extracts by 20 <sup>th</sup> century writers. Pupils will begin to read critically by answering comprehensive style questions such as; identifying and interpreting information; reading in different ways for different purposes; evaluating the writer's choice of vocabulary, form, grammatical and structural features.
	Eduqas Anthology poetry cluster 3	Pupils will thematically analyse the third cluster of poems from the Eduqas anthology, focusing on the writers' craft and writing critical analysis of the poems' theme, form and language.
	Narrative writing	Pupils will work on their skills of narrative writing; learning how to use sophisticated vocabulary, syntax and structure for effect.

# What resources can my child access for support?

Your child will have access to GCSE pod online.

# www.bbcbitesize.com

What enrichment opportunities are available and how do these support learning?

There are a multitude of reading and writing competitions running each term in the LRC to encourage students to actively read widely. The English department offer a website club for students with an interest in journalism and the media, and there is a popular Dungeons and Dragons club providing an excellent for students of all year groups to escape to a fantasy world once a week.

Head of Department:	KS3 Leader:	Curriculum Leader 7-11:	KS4 Leader:
Laura Douglas	Helen Crowder	Nicki Fellows	Ron Vose
Laura.Douglas@greatsankey.org	Helen.Crowder@greatsankey.org	Nicki.Fellows@greatsankey.org	Ron.Vose@greatsankey.org

#### **Engineering Curriculum vision:**

The National Curriculum states that 'specifications in engineering must require students to develop subject knowledge, skills and understanding that allow them to solve engineering problems in an informed way. Specifications will give students access to the use of new technologies, materials and processes in addition to established engineering practices. They must enable students to put theory into practice, solving engineering problems through the application of mathematical principles and computer modelling/simulation to produce carefully considered manufactured outcomes which showcase essential practical skills.'

As a consequence of this mission statement the decision has been made to focus in the main on planning and practical skills, reinforced with theory, in year 10. All assessments, in year 10, will be of a practical nature focusing on planning and the safe manufacture of a quality product. The theory part of the course will be assessed termly by way of tests based on exam questions. We also aim, in year 10, to build a portfolio of practical work that can be used when leaving school and applying for an apprenticeship or college course. The practical tasks also build competency on the machines and support aspects of the theory part of the course. The planning and practical skills will also transfer to other life skills for the future.

#### Year 10 Curriculum Aims:

Students have five lessons every two weeks in Engineering. The format is practical/demonstration lessons followed by linked theory lessons, to pick up any theory not covered in the practical lessons. Students will develop their practical skills further and work on planning and organisational skills. They will look at the processes used in industry, to manufacture products in bulk.

#### Subject content

All practical tasks will link to the theory work to demonstrate the key issues of manufacturing. There will be a ratio of 6 practical tasks to one theory test, in terms 1 & 2. Term 3 will involve a project that will cover all aspects of the work to be completed as part of the controlled assessment tasks in year 11. There will also be a full theory exam at the end of year 10.

Year 10 Engineering Curriculum	Topics	Key Knowledge
Term 1	Safe working in a manufacturing workshop Planning for manufacture Understanding drawings Hand and machine manufacturing processes Materials theory	Pupils will complete six practical tasks and one end of term test, which will cover the first of four learning outcomes for unit R109 (Exam unit). Working, in the school workshop, pupils will develop an understanding of working safely, to produce a quality product. The practical tasks will also help develop planning and making skills in a variety of areas of manufacturing. Theory work is supported by the practical tasks, with dedicated theory lessons, to fill in the gaps not covered by the practical tasks.
Term 2	Safe working in a manufacturing workshop Planning for manufacture Understanding drawings Hand and machine manufacturing processes CNC Manufacturing Manufacturing processes theory	Pupils will continue to develop manual manufacturing skills in the school workshop by completing another six practical tasks. This will include an introduction to the use of CNC machines in manufacturing, by completing a simple programming task. Theory work will focus on manufacturing processes. Assessment will focus on accuracy and quality as well as planning and will also involve a test that will be based on the first two learning outcomes for unit R109 (Exam unit).
Term 3	Safe working in a manufacturing workshop Planning for manufacture Understanding drawings Hand and machine manufacturing processes CNC Manufacturing Modern manufacturing processes theory	This term the pupils will be given a small project that will be used as a practise for the controlled assessment tasks, to be completed in year 11. All three, controlled assessment, units will be covered in this project. These tasks will help pupils develop skills to plan their time efficiently, in the workshop, so that they can complete the tasks in the time allocated. This work will be marked using the full assessment criteria, for units R110, R111 & R112. Assessment, at the end of year 10, will also have an exam that covers all four learning outcomes for Unit R109.

# What resources can my child access for support?

Useful books (copies are available in the LRC)

"DeGarmo's Materials and Processes in Manufacturing" – Black & Kosher – Wiley ISBN: 978-0-470-87375-5.

"Basic Manufacturing" – Roger Timings – Newnes ISBN 0-7506-5990-4

"Workshop processes, practices & materials" – Bruce J. Black ISBN 978-0-08-089064-7

"Basic Engineering Technology" – Roger Timings – Heinemann Newnes ISBN 0-434-91949-7

"Manufacturing Technology Volume 1" – Roger Timings Prentice hall ISBN 0-582-35693-8
"Manufacturing Technology Volume 2" – Roger Timings Prentice hall ISBN 0-582-35797-7
"GCSE Manufacturing" – Hodder & Stoughton ISBN 0-340-81409-8
Useful web sites :www.technologystudent.com
www.engineeringtoolbox.com
http://www.engineershandbook.com/

Pupils are encouraged to look at jobs in the engineering sectors.

# What enrichment opportunities are available and how do these support learning?

After school sessions will be available for pupils to practice manufacturing skills, from Easter in year 10. After school sessions will also be available in year 11 for pupils who miss lessons during the controlled assessment time.

Head of Engineering: G Morgan-Walker Gly.morgan-walker@greatsankey.org Exam board OCR insert hyperlink to spec

#### Food Preparation and Nutrition Curriculum vision:

Once students have opted for GCSE Food Preparation and Nutrition we aim to build on the basic principles set out in the National Curriculum. 'As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.' Our goal is to inspire students to be creative and imaginative, whilst applying their skills and knowledge to solve real and relevant problems, considering their own and others' needs, wants and values. Through cooking and nutrition, we encourage our pupils to take risks, become resourceful, innovative, enterprising and capable citizens.

#### Year 10 Curriculum Aims:

Whilst studying AQA Food Preparation and Nutrition, students are challenged to learn more about the science behind food, healthy eating and the role of foods in the body, as well as, the implications our food choices have on the environment and world around us. The course provides pupils with the opportunity to delve into interesting and thought-provoking theory, apply their knowledge and understanding in written and practical work, and participate in food science experiments and relevant, up-to-date task briefs to challenge their creativity and practical skills.

#### Subject content

Students have a double lesson and 3 single lessons every 2 weeks. The double is always a practical and one of the singles will be used for simpler practical skills or investigation work. The work is totally focused on the requirements of the AQA course, which states that the majority of the specification should be delivered by preparation and making activities. Activities prepare students for the demands of the NEA1 (investigational task) and NEA2 (a creative challenge) – these are worth 50% of the final grade.

Year 10 Food Preparation and Nutrition Curriculum	Topics	Key Knowledge
Term 1	Eatwell guide. Carbohydrates. Protein. Fats. Vitamins. Minerals. Water.	Initially students will revisit the Eatwell guide and be asked to apply the principles to a specific target group, so developing an ideal dietary plan – one of the dishes chosen will then be produced. They will then move on to look at macro-nutrients in detail, exploring how they are classified, what is the function of each, know good providers and the effects of deficiency and excess. There will be focused practical tasks to develop distinct skills such as cake making, sauce production, filleting a fish and portioning a chicken, as well as free choice practicals to meet a particular need. These allow students to develop their creative side whilst also meeting a functional need. Within the term, students will also carry out a number of investigations to introduce them to the demands of the NEA1.
Term 2	Celebration task. Factors affecting food choice. Life stages. Energy needs. Dietary related illnesses. Pastry skills. Gelatinisation. British cuisine.	The NEA2 is a focus at the start of the term and students are able to choose a celebration of interest to focus on. This project will start to challenge their technical skills and application of creativity. Factors affecting food choice will be explored in relation to current lifestyle patterns. This will give students a chance to discuss the impact of modern life on technological developments, new product design and the health of society. Life stages and energy needs are another interesting aspect, allowing an opportunity to develop an original design for a specific need. Functional properties of ingredients and high level skills then work hand in hand as we aim to seek practical excellence. Products such as Profiteroles, Fruit Tarts made from pâté sucrée and crème patisserie and Eccles Cakes push students to show skill, quality finishing techniques and the ability to produce consistent products. Time management and organisational skills will really come into play in these lessons. British cuisine and protected designation of origin will finish off the term.
Term 3	Special dietary needs. Food science. Food safety. Investigation techniques. Cooking methods and heat transfer.	Students will research different special diets, then choose one to focus on for a mock NEA2 task. They will need to showcase technical skills and select three final dishes to produce in exam conditions – this will help them to prepare for the real exam next year. Once completed, they will revisit raising agents and look at the food science behind a number of baked products. Food safety and safe temperatures will also be a focus. A mock NEA1 will then be carried out based around meringue production to retrieve knowledge of proteins and their functional and chemical properties as well as the format for the investigational task. The year will end with a focus on cooking methods and heat transfer, culminating in the production of a healthy Tapas buffet.

# What resources can my child access for support?

Your child will be provided with a KS4 cookbook, with a full range of tried and tested recipes included. All recipes are star rated for skill level so students know the level of challenge they are taking on.

Pupils are encouraged to cook at home. There are lots of fantastic cookbooks in the LRC and a reliable website is www.bbcgoodfood.com

# What enrichment opportunities are available and how do these support learning?

We conduct an Interhouse competition where pupils are challenged to produce a technical dish. The purpose of this activity is to encourage teamwork and instil a 'love of cooking'. Another opportunity is to cook as part of the Duke of Edinburgh Award scheme – this will count towards the skills section. Masterclasses are held after school to further enhance skills.

