



Goffs-Churchgate Academy

Year 11

How to support
your child

Year 11 Contents

Enterprise

English

Geography

German

Health and Social Care

History

I.C.T

Maths

Media

Photography

Combined Science

Sport

Emotional Wellbeing

Academic Support Programmes

Next Steps

Careers Information

If there are any concerns or queries regarding a subject, please speak to the named contact for the subject or with your child's class teacher. If concerns persist or issues are unresolved, please speak to your child's Director of Learning.

Year 11 Director of Learning

Name: Lucy Taylor

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Year 11 Senior Leadership Link

Name: Cheryl Goodchild - Assistant Principal

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Your Guide to Year 11 Enterprise (BTEC)

- **Exam board:** Edexcel/Pearson
- **Specification:** <https://qualifications.pearson.com/en/qualifications/btec-firsts/business-2012-nqf.html>

Assessment Criteria

- 75% - Three internally assessed assignment based units
- 25% - 1 hour external exam

Expectations of Students:			
<p>Students must be fully equipped with all essential stationary including a calculator and a USB stick to save work completed on the school PC's.</p> <p>Students will be informed of deadlines in advance and these must be adhered to. Any work submitted after a given deadline will unfortunately fail the task, unless a prior arrangement with their teacher has been made for a late submission.</p>			
Term	Topic, title and unit	What students will be learning	How can you specifically help your child
Autumn	Planning for and Pitching an Enterprise Activity	<ul style="list-style-type: none"> A. Explore ideas and plan for a micro-enterprise activity B. Pitch a micro-enterprise activity C. Review own pitch for a micro-enterprise activity 	<p>Give your child your income and expenses for the next few months and see if you child can create a budget for and advise you where you need to cut your spending.</p> <p>Using your bank statements for the last 6 months, help your child to create a cash flow forecast. Showing all inflow, outflows, net cash flow, opening and closing monthly balances.</p>
Spring	Promotion and Finance for Enterprise	<ul style="list-style-type: none"> • Understand the language and terminology used in business. • Explore what businesses do, trends that affect them, how they operate and the factors that influence their success. • Explore different types of business ownership and how these relate to the size and 	<p>Watch TV advertisements to identify product placement, for example the very successful comparethemarket.com advertisement.</p>

		<p>scale of a business, as well as how the type of ownership impacts on the responsibilities of the owners of a business.</p> <ul style="list-style-type: none"> • Looking at types of business model, students will begin to understand how diverse the world of business is. • Students will use their understanding of business language to investigate what business do by examining the aims and objectives they set, the importance of knowing their market and understanding the influence on their stakeholders. 	<p>Help you child research local data using the following website: www.statistic.gov.uk.</p> <p>Students should find out about income level, employment and other local trends.</p> <p>Take your child to a local business or a family/friend's business that is local with a prepared questionnaire about how their business operates.</p>
Summer	Final Exam	<ul style="list-style-type: none"> • Students will complete the external exam. 	Encourage your child to revise for their online examination.

Contact details:

Name: Mr Ebanks - ICT & Business Studies Teacher

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Your Guide to Year 11 English (GCSE)

- Exam board: AQA
- Specification: <https://www.aqa.org.uk/subjects/english/gcse>

Assessment Criteria

Language Paper 1: 1 hour 45mins

- Section A: Reading 25%
- Section B: Writing 25%

Language Paper 2: 1 hour 45 min

- Section A: Reading 25%
- Section B: Writing 25%

Literature Paper1: 1hour 45mins

- Section A: A Christmas Carol 25%
- Section B: Shakespeare 25%

Literature Paper 2: 1hour 45mins

- Section A: An Inspector Calls 25%
- Section C: Unseen Poetry 25%

Note: This year, students will **not be doing section B on “Power and Conflict”*

Expectations of Students:			
Students are expected to come equipped with appropriate stationery. They also need to read their teachers comments in their books and act on the feedback given. Students are expected to complete their progress tracking in the front of their books after every assessment.			
Term	Topic Title and unit	What students will be learning	How you can specifically help your child
Autumn 1	What the Dickens?	<ul style="list-style-type: none"> • Students will revise and practice writing responses to exam questions for the following topics: <ul style="list-style-type: none"> - Explorations in creative reading and writing (language) - Macbeth (literature) - A Christmas Carol (literature) 	You can support your child by encouraging them to complete practice exam questions at home, or by visiting and making notes from the BBC Bitesize revision pages: https://www.bbc.com/education/examspecs/zcbchv4 (language) https://www.bbc.com/education/topics/zgq3dmn (Macbeth) https://www.bbc.com/education/topics/zwhkxsg (A Christmas Carol)
Autumn 2	“Whether ‘tis nobler in the mind” Language and Literature	<ul style="list-style-type: none"> • Students will be learning how to analyse various topics for both English Language and English Literature. They will be learning how to appreciate a writer’s use of language, 	You can help support your child by reading the various poems as pre-reading, discussing what they are about and what the message the author is trying to give to his readers. You can support your child by encouraging them to visit the BBC