Head of Food:

Exam board AQA https://filestore.aqa.org.uk/resources/food/specifications/AQA-8585-SP-2016.PDF

V Knight vicky.knight@greatsankey.org

#### **Business Curriculum Vision:**

"To prepare all learners at Great Sankey High School for the changing world of work through developing engaging curriculum and outstanding teaching."

The faculty will help pupils to develop skills that will serve them well at A-Level and beyond, irrespective of the course and career they pursue after GSHS. In particular, pupils will learn how to consider human behaviour, use theory and analytical techniques and evaluate alternatives in the face of uncertainty. As well as improving their ability to interpret and present data in various forms, pupils will benefit from opportunities to progress other key skills such as Communication and Information Technology. Although many pupils will ultimately pursue careers in some area of business and therefore gain a direct benefit from having studied this subject, even those headed for less obvious commercial areas will benefit from an understanding of issues that are common to any organisation, such as motivation, project planning and budgeting.

During Business and Economics learners will pick a multitude of skills and knowledge that will not only benefit them in the academic lives but also in their personal ones. As we look at a constantly changing picture in Business, Economics and Computing it allows us to monitor and evaluate the world as it changes in front of our eyes. Leaners will acquire skills such as analysis and problem solving through looking a current events and picking out the different ways that a business or government could tackle these issues. Leaners who don't go on to study either discipline after key stage 4 or 5 will have a much deeper understanding of the working word and the economy which will place them in a much stronger position to make well informed decision as adults. My wish for all learners is that they become lifelong learners with a thirst to learn more.

#### Year 10 Business Curriculum Aims:

To introduce all pupils to the business basics through a better understanding of the business environment. The learners will investigate the reasons why businesses exist and the different types of businesses within the external environment. The learners at year ten will develop their understanding of the role the businesses play within the wider community.

Year 10 Business	Topics	Content
Curriculum		
Term 1	Dynamic nature of business, Risk and Reward, Role of Enterprise, Spotting and business opportunity, Market research, Market segmentation	The learners are introduced to these elements early as they form the basis as to why businesses exist and how businesses can become more successful through development and risk taking. Through studying these elements at the start of year ten learners are more able to assess why businesses make certain decisions and how external elements may affect the business.
Term 2	Business aims, business revenues, cash flow, sources of finance, start-up, location, marketing mix	These new elements build upon the learner's knowledge from term one. They are now required to think about the impacts of location upon the business and how marketing can influence their success. The learners will also look at the importance of finance within the business and how this can be a significant influencing factor. This sets up the final term of year ten.
Term 3	Stakeholders, technology, legislation, the economy, external influences.	The final part of year ten gets the learners to now investigate further impacts on businesses and how businesses can impact upon the wider economy. This is a great section to finish with as the learners have gradually built up their understanding of how the business is placed within the wider context.

#### What resources can my child access for support?

Seneca, GCSE Pod, Google Classroom, Revision Guides and GCSE Bitesize

# What enrichment opportunities are available and how do these support learning?

World Enterprise week, External speakers and trips

# Head of Department:

Christopher Wilson Christopher.wilson@greatsankey.org Exam board Edexcel https://qualifications.pearson.com/en/qualifications/edexcel-gcses/business-2017.html

# Geography Curriculum Vision:

A 'Great Sankey Geographer' is an informed citizen of the World with an understanding of how their lives are connected to others and shaped by the environment that we live in. A Geographer is someone that is curious about the World and thinks responsibly about how the World affects us all. Our job at Great Sankey is to create a Geographer with the knowledge of places within every continent and the physical and human features that comprise each place. For all young Geographers, it is important to have a good understanding of the social, political, economic and environmental factors that affect places from a local to a global scale.

Geography is a fascinating subject that is always changing. Geography is classed as a Science whereby 'Geo' means earth and 'graphy' means description. A Geographer is someone that studies the Earth. In the words of my hero David Attenborough:

"It seems to me that the natural world is the greatest source of excitement; the greatest source of visual beauty; the greatest source of intellectual interest. It is the greatest source of so much in life that makes life worth living."

# David Attenborough

**Geography** is separated into 'Human' and 'Physical'. The Human geography is a branch of geography that deals with the study of people and their communities, cultures, economies, and interactions with the environment by studying their relations with and across space and place. The Physical Geography is the study of natural processes and patterns. These include the atmosphere, hydrosphere, biosphere and geosphere.

We live in a world of amazing beauty, infinite complexity and rigorous challenge. Geography is the subject which opens the door to this dynamic world and prepares each one of us for the role of global citizen in the 21<sup>st</sup> century. Through studying geography, people of all ages begin to appreciate how places and landscapes are formed, how people and environments interact, what consequences arise from our everyday decisions and what a diverse range of cultures and societies exist and interconnect. Geography is a subject which builds on young people's own experiences, helping them to formulate questions about the Earth. **Year 10 Geography Curriculum Aims:** 

The GCSE Geography course is with AQA. We teach the new SPEC from 2016 onwards. Each student has a full copy of the Specification. Geography is made up of three exams:

- 1. Living with the Physical Environment (1hour 30 minutes) 35%
- 2. Challenges in the Human Environment (1 hour 30 minutes) 35%
- 3. Geographical Applications (1 hour and 15 minutes) 30%

Year 10 Geography Curriculum	Topics	Key Knowledge
Term 1	Economic World	We start year 10 by looking at the global variations in the quality of life of certain populations. We look at various strategies to reduce the global development gap. Nigeria is experiencing fast economic growth, so we use Nigeria as a case study. We then finish by analysing major changes in the economy of the UK.
Term 2	UK landscapes: Coasts and Rivers.	We focus on how the UK coasts and rivers are shaped. We look at coastal and river landforms and how they result from physical processes. We look at the management strategies that are used to protect coastal and river landscapes.
Term 3	The Challenge of Natural hazards.	The final term, we look at Earthquakes and Volcanoes and how they can be managed to reduce their effect. We look at Tropical Storms and their effect on the environment. We also look at extreme weather in the UK. We also look at climate change management from mitigation to adaption.

# What resources can my child access for support?

www.aqa.org.uk www.gcsepod.com www.exampro.co.uk www.senecalearning.com www.s-cool.co.uk www.internetgeography.net www.coolgeography.co.uk

# What enrichment opportunities are available and how do these support learning?

Geography Intervention once a week with the class teacher. Revision guides and Revision cards to purchase.

Head of Department: Mr S Elliott <u>shaun.elliott@greatsankey.org</u>

#### Graphic Design Curriculum vision:

Creativity is at the heart of our vision for Graphic Design students. In school the subject sits in the Design & Technology department and embraces traditional art & design techniques with new technology. Our vision is to make our students versatile multi-disciplined designers. The course is predominantly skills based at this level. Our students study NCFE technical award Level 2, this gives students a well-rounded project based introduction into the world of graphic design. Students will use industry standard software, produce a professional portfolio and learn about the wider culture of graphic design to prepare then to progress to A-Level, enter an apprenticeship or study to complement their other GCSEs.

#### Year 10 Curriculum Aims:

Year 10 is both a foundation year and a skills based introduction to Graphic Design. Students will be taught design from a basis start and show how to print, draw, illustrate and bring projects together. Learners will develop skills and knowledge: in using different tools and equipment competently, when experimenting with materials and techniques, in adapting their own ideas and responding to feedback and in evaluating their own work that are essential for the modern workplace, such as team working; presentation skills; independent working; working to deadlines; efficient use of resources.

Knowledge of the subject will be taught through project based hands-on learning. The work they create will form some of the content for their evidence portfolio to be produced in year 11. The course will introduce them to famous graphic designers and look at typography and understand some of the basic terminology they will need to communicate their ideas and evaluate the work of others.

Year 10 V-Cert	Topics	Key Knowledge
Technical award in		
Graphic Design		
Term 1	Introduction to graphic design. Typography. Designer research group & individual	Year 10 is about skills building and an introduction to design through task based learning. Students will learn skills through projects and these projects will form finished work that will go towards the evidence portfolio that students will be assessed on in year 11. Use hand & computer skills and producing own typography. Lino and foam printing of the letters designed earlier in the term Visual Dictionary to understand terminology.
Term 2	Line, tone, and imagery, Printing, magazine project.	Continue Lino and foam printing of the fonts. 26 letters, photography.
Term 3	Final project - stationary set. Composition & imagery. Mock exam.	Research a brief and look at existing products. Students design their own motif and explore pattern and composition.

What resources can my child access for support? The exam board's website has a sample portfolio and information including Mark schemes and assessment criteria. The department also have a Pinterest site, with lots of inspiration and example of good Graphic design to encourage students to widen their diet of the subject. The class also have a Google classroom page, which your son or daughter will be signed up to, where I post information/materials, classroom and homework. You can also sign up to this if you contact me via email where you will be able to read content as a guardian. Plus, information on how to improve Photoshop and Illustrator skills in available from the Adobe website. Parents main also choose to purchase those programmes on a monthly fee but there is no obligation to do so as coursework must be completed in school time. https://www.adobe.com/uk/education.html?marketSegment=EDU

What enrichment opportunities are available and how do these support learning? Graphics after school intervention takes place every Wednesday all year and is open to year 10 & 11. We also run A-Level Graphic Design are there are opportunities to receive help from older students.

Exam board NCFE https://www.qualhub.co.uk/qualification-search/qualification-detail/ncfe-level-2-technical-award-in-graphic-design-4569

Lead Teacher: F Shiel fiona.shiel@greatsankey.org

# **History Curriculum Vision:**

To provide an education that allows students to develop a greater understanding of the world we live and why it is the way it is. It will give students the skills and confidence necessary to challenge what they see and are told in the wider world. By studying history students are able to understand their place in the story of not just Britain but the wider world view. In an ever changing word it is important for students to have the skills to be able to identify fact from fiction, why someone may want to mislead or manipulate an event and how to identify and learn from lessons in the past.