	Paper 1 revision and prep for mock exam.	<p>structure and the effect on an intended audience. Students will be assessed on:</p> <ul style="list-style-type: none"> - 1. Answering exam questions based on multiple characters using PEAL paragraphs. - 2. Answering exam questions based on a theme using PEAL paragraphs. - 3. Responding to questions on fiction and non-fiction, pieces using a range of analytical skills. - 	<p>Bitesize revision pages: http://www.bbc.co.uk/schools/gcsebitesize/english_literature/ https://www.bbc.com/education/examspecs/zcbchv4 (English Language)</p>
Spring	Language and Literature Paper 2 revision and prep for mock exam.	<ul style="list-style-type: none"> • Students will revise and practice writing responses to exam questions for the following topics. <ul style="list-style-type: none"> - Writers' Viewpoints and Perspectives (language) - An Inspector Calls (literature) - Unseen Poetry (literature) 	<p>You can support your child by encouraging them to complete practice exam questions at home, or by visiting and making notes from the BBC Bitesize revision pages: https://www.bbc.com/education/examspecs/zcbchv4 (language) https://www.bbc.com/education/topics/zpr639q (An Inspector Calls)</p>
Summer	As Above	<ul style="list-style-type: none"> • Students will be revising all areas of the exams. (These lessons will be tailored to fit students' needs based on their previous exam and mock results.) 	<p>You can support your child by helping them to devise a revision timetable in order to aid them in their own time management. A useful website is GetRevising: http://getrevising.co.uk/resources/level/gcse</p>

Contact details:

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Your Guide to Year 11 Geography (GCSE)

- **Exam board:** Eduqas Geography A
- **Specification:** https://www.educas.co.uk/qualifications/geography-gcse-a/#tab_overview

Assessment Criteria

Students will be assessed on longer answer questions based off the GCSE exam boards style it will be assessed using the same criteria as the GCSE examination. Students will also complete an end of topic exam and complete regular knowledge recall quizzes and activities.

Expectations of Students:			
<p>Students are expected to come equipped with appropriate stationary. They also need to read their teacher’s comments in their books and respond to the feedback given.</p> <p>Attend any revision session as directed by class teacher bringing revision book and workbook.</p> <p>Use the revision book and work book provided by the school.</p> <p>All independent learning must be completed on time and brought to the next lesson.</p> <p>Students will be expected to revise key vocabulary and content from Year 10.</p>			
Term	Topic Title and unit	What students will be learning	How you can specifically help your child
Autumn 1	Coastal Landscapes	<ul style="list-style-type: none"> • Coastal Processes • Coastal Landforms • How factors including management effect coastal landscapes. 	Talk to your child about the world around them be it a visit to a city or a trip to coast.
Autumn 2	Weather & Climate	<ul style="list-style-type: none"> • Global Atmospheric processes including ITCZ. • Hazards created by Low Pressure looking at distribution causes, effect, responses and futures. • Hazards created by Low Pressure looking at distribution, causes, effect, responses and futures. <p>Factors that affect the UK weather and climate.</p>	<p>By encouraging students to watch the news and think critically about what they read.</p> <p>There are a number of television programmes that cover geographical issues.</p>
Spring 1	Social Development	<ul style="list-style-type: none"> • What is social development and how is it measured. • Challenges facing Sub-Saharan Africa and Asia 	You could visit the Royal Geographical Society or Geographical association website that have

		<p>(including Child Labour, Education and Refugees)</p> <ul style="list-style-type: none"> Challenges of health in Sub-Saharan Africa (including HIV/AIDS) 	<p>geographical news and resources.</p> <p>You could subscribe to monthly geographical magazines such as “Geographical” and “National Geographic”</p> <p>Students could also visit Paradise Wildlife Park, Natural History Museum, Science Museum, Museum of London and London Zoo as all offer opportunities to develop geographical knowledge and understanding.</p> <p>Useful websites:</p> <p>http://www.geography.org.uk/resources</p> <p>https://www.rgs.org/</p>
Spring 2	Ecosystems	<ul style="list-style-type: none"> Where do we find large scale ecosystems and their characteristics Tropical Rainforest and Savannah ecosystems. A small scale ecosystem in the UK. How humans are using and effecting ecosystems. 	
Summer 1	Global Cities Fieldwork	<ul style="list-style-type: none"> What is a global city and where they are located. The opportunities and challenges in Lagos and London. How Lagos are changing over time. What is urbanisation and the impact. <p>Drop Down/Independent Learning/Direct Learning</p> <ul style="list-style-type: none"> Fieldwork Methods and Concepts 	

Contact details:

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Your Guide to Year 11 German (GCSE)

- **Exam board:** Edexcel
- **Specification:** <http://qualifications.pearson.com/en/qualifications/edexcel-gcses/german-2016.html>

Assessment Criteria

For examinations taking place in 2021, students are assessed in 3 key skill areas: Listening, Reading and Writing, with each paper having an equal weighting of 33.33%. Students' speaking skills will be assessed through a teacher endorsement alongside the 9 to 1 grade.