# Year 10 History Aims:

A year 10 historian is able to build on the skills they have studied in since year 7 to not only pass their GCSE with confidence but to go into the world with a sound knowledge of history and a love of learning that will go beyond a set of exam certificates.

Year 10 History Curriculum	Topics	Key Knowledge
Term 1	What was the Treaty of Versailles and why did it fail? Was the League of Nations destined to fail?	In the autumn term we begin GCSE history with a study of the aims of the big three, the terms of the Treaty of Versailles and how different countries reacted to it and why. This then develops into questioning the impact of the Treaty of Versailles and did it achieve its aims. After this we study the structure of the league of nations and how effective it was in the 1920s and 30s and whether it was destined to fail from the very beginning or did fail as a result of events outside of their control. Each until is tested with a full 1 hour assessment as well as consistent retrieval practise throughout the topic.
Term 2	What were the origins of the 2 <sup>nd</sup> World War? How was royal authority challenged?	In the spring term we complete the first topic of GCSE history by looking at the origins of the 2 <sup>nd</sup> World War. Students will be able to make a judgement on why the war began and could it have been prevented. Throughout the topic students will be building on schemas that began in year 9. Students then begin our second topic of Britain power and the people, this topic of 13 case studies covers the creation of modern parliament from Magna Carta to the Brixton riots. In this section we look at how royal authority was challenged from Magna Carta to the American Revolution. Again students are assessed at the end of units whilst also sitting assessments from the 1 <sup>st</sup> topic.
Term 3	Who were the reformers? How was equality achieved?	In the summer term students continue to study Britain Power and the People, they look at social and factory reform, the end of the slave trade, the rise of unionism and he campaign for equal rights. This covers the entire summer term and allows students to building on topics that they first studied in years 7, 8 and 9. Students are assessed at the end of each topic and a final formal mock exam.

#### What resources can my child access for support?

Students can access core information within their knowledge organisers, the ILC has a broad range of reference books alongside copies of the AQA published hindsight magazine. There is also GCSE pod, AQA approved revision guides and GSHS workbooks to support learning.

Exam board: AQA specification

What enrichment opportunities are available and how do these support learning?

There is a ks4 drop in sessions for students to provide extra support. There is also a ks4 battle fields trip to supplement the learning of GCSE students.

Head of Department: Mark Farrer Mark.farrer@greatsankey.org

# IT National Curriculum Vision:

"To prepare all learners at Great Sankey High School for the changing world of work through developing engaging curriculum and outstanding teaching."

The faculty will help pupils to develop skills that will serve them well at A-Level and beyond, irrespective of the course and career they pursue after GSHS. In particular, pupils will learn how to consider human behaviour, use theory and analytical techniques and evaluate alternatives in the face of uncertainty. As well as improving their ability to interpret and present data in various forms, pupils will benefit from opportunities to progress other key skills such as Communication and Information Technology. Although many pupils will ultimately pursue careers in some area of business and therefore gain a direct benefit from having studied this subject, even those headed for less obvious commercial areas will benefit from an understanding of issues that are common to any organisation, such as motivation, project planning and budgeting.

During Business and Economics learners will pick a multitude of skills and knowledge that will not only benefit them in the academic lives but also in their personal ones. As we look at a constantly changing picture in Business, Economics and Computing it allows us to monitor and evaluate the world as it changes in front of our eyes. Leaners will acquire skills such as analysis and problem solving through looking a current events and picking out the different ways that a business or government could tackle these issues. Leaners who don't go on to study either discipline after key stage 4 or 5 will have a much deeper understanding of the working word and the economy which will place them in a much stronger position to make well informed decision as adults. My wish for all learners is that they become lifelong learners with a thirst to learn more.

# Year 10 IT National Curriculum Aims:

Year 10 IT	Topics	Key Knowledge
National		
Curriculum		
Term 1	Project Life cycles, phases,	These initial topics help to set the scene for the course. They introduce the learners to why it is important for businesses and IT projects to think about how
	interaction and iteration,	they construct plans and keep top their plans. The learners then look at tools that can help with this such as Gantt charts, flow charts, etc. They also then look
	Planning tools, Gantt charts	at the importance of SMART objectives in effective planning and implementation. This knowledge helps the learners with many aspects of the course that they
	and data dictionaries, collecting	will do at a later stage.
	and processing data	
Term 2	Data and information,	The learners now take things a step further and look at the ways that data and information are used and the differences between these two areas. They will
	collecting data methods, tools	look at how data is stored and the problems with this from a security and space perspective. They will also look at the different ways that data can be
	and techniques, storing data	presented.
	and the uses of data	
Term 3	Different methods of data	In the final term learners will look at the different method of collecting data and how this data can be presented and used. They will then look at the problems
	collection, processing and	for organisations in keeping peoples data safe and secure in terms of the law.
	presentation,	
	Exam preparation	
	Spreadsheet skills	

# What resources can my child access for support?

Textbooks, GCSE Pod, Google classroom, Past Papers

# What enrichment opportunities are available and how do these support learning?

Trips and IT clubs

#### Head of Department:

Christopher Wilson

Christopher.wilson@greatsankey.org

Exam board = OCR https://www.ocr.org.uk/qualifications/cambridge-nationals/information-technologies-level-1-2-j808/

#### **Mathematics Curriculum Vision:**

Mathematics is a universal language and one that our department is completely passionate about at all levels. It is a fundamental skill that is needed for everyday life and for understanding the world around us. Key to areas such as finance, science, technology and engineering, it is vitally important that a learner has the best possible grounding in mathematics from their education. They need to understand the mathematics they learn in order to approach problems that need to be solved creatively, whilst showing a level of confidence and fluency in using and enhancing the mathematical skills that are valued highly in industry and higher education.

Building upon the ten core values that are at the heart of our school, the department are tasked with delivering Quality First Teaching across all Key Stage. Regardless of the ability they are teaching, they encourage learners to develop their potential to the fullest. This is coupled with showcasing their enthusiasm and knowledge of our phenomenal subject to engage and engross all stakeholders in our learning community.

#### Year 10 Mathematics Curriculum Aims:

Year 10 builds upon the skills developed in the previous year to continue extending understanding in the core strands of Number, Algebra, Geometry and Measure, Ratio, Proportion and Probability and Statistics.

Year 10 Mathematics	Topics	Key Knowledge
Curriculum: Foundation		
Term 1	Multiplication and division involving worded problems Fractions, decimals and percentages in calculations Ratio and proportion Rounding and estimating Simplifying expressions, including quadratics Changing the subject of a formula Displaying and interpret inequalities Working with straight line graphs and quadratic functions	The early topics of this term build consolidate and build upon the skills that have been developed in previous years. The practicing of multiplication and division is placed into a contextual situation and this is also applied to fractions decimals and percentages – these are key components in the real life usage of mathematics. A proficiency in ratio and proportion allows students to be able to apply it to a range of different scenarios from cookery to building to engineering to medicine. The ability to round and estimate is a fundamental skill that all students need in order to work in calculations and also to develop approximate answers to questions
Term 2	Solving simultaneous equations Transformations of shapes Drawing and add/subtract column vector. Circles including area, perimeter, arc length and sector area Volume and surface area of prisms, pyramids, cones and spheres Bearings Interior and Exterior angles of polygons Loci Pythagoras Theorem and Trigonometry Scatter diagrams Collecting, displaying and interpreting data	The start of the second term begins with the solving of simultaneous equations, a key skill at Foundation for those students are aiming for a Grade 5. The emphasis then moves into the Geometry and Measure strand looking at the transformations of shapes, consolidating on reflections, rotation, translation and enlargement and linking into column vectors for translation. Reflections and rotations especially are a great aspect to apply to art projects. The section on area, perimeter, volume and surface area looks to reinforce and develop additional skills that can be applied to a range of different scenarios in the future. Working in construction will need an excellent understanding of these areas in order to be a proficient worker in this industry. The section on bearings consolidates work that has been done in Key Stage 3 and is a key component for students who are continuing to take their Duke of Edinburgh award. Interior and Exterior angles are a key part of computer aid design programmes and are needed in some programming elements too. Towards the end of the term we move into Pythagoras and Trigonometry territory. This is an area that can be used in Physics and further afield, such as in engineering qualifications and can be used to calculate the shortest path in a rectangle. We finish the second term in the land of data and continue our pursuit of making our students into data-savvy students. The ability to understand statistical diagrams is critical in a large range of academic subjects both now and in the future. The ability to make subjective and informed views from data and to identify quality data will give a strong grounding. Linking this with an effective understanding of mean, median, mode and range will allow students to confidently communicate in the future when working in business and other data rich areas.
Term 3	Converting between fractions, decimal and percentages Compound measures Unit conversions Working with upper and lower bounds Functional Numerical Problems	In the final term we look at the links between fractions, decimals and percentages, which are a fundamental skill in order to be numerate. The consolidation of the numeracy toolkit continues with unit conversions, which is critical in order to be able to work in construction, engineering, nursing and catering to name but a few. In between these are the understanding of compound measures which is key to Physics and Geography but also key to understanding how to get to places effectively in the future via speed. This can lead to improved understanding of distance-time graphs which are another key part of the GCSE syllabus in the Mathematics and Physics. We then look at the accuracy of measures via upper and lower bounds which are used in engineering, catering
		and manual vocations like carpentry to ensure that objects are maintained within guidelines that are set out in laws like the British Standards.

Year 10 Mathematics Curriculum: Higher	Topics	Key Knowledge
Term 1	Changing the subject of a formula Inequalities Direct and Inverse Proportion Real Life Graphs Rates of Change and Areas under a graph Distance-Time and Velocity-Time Graphs Pythagoras and Trigonometry Plans and Elevations Transformations Vector Geometry	<ul> <li>Students start Year 10 in the land of Algebra and rearranging formula which is important in many aspects of the subject both not and in the future and is also important in Physics. In real life this skill is important because it may be able to find us solutions to problems from quite mundane to more complex ones. We revisit linear inequalities to build the understanding of this area and to link it both algebraically and graphically with the understanding with equations of lines.</li> <li>Students then move onto direct and inverse proportion, which is a key area in many subjects, including engineering, physics and biology. This is a great opportunity to extend algebraic skills whilst understanding the key aspects of this area.</li> <li>Students then work through a section on graphs which looks at many aspects of the applications of this topic. From interpreting and working with real life graphs – linking to many areas academically in the process – we then work on rates of changes, areas under and graph and move onto distance-time graphs and velocity-time graphs, which will link strongly with Physics and the concepts of Numerical Methods and Mechanics in Mathematics at AS and A-Level.</li> <li>The second half of the term has Geometry and Measure at the forefront. Students first of all return to Pythagoras and Trigonometry and look to extend their understanding from 2D to 3D. This 3D understanding links into Plans and elevations, which helps students to visualise the potential ways in solving 3D Trigonometry more effectively.</li> <li>Working through transformations allows students to extend their understanding of the area through to negative enlargements, which enables students to understand the effect different transformations would have in things such as computer gaming and meteorology in preparation for the use of Matrices in GCSE and A-Level Further Mathematics.</li> <li>The final element of the term links to this by looking at Vector Geometry. This combines the elements of working with column vector</li></ul>
Term 2	Exact Values of Sine, Cosine and Tangent Sine and Cosine Rule Circle Theorems Indices and Surds Solving Quadratic Equations and inequalities Working with algebraic fractions Transformations of functions Equations of Circles and Tangents	<ul> <li>The understanding of exact trigonometric values is a key part of mathematics in Year 11 and beyond. This links to many areas, not just in trigonometry but into surds as we will see later in the term. It is a fundamental area needed for A-Level Mathematics and beyond.</li> <li>This then leads on naturally to working through the Sine and Cosine rules, which extends knowledge of trigonometry past those of right-angled triangles through to any triangle. These concepts play a critical part of our world, from being able to measure lengths and distances electronically in surveying and sporting events to calculating areas in conjunction with the sine area formula for triangles</li> <li>We then review the basic properties of indices and extend them to the more advanced properties and continue to extend students understanding of surds</li> <li>We then move onto algebra; initially by practicing and extending the solving of quadratic equations and then returning to the solution of inequalities, reviewing linear and moving onto quadratics. This then extends into working with algebraic fractions, which in numerous situations produces more opportunities to develop algebraic manipulation skills and the solving quadratic equations.</li> <li>We conclude the term with transformations of functions, which combines skills gained in the first two sections of the term to investigate and understand the how a function can be transformed in an array of scenarios Finally, we complete this section of algebra by working with equations of circles and its relation to tangents. This is the beginning of our understanding of coordinate geometry which is a key aspect of the Additional Mathematics and A-Level Mathematics courses.</li> </ul>

StatisticsIdentifying discrete and continuous dataPie ChartsTerm 3Mean, median, mode and range, including from frequency tablesDisplaying data including histograms, cumulative frequency and boplots	The final term of Y10 is spent developing statistical skills. Being proficient at statistics in our data rich world is something that will allow people to stand out from others. From displaying data and looking at new areas through to the traditional calculations of mean, median, mode range and the new calculations of quartiles, students get the opportunity to link these all together and in some cases consolidated GCSE Statistics knowledge.
---	--

# What resources can my child access for support?

The department subscribes to <u>MathsWatch</u> and encourages the use of <u>GCSEPod</u> for which students are provided with logins for both. Students also have access to <u>Kerboodle</u> where our textbook that links to our programme of study are located. The excellent resources on <u>Corbett Maths</u>, including the 5-a-day questions, worksheets and exam-style questions are also an excellent resource to use, along with <u>BBC Bitesize</u> and <u>Seneca Learning</u> provide additional support for students.

## What enrichment opportunities are available and how do these support learning?

Year 10 students have the opportunity to attend weekly support sessions on Thursdays in the Mathematics Department that allow them to develop and enrich their mathematics skills High-achieving students can start on a pathway where they in Year 10 they look at the components of GCSE Statistics moving onto the AQA Level 2 Further Mathematics Qualification in Year 11. In addition they also are invited to sit the UKMT Intermediate Mathematics Challenge in February.

Head of Department	Head of Key Stage 4	Mathematics Exam board
Michael Hay	James Brophy	AQA 8300
michael.hay@greatsankey.org	james.brophy@greatsankey.org	

# MFL Curriculum Vision:

A 'Great Sankey Linguist' will have a strong desire to be able to communicate in another language. They will appreciate the concept that 'English is not enough' and they will have a deep interest in broadening their knowledge of the cultures of the people who speak the language they study. They will be open-minded and have a desire to learn about the customs, traditions and daily routines in countries around the world. They will be risk-takers and be willing to take on the challenge of communicating in a language other than their own native tongue. They will develop the ability to express themselves in a different language through an increasingly growing vocabulary and a deepening knowledge of grammar. They will become more confident as their fluency and spontaneity increase and will develop the linguistic skills which could enable them to pursue the study of further foreign languages. In our global society, where there is a strong likelihood that future employment will transport today's young people to distant horizons, the ability to speak a foreign language is and will continue to be, a much sought-after, lifelong skill.

# Year 10 French GCSE Curriculum Aims:

The aim in year 10 in the first year of the GCSE course in French is to enable students to develop their French language skills and to equip them with the knowledge to communicate confidently in a variety of contexts. There is equal emphasis on the four skills of speaking, listening, reading and writing and students will simultaneously strengthen these skills and expand their cultural knowledge of France and the French-speaking world. Students will be able to understand and provide information and opinions about a range of themes relating to their own experiences as well as those of other people including those of people living in France and countries and communities where French is spoken.

Year 10	Topics	Key Knowledge
French		
Curriculum		
Term 1	<u>Current and future study</u> : School life, school rules, differences between French and British school <u>Local, national and international areas of interest</u> : transport, holiday destinations, accommodation, facilities, weather, regions of France, main cities <b>Grammar</b> : modal verbs, expressions of obligation 'il faut + infinitive, forming the imperative, re-visit perfect tense, imperfect tense, sequencers	Students will be able to understand personal and factual information from longer and more complex spoken and written texts. They will be able to express their viewpoints about their schooling and aspects of school life. They will be able to express disagreement and agreement. They will be able to speak and write about holiday preferences. They will be able to give an account of a holiday using a range of verbs in the perfect and some examples of the imperfect tense. They be able to identify key information relevant to tourists. They will re-inforce skills required to translate to and from the target language which are requirements for the GCSE papers.
Term 2	<u>Current and future study</u> : future plans, post-16 education, compare university and apprenticeships <u>Social issues</u> : Healthy and unhealthy eating, compare old and eating habits, smoking, drugs and alcohol, health resolutions <b>Gramma</b> r: re-visit simple future of regular verbs, key irregular verbs in the future tense, future time expressions, use of 'quand', re-visit 'si' clauses, conditional form of devoir and pouvoir + inf., re-visit imperfect tenses, il vaudrait + inf.	Students will be able to understand information referring to a range of options relating to post-16 study. They will be able to identify positive and negative aspects of future pathways. They will be able to express their own intentions with regards to their future choice of study. They will be able to use a range of structures and future time expressions. They will be able to discuss healthy and unhealthy lifestyles and make suggestions as to what they or others should or shouldn't or do in order to keep healthy. They will be able to compare current and past habits. They will use strategies which will enable them to deduce meaning from longer texts.
Term 3	<u>Culture and identity</u> : personal relationships, marriage and partnerships, personality/ physical attributes <u>Culture and Identity</u> : social media and mobile technology <b>Grammar</b> : re-visit adjectival agreements, future tense, conditional tense, expressing possibility, recognising the subjunctive.	Students will be able to describe current relationships with friends and consider what attributes are important from them in a future partner. They will be able to give and understand viewpoints about different partnerships and types of family units. Mobile technology and social media form an integral part of the lives of today's young people and the students will be able to discuss their personal opinions and consider the advantages and disadvantages and potential dangers of technology.

#### What resources can my child access for support?

Your child will have access to online resources through Kerboodle, GCSEpod and www.vocabexpress.com

www.bbcbitesize.com

m www.quizlet.com

Head of Department:	Second in Department:
Patricia Mellado	Sarah Sinclair
patricia.mellado@greatsankey.org	sarah.sinclair@greatsankey.org

Exam board: www.aqa.org.uk

# Year 10 German GCSE Curriculum Aims:

The aim in year 10 in the first year of the GCSE course in German is to enable students to develop their German language skills and to equip them with the knowledge to communicate confidently in a variety of contexts. There is equal emphasis on the four skills of speaking, listening, reading and writing and students will simultaneously strengthen these skills and expand their cultural knowledge of Germany and the German -speaking world. Students will be able to understand and provide information and opinions about a range of themes relating to their own experiences as well as those of other people including those of people living in Germany and countries and communities where German is spoken.

Year 10	Topics	Key Knowledge
German		
Curriculum		
Term 1	Current and future study: School life, school rules, education system in Germany Local, national and international areas of interest: transport, holiday destinations, accommodation, facilities, weather, regions of Germany, main cities <b>Grammar</b> : Re-visit present, perfect and future tenses, using seit and vor, infinitive constructions, common conditionals, re-visit adjectival endings, forming comparatives, recognising the imperative, irregular verbs, imperfect forms, re-visit word order (time, manner, place), re-visit dative and accusative with prepositions	Students will be able to express their viewpoints about their schooling and aspects of school life. They will be able to express disagreement and agreement. They will be able to identify similarities and differences in the British and German education systems. Students will be able to speak and write about holiday preferences. They will be able to give an account of a holiday using a range of verbs in the perfect and some examples of the imperfect tense. They be able to identify key information relevant to tourists. They will re-inforce skills required to translate to and from the target language which are requirements for the GCSE papers.
Term 2	Current and future study:       future plans, post-16 education, compare university and apprenticeships         Social issues:       Healthy and unhealthy lifestyles, revise sports and fitness, compare old and eating habits, smoking, drugs and alcohol, health resolutions         Grammar:       future tense, prepositions with genitive, time phrases, modal verbs re-visited, weak and strong verbs, perfect tenses of weak and strong verbs, expressions of frequency, using must and must not	Students will be able to understand information referring to a range of options relating to post-16 study. They will be able to identify positive and negative aspects of future pathways. They will be able to express their own intentions with regards to their future choice of study. They will be able to use a range of structures and future time expressions. They will be able to discuss healthy and unhealthy lifestyles and make suggestions as to what they or others should or shouldn't or do in order to keep healthy. They will be able to compare current and past habits. They will use strategies which will enable them to deduce meaning from longer texts.
Term 3	Culture and identity: personal relationships, marriage and partnerships, personality/ physical attributes         Culture and Identity: social media and mobile technology         Grammar:         Adjectival agreements, comparative and superlative adjectives, using weil and wenn, possessive adjectives, perfect and imperfect tenses, imperfect tenses of weak and selected strong verbs	Students will be able to understand personal and factual information from longer and more complex spoken and written texts. They will be able to discuss advantages and disadvantages of marriage. They will be able to give and understand viewpoints about different partnerships and types of family units. Mobile technology and social media form an integral part of the lives of today's young people and the students will be able to discuss their personal opinions and consider the advantages and disadvantages and potential dangers of technology as well as compare life in the present day to life in the past.

#### What resources can my child access for support?

Your child will have access to online resources through Kerboodle, GCSEpod and www.vocabexpress.com www.guizlet.com

Head of Department:	Second in Department:
Patricia Mellado	Sarah Sinclair
patricia.mellado@greatsankey.org	sarah.sinclair@greatsankey.org

Exam board: www.aqa.org.uk

# Year 10 Spanish GCSE Curriculum Aims:

The aim in year 10 in the first year of the GCSE course in Spanish is to enable students to develop their Spanish language skills and to equip them with the knowledge to communicate confidently in a variety of contexts. There is equal emphasis on the four skills of speaking, listening, reading and writing and students will simultaneously strengthen these skills and expand their cultural knowledge of Spain and the Spanish-speaking world. Students will be able to understand and provide information and opinions about a range of themes relating to their own experiences as well as those of other people including those of people living in France and countries and communities where Spanish is spoken.

Year 10 Spanish	Topics	Key Knowledge
Curriculum		
Term 1	Current and future study:       School life, school rules, differences between Spanish and British school         Local, national and international areas of interest:       Transport, holiday destinations, accommodation, facilities, weather, regions of Spain, main cities         Grammar:       Re-visit expressing opinions and use of comparatives. Use of the future tense to discuss our plans. The imperative and modal verbs to discuss school rules. Use of verb "estar" for location and with past participles. The preterit tense and introduction to the imperfect tense to discuss past holiday	Students will be able to understand personal and factual information from longer and more complex spoken and written texts. They will be able to express their viewpoints about their schooling and aspects of school life. They will be able to express disagreement and agreement. They will be able to speak and write about holiday preferences. They will be able to give an account of a holiday using a range of verbs in the perfect and some examples of the imperfect tense. They will re-inforce skills required to translate to and from the target language which are requirements for the GCSE papers.
Term 2	Culture and Identity:       social media and mobile technology.         Culture and Identity:       Eating habits and eating out.         Grammar:       The perfect tense to discuss what we have done online today. The present continuous tense to be able to discuss what people are doing. Re-visit key verbs for eating at different meal times.	Mobile technology and social media form an integral part of the lives of today's young people and the students will be able to discuss their personal opinions and consider the advantages and disadvantages and potential dangers of technology. They will be able to discuss eating habits and what they eat at different mealtimes. Students will be able to order food at a restaurant and gain an insight into eating Spanish eating habits and traditional Spanish foods. They will use strategies which will enable them to deduce meaning from longer texts. Students will be able to take part in GCSE role plays and discuss events presented in a photo card.
Term 3	Local, national and international areas of interest: Healthy and unhealthy eating, compare old and eating habits, smoking, drugs and alcohol. <u>Culture and Identity</u> : Personal relationships, marriage and partnerships, personality/ physical attributes. Spanish festivals, and traditions <b>Grammar</b> : the imperfect tense to compare current and past eating habits. Use of imperative to discuss how to improve diet and lifestyle. Pupils can identify key past tenses when reading accounts of events at key festivals.	They will be able to discuss healthy and unhealthy lifestyles and make suggestions as to what they or others should or shouldn't or do in order to keep healthy. They will be able to compare current and past habits. They will use strategies which will enable them to deduce meaning from longer texts. Students will be able to describe current relationships with friends and consider what attributes are important from them in a future partner. They will be able to give and understand viewpoints about different partnerships and types of family units Students will gain an insight into the importance of Spanish festivals and when they take place throughout the year, they will research key festivals and traditions associated with festivals.

#### What resources can my child access for support?

Your child will have access to online resources through Kerboodle, GCSEpod and www.vocabexpress.com

www.bbcbitesize.com

www.quizlet.com

Head of Department:	Second in Department:
Patricia Mellado	Sarah Sinclair
patricia.mellado@greatsankey.org	sarah.sinclair@greatsankey.org

Exam board: www.aqa.org.uk

#### **Music Curriculum Vision:**

A 'Great Sankey Musician' is committed, creative individual with increasing confidence; they are role models and ambassadors for our Great Sankey musical family. A Great Sankey Musician will become an effective communicator, whilst also developing skills to listen with a critical ear, nurturing a platform to celebrate success and reflection for further improvement (both for themselves and also for others). Our musicians naturally become leaders, developing their teamwork skills to fruition, enhancing values such as inclusiveness, respect, and fairness. Our musicians are tenacious, resilient and disciplined; they are dedicated to both independent and collaborative learning, understanding the importance of private practice and also the vitality of commitment to an ensemble. Above all, our musicians develop human values such as learning to love, show empathy and compassion, enthusiasm, passion, emotional intelligence, beauty and good humour.

Music is a universal language that embodies one of the highest forms of creativity. Our music curriculum is certainly broad and balanced as it encompasses Science, Maths, Literacy, MFL, History, P.E., research skills and above all, Art. Our carefully crafted curriculum will engage and inspire pupils to develop a love of music and their talent as musicians, and so increase their self-confidence, creativity and sense of achievement. As pupils progress, they should develop a critical engagement with music, allowing them to compose, and to listen with discrimination to the best in the musical canon. Above all, our curriculum will ensure a development of "family ethos"; our students will have a home where they feel safe, happy, valued, loved, trusted as they will naturally be provided with opportunities to lead and perform on a platform for sustained progress. Our students are individuals and our spiral curriculum will nurture and develop "the whole child". We are a local lead Ambassador Music School "Accent" (Warrington/ Halton); exemplified by our curriculum and extracurricular offer.
# Year 10 Music Curriculum Aims (AQA GCSE Music):

At the start of year 10 pupils will be taught how to read music. They will already have a good knowledge of this as it students are taught how to read and write the elements of music at KS3, but at KS4 we revisit and develop the depth. Students will arrange to have lessons with an instrumental/vocal teacher if they haven't done so already. At Great Sankey High School, we have nine visiting Peripatetic teachers each week and students can learn any instrument of their choice. All instrumental/vocal lessons are individual and last for 20 minutes. PP students receive free lessons.

Year 10 Music	Content	Key Knowledge
Curriculum		
Term 1	Treble clef, bass clef, chords, scales, keys and key	Students will take a Baseline Theory assessment so we can assess their starting point. Students will perform on their instrument to
	signatures, rhythm, metre, structure and dynamics.	the class so we can develop their confidence and provide constructive feedback. This is also an important time to develop
	Solo Performance 1.	confidence and relationships so students can feel comfortable when performing and providing support and honest feedback in an
	Introduction to Sibelius software.	open forum. Students learn the basics of how to navigate music notation software, Sibelius, in preparation for their future composition tasks.
Term 2	Texture, tonality, instruments of the orchestra,	Students continue to embed, recall and apply their theory knowledge. They learn Bach's basic rules of composition and apply
	articulation, Bach's composition rules.	them to an arrangement task on Sibelius software. Students are now ready to begin to study their classical period set work;
	Classical Period Set Work.	initially via listening and score reading tasks. They also learn to perform the music as an ensemble, thus embedding ensemble
	History of Music AoS1- 4.	skills, in addition learning about the wider context of the classical period (AoS1). They will look at AQA exam questions on AoS1
	Solo Performance 2.	applying their knowledge of the theory and also the classical period whilst building this analysis into AoS1-4. Students also perform
	Arranging.	a solo, either an improved version of solo performance 1 or a different piece entirely. Students learn to arrange music on Sibelius
		and gain confidence with creative ideas (applying their theory knowledge) in preparation for their free composition.
Term 3	Ensemble Performance 1 & 2.	Students constantly apply their theory knowledge in order to improve on their performances. They are now ready to compose
	Solo Performance 3.	with increased creatively whilst also confidently listen with an analytical ear. They perform in a concert to parents and friends; the
	Free Composition.	concert is recorded and students can celebrate their hard work and progress, whilst also receiving feedback concerning www/ebi.
	Popular Music Set Pieces.	Students study their popular music set pieces in addition to studying exam questions on their classical set piece, in addition to the
	Mock Paper.	continuation of history of music study via AoS1-4. At the end of Year 10 students are then ready to sit a mock paper.

# What resources can my child access for support?

Your child will have access to online resources through Moodle and the Great Sankey Music website:- <u>www.greatsankeymusic.com</u> or check out our showcase of performances YouTube Channel *Sankey Music* What enrichment opportunities are available and how do these support learning?

We offer an extensive programme with at least two ensembles rehearsing after school each night and a concert every half term. Our ensembles include:- Sankey Singers, Bellas & Fellas A capella, Theory Club, The Hit Men, Y7 Drum Ensemble, Ukulele Ensemble, String Ensemble, Young Musicians, Rock Bands & Junior Ensemble. Our programme of concerts include:- Christmas Concert, GCSE Music Concert, Great S Factor, MAT Collaborative Concert, Young Musicians Concert & Summer Concert.

Head of Department:	KS3 Curriculum Lead:	Exam board AQA
Joanne Foster	Paul Bryan	
jo.foster@greatsankey.org	paul.bryan@greatsankey.org	https://filestore.aqa.org.uk/resources/music/specifications/AQA-8271-SP-2016.PDF

### Year 10 Music Technology Curriculum Aims (NCFE Level 2 Technical Award in Music Technology):

Year 10 MT Curriculum	Topics	Key Knowledge
Term 1	Unit 1 – Task 1 Students begin by learning about the hardware components and software features of the digital audio workstation. They consolidate their knowledge into a document, which is used as evidence for their coursework.	Students will use the digital audio workstation to produce all projects, so it makes sense to study the components and features first.
	Unit 1 – Task 2 Students use the hardware and software features that they learnt about in task 1 to recreate a song of their choice, as well providing 'process evidence' of how they developed their practical work.	Recreating an existing song allows students to develop their technical skills and musical ears without worrying about creating their own original musical ideas.
Term 2	<b>Unit 3 – Task 1</b> Students will learn to select and place microphones to capture musical performances, as well as learning to use the mixing desk to route sounds within the recording studio. They will use this information to plan their own recording session.	As the recording sessions for unit 3 are carried out individually in after-school sessions, starting them in January of Year 10 gives us time to carry them all out before the end of Year 10. Task 1 is to create a plan for the task 2 recording, so the plan must be completed before the recording.
	<b>Unit 3 – Task 2 (after school)</b> Students will complete their recordings in after school sessions between January and July. Their 'process evidence' for this task will take the form of videos that they record during the session, explaining their work.	Students creating their own video evidence as they are completing the recording is more time-efficient than writing it up afterwards. It also allows the students to document the information while it is fresh in their minds.
	<b>Unit 2 – Task 1</b> Students choose a musical style and research the musical and technical features of this style. This includes the structure, rhythm, melody, harmony, instrumentation and use of technology.	This is usually the unit that students find most challenging, so placing it here means that we are not overfacing them at the beginning, but they still have time to improve it in Year 11 before the final deadline.
Term 3	Unit 2 – Task 2 Using the information that they learnt from unit 2 – task 1, students will create their own original piece of music, as well as producing 'process evidence' of how they developed this piece.	Having honed their sequencing skills in unit 1, and recording skills in unit 3, students are now free to focus on creating their own original musical ideas.
	<b>Mock Exams</b> During their mock exam period, students will complete their first mock papers for the written and practical exams. This will allow students to practise the skills and exam technique required.	The exam content is the same as the content covered in the coursework, and students are supported with regular knowledge retention activities.
	<b>Coursework Improvement Time</b> During the final days of Year 10, students will be given the opportunity to reflect on their work and improve it. This gives the opportunity for students to raise the grade of earlier work.	The end of the year is a good time for reflection and future target setting, so we have a clear focus in September of Year 11.

# What resources can my child access for support?

Each students has a folder, which contains detailed instructions for each piece of coursework, and feedback and tracking. All lesson resources are available on Classwork/Music/Music/Music Technology. 'Quizlet' can also be used to revise key terms.

# What enrichment opportunities are available and how do these support learning?

We offer an extensive programme with at least two ensembles rehearsing after school each night and a concert every half term. Our ensembles include:- Sankey Singers, Bellas & Fellas A capella, Theory Club, The Hit Men, Y7 Drum Ensemble, Ukulele Ensemble, String Ensemble, Young Musicians, Rock Bands & Junior Ensemble. Our programme of concerts include:- Christmas Concert, GCSE Music Concert, Great S Factor, MAT Collaborative Concert, Young Musicians Concert & Summer Concert.

Head of Department: Joanne Foster jo.foster@greatsankey.org Music Technology Curriculum Lead: Paul Bryan paul.bryan@greatsankey.org Exam board: NCFE https://www.qualhub.co.uk/qualification-search/qualificationdetail/ncfe-level-2-technical-award-in-music-technology-3665

#### **Physical Education Curriculum Vision:**

The intent of the Physical Education programme at Great Sankey High school is for students to enjoy and engage in physical activity, with the ambition to develop the skills and knowledge required to allow all learners, regardless of background and ability, to access a range of sports and physical activities both in school, during curricular and extra-curricular activities, as well as outside of the school environment. This could include an interest in sport both as a performer or spectator.

If learners have these skills and knowledge and enjoy physical activity they will confidently adopt a physical healthy lifestyle that they will maintain into later life. They will be aware of the impact that sport and physical activity has on overall wellbeing.

## Year 10/11 Core Physical Education Curriculum Aims:

Students should enjoy participation in physical activity. They should tackle complex and demanding physical activities. They should get involved in a range of activities that develops personal fitness and promotes an active, healthy lifestyle.

Year 10/11 Curriculum Plan: Activities are taught on a rotation depending on the availability of facilities. The broad and balanced curriculum builds upon the students' experience in KS3. Revisiting the basic knowledge, skills and introducing some more complex skills and tactics of a range of games and other physical activities. Striking and fielding games and athletics are again taught in the summer months. The main focus is ensuring that students are physically active and enjoy PE, experiencing a range of activities

	Boys Set 1&2	Girls option choices		
Term 1 + 2	Games (football, rugby, handball)	Outdoor games	Badminton / table tennis	
	Basketball Badminton	Fitness (yoga)	Sports-hall games	
	Fitness	Outdoor games	Fitness (dance)	
Term 3	Dodgeball Athletics	Fitness	Tennis/outdoor games	
	Striking and Fielding games			

#### What resources can my child access for support?

Information and resources for different sports can be found in the relevant National Governing Body websites. The BBC Sports Academy website is also a useful resource: http://news.bbc.co.uk/sport1/hi/academy/default.stm

# What enrichment opportunities are available and how do these support learning?

There is an extensive extra-curricular programme run by the PE department. Clubs are open to all students and (where applicable) competitive teams are selected from those students who attend the clubs. The department also runs a regular inter-house competition, giving all students the opportunity to represent their house in an organised competition.

Head of Department: Andrew Gee <u>andrew.gee@greatsankey.org</u>

KS3 Curriculum Lead: n/a

Exam board n/a

### **BTEC First in Sport Curriculum Aims:**

Unit 1: Fitness for Sport and Exercise: Know about the components of fitness and the principles of training. Explore different fitness training methods. Investigate fitness testing to determine fitness levels. Unit 2: Practical Performance in Sport: Understand the rules, regulations and scoring systems for selected sports. Practically demonstrate skills, techniques and tactics in selected sports. Be able to review sports performance. Unit 3: Applying the Principles of Personal Training: Design a personal fitness training programme. Know about the musculoskeletal system and cardiorespiratory system and the effects on the body during fitness training. Implement a self-designed personal fitness training programme to achieve own goals and objectives. Review a personal fitness training programme. Unit 6: Leading Sports Activities: Know the attributes associated with successful sports leadership. Undertake the planning and leading of sports activities. Review the planning and leading of sports activities.

### Year 10 BTEC First in Sport Curriculum Plan:

	Topics	Key Knowledge
Term 1	Unit 6: Leading Sports Activities:	Practical based unit to engage students at the start of the course. Students have had recent previous experience of Sports leadership in KS3 PE so this unit will build upon their existing knowledge. This unit will focus on: Key attributes and responsibilities of a sports leader. Planning and delivering a sports session. Reviewing the success of their delivery setting targets for improvement.
Term 2	Unit 1: Fitness for Sport and Exercise	Exam unit to be taught ready for summer external exam which would allow an opportunity for a resit if necessary in year 11. Content will include: Know about the components of fitness and the principles of training. Explore different fitness training methods.
Term 3	Unit 1: Fitness for Sport and Exercise	Exam unit to be taught ready for summer external exam which would allow an opportunity for a resit if necessary in year 11. Content will include: Investigate fitness testing to determine fitness levels. This will be practical as well as theoretical.

# What resources can my child access for support?

BTEC First in Sport Revision Guide (published by Pearson)

For practical sport Information and resources can be found in the relevant National Governing Body websites. The BBC Sports Academy website is also a useful resource:

http://news.bbc.co.uk/sport1/hi/academy/default.stm

# What enrichment opportunities are available and how do these support learning?

There is an extensive extra-curricular programme run by the PE department. Clubs are open to all students and (where applicable) competitive teams are selected from those students who attend the clubs. The department also runs a regular inter-house competition, giving all students the opportunity to represent their house in an organised competition.

Head of Department: Andrew Gee andrew.gee@greatsankey.org Exam board: Pearson https://qualifications.pearson.com/content/dam/pdf/BTEC-Firsts/Sport/2012/Specification-and-sampleassessments/9781446936368\_BTECFIRST\_AWD\_SPORT\_SPEC\_ISS4.pdf

# Year 10 GCSE Physical Education Curriculum Aims:

Develop theoretical knowledge and understanding of the factors that underpin physical activity and sport and use this knowledge and understanding to improve performance Understand how the physiological and psychological state affects performance in physical activity and sport Perform effectively in different physical activities by developing skills and techniques and selecting and using tactics, strategies and/or compositional ideas Develop their ability to analyse and evaluate to improve performance in physical activity and sport Understand the contribution that physical activity and sport make to health, fitness and well-being

Understand the key socio-cultural influences that can affect people's involvement in physical activity and sport

### Year 10 GCSE Physical Education Curriculum Plan:

	Topics	Key Knowledge
Term 1	Component 1: Fitness and Body Systems – topics 3: Physical training Topic and 4: Use of data Component 4: Personal Exercise Programme (PEP) Component 3: Practical sport	Knowledge from component 1 is relevant for PEP (Personal exercise plan). The PEP is a practical investigation with 10% of the overall mark. Students plan and carry out fitness tests and training methods to improve an aspect of fitness relevant to their own practical performance. Component 1 also links with the links with practical (component 3 Practical sport) which runs parallel throughout the term. In component 3 students will start to develop skills in team and individual sports. Content is enjoyable and students will have some prior knowledge from their own involvement in sport and KS3 fitness lessons. This is planned to engage all learners right at the start of the course.
Term 2	Component 2: Health and Performance - topics 2: Sport psychology; and 3: Socio- cultural influences Component 3: Practical sport	New content from component 1&2 is taught to ensure robust assessment by the end of the year that reflects the actual exam papers students will sit at the end of year 11. These lessons are taught as theory with some practical where appropriate. Practical sport continues to run parallel throughout the term. Lessons will include structured opportunities for retrieval of previously learned knowledge.
Term 3	Component 1: Fitness and Body Systems – topic 1: Applied anatomy and physiology Component 2: Health and Performance – topic 2: Sport psychology Component 3: Practical sport	New content from component 1&2 is taught to ensure robust assessment by the end of the year that reflects the actual exam papers students will sit at the end of year 11. These lessons are taught as theory with some practical where appropriate. Practical sport continues to run parallel throughout the term. Lessons will include structured opportunities for retrieval of previously learned knowledge.

# What resources can my child access for support?s

CGP revision guides and workbook – provided by the department.

GCSE pods <u>https://www.gcsepod.com/</u>

For practical sport Information and resources can be found in the relevant National Governing Body websites. The BBC Sports Academy website is also a useful resource:

http://news.bbc.co.uk/sport1/hi/academy/default.stm

# What enrichment opportunities are available and how do these support learning?

There is an extensive extra-curricular programme run by the PE department. Clubs are open to all students and (where applicable) competitive teams are selected from those students who attend the clubs. The department also runs a regular inter-house competition, giving all students the opportunity to represent their house in an organised competition.

Head of Department: Andrew Gee andrew.gee@greatsankey.org Exam board Edexcel https://qualifications.pearson.com/en/qualifications/edexcel-gcses/physical-education-2016.html

### **PSHE Curriculum Vision:**

PSHE will enable students to feel positive about who they are and to enjoy healthy, safe, responsible and fulfilled lives. Through active learning opportunities students will learn to recognise and manage risk, take increasing responsibility for themselves, their choices and behaviours and make positive contributions to their families, schools and communities.

Students will learn to recognise, develop and communicate their qualities, skills and attitudes. They build knowledge, confidence and self-esteem and make the most of their abilities. Students will learn to identify and articulate feelings and emotions, learn to manage new or difficult situations positively and form and maintain effective relationships with a wide range of people.

# Our aim therefore for PSHE is to provide students with:

Accurate and relevant knowledge

Opportunities to turn that knowledge into personal understanding

Opportunities to explore, clarify and if necessary challenge, their own and others' values, attitudes, beliefs, rights and responsibilities

The skills and strategies they need in order to live healthy, safe, fulfilling, responsible and balanced lives.

At GSHS we know that learning and undertaking activities in PSHE education contribute to achievement of the curriculum aims for all young people to become:

Successful learners who enjoy learning, make progress and achieve

Confident individuals who are able to live safe, healthy and fulfilling lives

Responsible citizens who make a positive contribution to society.

At GSHS we will create a comfortable class room climate where students are confident and discuss their hopes, fears and sensitive issues; develop a set of ground rules for the PSHE class room; model good practice in the way we talk to students; provide enrichment opportunities that support and develop our students emotional and physical wellbeing; work with external providers to provide the best possible experience and expertise for our students; remain flexible with our Curriculum and respond to issues as and when they arise. Students will revisit content throughout the key stages developing knowledge and understanding which is age appropriate.

All students will receive one hour of PSHE each week, delivered by their form tutor.

	Topics	Key Knowledge
Term 1	Transition to key stage 4 and developing study habits Mental health and ill health, tackling stigma	Having successfully transitioned to and navigated KS3, students will be supported to transition to KS4. They will reflect on learning habits and individual strengths as a learner and to develop a growth mind-set. KS4 can be stressful due to preparing for external assessment. Students will be supported to develop strategies to manage emotional wellbeing during the transition, including ways of overcoming anxiety and will explore the link between lifestyle choices and emotional and mental wellbeing. Mental health will be revisited to learn about the causes and effects of stigma in relation to mental ill-health and how to challenge mental health stigma. Students will be supported in developing strategies for safeguarding emotional and mental health, building on KS3 learning on unhealthy coping strategies. They will know what services are available and will be able to access them independently. Students will explore the financial, social and emotional risks of poor money management and will critically evaluate the risks associated with online gambling and illegal financial activity.
	Understanding the causes and effects of <b>debt</b> Understanding the risks associated with <b>gambling</b>	
Term 2	Tackling <b>relationship myths</b> and expectations Managing romantic <b>relationship challenges</b> including break ups	Building upon KS3 content, students will learn about commonly held relationship and sex myths and where these originate from. They will learn about social norms in relation to sex, particularly for young people and will evaluate how sex myths can impose pressure on young people and how to manage this. They will also explore the changing nature of relationships over the course of a lifetime and will learn how to manage the end of an intimate relationship. Students will learn how to recognise pressure, coercion and exploitation in romantic or sexual relationships and will further their learning about consent and support services. Students will consider the importance of role models on health-related behaviour and what makes a good role model and will learn about the impact of a role model on people's health-related behaviour.

	Exploring the influence of <b>role models</b> Evaluating the <b>social and emotional risks</b> of drug use	Time will be spent clarifying values and challenging the representation of drug and alcohol use in the media and will also learn about the consequences of drug taking on the wider community.
Term 3	Understanding <b>different families</b> and learning <b>parenting</b> skills Managing <b>change, grief and bereavement</b>	Time will be given to recognise and explore the different types of families in the UK today and students will learn about why someone might not have children, or might find it hard to have children and the options open to those who are not able to. They will learn about readiness for parenthood and about the qualities that make someone a good parent. They will also learn about the options available following an unplanned pregnancy. Students considered managing loss in year 8. This topic will be returned to at a more age appropriate level and students will consider the effects and impact of family breakdown and bereavement and develop strategies for coping with these changes.
	Preparation for <b>work experience</b> Evaluation of <b>work experience</b> and readiness for work	Year 10 students undertake work experience at the end of the academic year. As such, time will be spent learning about the range of opportunities that exist in learning and work, about the experience of taking part in a work experience placement, including reflection on their expectations and concerns and about the documentation that is required by the school and/or the employer prior to, during and after work experience. Students will learn how to recognise inappropriate and/or unsafe expectations in the workplace and how to overcome challenges faced during work experience. They will then reflect on the employability skills developed during work experience.

Lead Teacher

Lewis Twist Lewis.twist@greatsankey.org

# **Psychology Curriculum Vision:**

A Great Sankey/Barrow Hall College social science student will want to discover what leads to humans behaving in the way they do and what influences different groups within society. Students will have a desire to explore different theoretical explanations in an analytical way, which will inspire them to keep questioning and will give them a thirst for the knowledge over their whole lifetime. In addition, they will have a solid grasp of the research process as it is research which underpin all areas of the social sciences. Students will also develop the ability to translate research findings into real world applications which can then have a positive impact on the economy. Students will also develop an empathetic understanding and awareness about different conditions such as schizophrenia or depression and groups within society. This knowledge will enable them to develop their interpersonal skills which will enhance their ability to work with different types of people in a more productive way throughout their lives.

### Year 10 Psychology Curriculum Aims:

The aim of our Year 10 Psychology GCSE curriculum is to aid our students to develop a real interest in the Psychology which will help to motivate them to want to learn more and to a high standard. In addition, it will create a solid foundation for their GCSE Psychology via the teaching of specialist tier 3 terminology.

Year 10 GCSE Psychology Curriculum	Topics	Key Knowledge
Term 1	Psychological Problems Research Methods	<b>Psychological problems</b> is a relatable topic and introduces students to the nature/nurture debate which is the most accessible debate so provides a good foundation. This topic area also links well with the A level specification we study at A level at Barrow Hall College. <b>Research methods</b> underpins everything we do in psychology so it is important that our students gain the skills about how to conduct research and how to evaluate studies in order to access other topic areas effectively.
Term 2	Social Influence Sleep & Dreaming	Social Influence relates well to experimental methods as there are a number of number of studies which use lab exps. This allows us to further embed research method skills which contribute to a significant number of marks across the 2 exam papers. Sleep and dreaming enables us to introduce non-experimental methods in an accessible way. This topic area links well with the A level specification we study at A level at Barrow Hall College.
Term 3	Research methods Brain and neuro-psychology	Non-exp methods to build upon knowledge about non –experimental methods used in sleep and dreaming. Intro to the brain and Neuro-Psychology to students the time to go over this area ahead of the exams in Yr 11 as there is a lot of new and difficult tier 3 terminology

#### What resources can my child access for support?

Your child will have access to core notes for Paper 1 and Paper 2 provided by the department. These resources can also be found via Google Drive – Social Sciences Optional purchase = Edexcel GCSE (9-1) Psychology Student Book by Christine Brain, Karren Smith, et al. | 12 May 2017 ISBN = 9781292182773 Google classrooms to gain access to Quizziz

For wider interest they should access the British Psychological Society Website and subscribe £12 a year. https://www.bps.org.uk/

Head of Department: Clare Cunningham Email: <a href="mailto:clare.cunningham@greatsankey.org">clare.cunningham@greatsankey.org</a>

Exam board: https://qualifications.pearson.com/en/qualifications/edexcel-gcses/psychology-2009.html

#### **RS Curriculum Vision**

In RS our intention is to provide a curriculum that ensures varied and enriching lessons that prepare students for life in a culturally diverse modern world. RS allows students to understand the beliefs and practices of the religions and world views that not only shape their history but their world today and to appreciate how religion, philosophy and ethics form the basis of our culture. The RS curriculum encourages enthusiasm in the study of other people's beliefs and ensures students have an understanding and respect for different cultures and communities by exploring what it means to be a part of that faith. The RS curriculum widens a student's awareness of their own surroundings, reflecting on our ever-changing world and society and a wide range of issues and big questions that affects millions of people around the world e.g. abortion and euthanasia. The RS curriculum allows students to understand and unravel the concepts they encounter, encouraging them always to be challenged in their thinking. RS allows each student to express their own beliefs and values, giving students the opportunity to think about what they believe and reflect on their own choices, allowing them to develop their own ideas and opinions, whilst understanding why some hold viewpoints and beliefs that are different to their own. Studying RS will allow pupils to adopt an enquiring, critical and reflective approach to the world in which they live. It will encourage a critical mind set and allows the development of skills such as textual analysis, critical analysis, synthesis, evaluation and empathy. RS promotes mutual respect in a diverse society.

#### Year 10 RS Curriculum Aims

In Year 10 students continue their GCSE in RS studying Specification A with AQA. The course consists of two papers. In the study of Paper One students will develop their knowledge of the key beliefs and practices of Christianity and Islam, assessing what is similar and different between the two religions. In Paper One students will be given the opportunity to understand what it means to be a member of each of these faith communities both in the UK and wider world today. In Paper Two students investigate a range of controversial social issues from both religious and non-religious viewpoints. Students use this to help articulate their own viewpoint on these widely debated issues.

<u>PAPER ONE</u> : The study of Religions	PAPER TWO: Thematic Studies
Christian Beliefs	Crime and Punishment
Christian Practices	Peace and Conflict
Islam Beliefs	Religion and Life
Islam Practices	Relationships and the Family

Year 10 RS	Topics	Key Knowledge
Curriculum		
Term 1	Islam Beliefs (Paper 1)	With a quarter of the world being Muslim students will spend their time building on their previous learning of Islam at KS3 exploring some of the key beliefs of a Muslim e.g. Prophets, angels, tawhid and predestination.
Term 2	Religion and Life (Paper 2)	Students consider some of the key religious, philosophical and ethical arguments relating to deeply controversial issues such as abortion, euthanasia and a life after death. This unit enables students to discuss some of the key global issues that confront humanity in the 21st Century and articulate their own view point on these issues whilst understanding why some may disagree with them
Term 3	Christian Practices (Paper 1)	A third of the world follow Christianity. Students build on all their previous learning in Year 7, 8 and 9 with Christianity exploring how Christians practice their faith today investigating specifically topics such as prayer, worship, festivals and missionary work.

#### What resources can my child access for support?

Some useful websites to support your child's learning further are: www.bbcbitesize.com , SAM learning, Seneca learning and GCSE Pod

#### What enrichment opportunities are available and how do these support learning?

To ensure students are as engaged and as enthusiastic with their learning as can be the department offers a range of learning opportunities outside of the classroom including trips to Auschwitz, Rome and places of worship. The department also holds deeper learning days such as Holocaust Memorial Day and World Religion's Day.

**Head of Department:** 

Exam board AQA https://www.aqa.org.uk/subjects/religious-studies/gcse/religious-studies-a-8062

Lisa Baker Lisa.Baker@greatsankey.org

#### Science Curriculum Vision:

A 'Great Sankey Scientist' is a curious individual with an inquisitive and enquiring mind. They strive for answers about how or why something behaves or acts the way it does. They investigate, considering all the factors that can affect their results and then evaluate their methods and strive to improve what they have done. They can make an open minded attempt to explain the world around them using evidence and facts. They understand the value of evidence over opinion, can spot trends in data and make conclusions and link them with explanations and understands the need for peer review. Students are not afraid to challenge ideas (in a positive way.) They have the self-motivation to read around the subject and continue their learning beyond the classroom. They think in a logical, systematic and rational way. They are also able to use abstract thinking to link ideas and concepts together. They are problem solvers (solution focussed) with good numeracy, scientific literacy and oracy skills. They have the ability to look at the complex systems within Biology, Chemistry and Physics and explain how they work in terms that anyone can understand.

# Year 10 Biology Curriculum Aims:

The year 10 curriculum builds on units of work previously studied in year 9. By the end of year 10, pupils will have studied a number of units. These units will be revisited and built upon in their year 11 course of study. At the end of year 10 pupils will have explored these units from a range of assessment objectives and developed a range of practical skills.

Year 10 Biology Curriculum	Topics	Key Knowledge
Term 1	Communicable Diseases Preventing and Treating Disease Non Communicable Disease Photosynthesis	The disease section that starts year 10 builds on cell structure, division and organisation. These units also build on the organisation of systems in the body and plants. The Photosynthesis unit looks at the process of how plants use energy and develops knowledge and understanding about specialised plant cells. These units also further develop practical skills required for the science qualification.
Term 2	Respiration Nervous System Hormonal Control	At the start of the term learners will explore respiration and how the process is essential for the functioning of all living organism. The units then move onto the organisation of the nervous system and how hormones are also involved in the coordination of responses of living things to the internal and external environment.
Term 3	Hormonal Control *Homeostasis in action Reproduction	In the final term the coordination unit is completed and learners will have a full understanding of the role of the specialised cells and the organisation of the systems involved. The final unit studied will build on the role of the reproductive hormones in males and females and how these regulate the process of reproduction. Year 10 learners will finish the year having built on their year knowledge and understanding and give them the foundations to be able to begin the units in year 11 which look at the importance of reproduction in genetic diversity.

### What resources can my child access for support?

Your child has a kerboodle log in where they can access the digital textbook and checklists of content. www.kerboodle.com

They can also purchase a revision guide from school which covers the above content and is specific to the exam board.

# What enrichment opportunities are available and how do these support learning?

Learners can attend the STEM club which is a weekly club organised by members of the science department.

Head of Science:	Head of Biology
Helen Stones	Collette Robertson
Helen.stones@greatsankey.org	Collette.robertson@greatsankey.org

Exam board AQA https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464

# Year 10 Chemistry Curriculum Aims:

Using prior knowledge of atomic structure and the periodic table from year 9, in year 10 this is extended to include bonding, chemical calculations, chemical reactions and energy changes and rates of reactions. This will allow them to explain some of the phenomena that the see in the world around them and justify why we chose do use particular materials. Chemical reactions link throughout the Biology curriculum and energy changes has links to Physics

Year 10	Topics	Key Knowledge
Chemistry		
Curriculum		
Term 1	Bonding and Chemical Calculations	The theories of bonding explain how atoms are held together to make millions of different materials. Scientists use this knowledge of structure and bonding to engineer new materials with desirable products. This links directly to atomic structure. Chemists use their calculations from quantitative analysis to determine the formula of compounds and the equations for reactions. They also use quantitative methods to determine the purity of chemical samples and monitor the yield of chemical reactions. This is built upon in the chemical changes unit.
Term 2	Chemical reactions and energy changes.	All the accumulated knowledge of particles and bonding is now brought together when chemical reactions are described and explained. Experimenting with chemical reactions in a systematic way and organising results logically allows scientists to predict exactly what new substances will be formed and this knowledge can be used to develop a wide range of different materials and processes. This links to earth's resources which is taught in year 11. Energy changes are also an important part of chemical reactions. Transfers of energy take place due to the breaking and formation of bonds. The heating or cooling effects of reactions are used in a range of everyday applications.
Term 3	Rates of Reactions	Chemical reactions can occur at vastly different rates and there are many variables that can be manipulated in order to change their speed. Chemical reactions may also be reversible so conditions will affect the yield of a desired product. In industry chemists determine the effect of different variables on the rate of reaction and yield of the product. This connects to the chemical reactions and energy changes unit directly and further develops the idea of scientific method.

# What resources can my child access for support?

Your child will have access to online resources, including text books, podcasts and exercises through www.kerboodle.com.

They can also access national curriculum revision materials at www.bbcbitesize.com.

Podcasts and questions are available on all topics a <u>www.GCSEpod.com</u>

# What enrichment opportunities are available and how do these support learning?

In year 10 pupils are encouraged to attend revision sessions on a Wednesday night in 204.

Head of Science:	Head of Chemistry	Exam board AQA https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464
Helen Stones	Louise Kwasnicki	
Helen.stones@greatsankey.org	Louise.kwasnicki@greatsankey.org	

# Year 10 Physics Curriculum Aims:

In year 10 students build upon their existing scientific knowledge and look at Physics core theories and their application in context, giving them the ammunition to make informed judgements about scientific issues affecting our world today.

Year 10	Topics	Key Knowledge	
Physics			
Curriculum			
Term 1	Electricity	The electricity module covers the basic rules for current, potential difference, resistance power and energy in simple series and parallel circuits before	
	Radioactive Materials	applying some of these concepts in domestic situations. Efficiency of devices are compared and the cost of using electrical devices is explored.	
		The radioactive materials unit discusses the nature of alpha, beta and gamma radiation and explores some of their uses. The pattern of radioactive	
		decay is explored and linked to decisions around nuclear power previously covered in year 9. Students studying separate sciences will also learn how	
		nuclear fission and fusion can be used to provide energy to produce electricity.	
Term 2	Forces in balance	In year 7 students covered the basics of forces. They visited this again in year 9 when looking at how forces can produce energy transfers. In year 10	
	Describing Motion	they will begin by looking at balanced forces and use geometry and algebra to find missing forces in a system.	
		Students will then learn how the motion of an object can be represented graphically and discover how speed and acceleration can be calculated.	
		Both of these units together set the foundations for Term 3.	
Term 3	Forces and Motion	Students use the ideas studied in term 2 to describe the effects of unbalanced forces on an object in terms of its motion. The unit will refer to the	
	Forces and Pressure (Separates only)	fundamental laws of Physics first described by Sir Isaac Newton.	
		Students studying separate sciences will study the effects of forces on surfaces and in fluids, building upon work done in year 8.	

## What resources can my child access for support?

Your child will have access to online resources, including text books, podcasts and exercises through www.kerboodle.com.

They can also access national curriculum revision materials at <u>www.bbcbitesize.com</u>.

Podcasts and questions are available on all topics a <u>www.GCSEpod.com</u>

# What enrichment opportunities are available and how do these support learning?

STEM Club provides opportunities to apply science and engineering outside of the regular curriculum. Year 10 students are encouraged to act as coaches and mentors to younger members of the club or to take on a longer term STEM Project.

 Head of Science:
 Head of Physics
 Exam board AQA
 https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464

 Helen Stones
 Tony Gledhill
 Tony Gledhill
 Tony Gledhill

Helen.stones@greatsankey.org Tony.gledhill@greatsankey.org