There are two tiers for GCSE examinations- Foundation and Higher Tier; pupils will be assessed in the papers appropriate to their level.

Examination units:

- Listening - Multiple-response and short-answer open response questions in English and German.
- Reading - Multiple-response, short-answer questions in English and in German, including one translation passage from German into English.
- Writing - 2/3 open response questions, expressing ideas and opinions in German and one translation passage from English into German

Visit the Pearson Edexcel website for access to the course specification and exemplar material:

<http://qualifications.pearson.com/en/qualifications/edexcel-gcses/german-2016.html>

Expectations of Students:			
<p>Students are expected to come equipped with appropriate stationary. They also need to read their teacher's comments in their books and respond to the feedback given.</p> <p>All independent learning must be completed on time and brought to the next lesson.</p> <p>Students will be expected to complete on going revision of the material covered during year 9 and 10.</p>			
Term	Topic Title and unit	What students will be learning	How you can specifically help your child
Autumn	"This is your life!"	<i>Students will study the development and consolidation of knowledge and understanding of more complex vocabulary and grammatical structures to describe ambitions (further study; future plans), volunteering; training, work experience. Work, future careers and places of work.</i>	<p>You can assist your child by supporting them with learning key vocabulary, phrases and grammatical points.</p> <p>Students should have a good dictionary, which includes verb tables to refer to - we use the</p>

		<p>Celebrating German festivals, customs and traditions</p> <p>Cultural celebrations and festivals (Oktoberfest, Christmas, Fasching)</p>	<p>Collins Easy Learning Dictionary in school.</p> <p>Encourage them to practice their skills of listening, reading, writing and speaking using the online resources listed below and ensure your child has access to authentic sources such as comics, music and DVDs in the language.</p> <p>GCSE Edexcel (Pearson) revision guides and GCSE revision workbooks (for listening and reading with exam practice questions and grammar activities and explanations) will also assist students' progress.</p> <p>Visit the "Goethe-Institut", Germany's worldwide cultural institute in London</p>
Spring	Eco-Warriors: Working to protect the environment	<p><i>Students will study the development and consolidation of knowledge and understanding of more complex vocabulary and grammatical structures to describe how you help the environment, environmental problem, eco cities and ways to protect the environment.</i></p> <p>Celebrating German festivals, customs and traditions</p> <p>Cultural celebrations and festivals (Valentines day, Easter)</p>	<p>If possible visit German speaking countries for a family holiday, experience the Christmas markets or even take a day trip abroad to learn about the culture and speak the native language.</p> <p>Please ensure that your child attends the support/revision sessions available and completes all independent learning tasks - all homework is issued in class and logged on 'Class Charts.</p> <p>Online resources:</p> <ul style="list-style-type: none"> - http://www.memrise.com - https://www.duolingo.com/course/de/en/Learn-German-Online
Summer	Revision of all content and preparation for listening, reading and writing examinations	<p>Students will revise all content with specific focus on listening, reading (including literary texts) and writing (including translation) skills and exam techniques on the following 5 themes:</p> <ol style="list-style-type: none"> 1. Identity and culture 2. Local area, holiday and travel 3. School 4. Future aspirations, study and work 5. International and global dimension 	

			Interactive games for fun way of learning vocabulary - http://www.voki.com/ - http://www.bbc.co.uk/languages/german/ -
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Contact details:

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Your Guide to Year 11 Health & Social Care (BTEC)

- **Exam board:** Edexcel/Pearson
- **Specification:** <https://qualifications.pearson.com/en/qualifications/btec-tech-awards/health-and-social-care.html>

Assessment Criteria

Students have been studying this subject since year 9. They are required to complete 4 assignments and sit one examination. The assignments are internally moderated and the examination is externally assessed.

	Topic Title and unit	What students will be learning	How you can specifically help your child
Autumn 1	<p style="text-align: center;"><u>Who are you going call?</u></p> <p style="text-align: center;">Component 2 – Health and Social Care Services and Values</p>	<p style="text-align: center;">Demonstrate care values and review own practice</p> <ul style="list-style-type: none"> • Looking at how people within the health and social care services care for individuals. • Students have to provide care to a group of individuals. 	<p>Students will be given their second assignment brief. Encourage them to work independently and meet deadlines.</p> <p style="text-align: center;">Websites</p> <p style="text-align: center;">https://www.gov.uk/government/organisations/department-of-health-and-social-care</p> <p>Students will plan a visit to a Health and Social Care setting and plan an activity. They have to set demonstrate the health and social care values.</p>
Autumn 2	<p style="text-align: center;"><u>What's up Doc?</u></p> <p style="text-align: center;">Component 3 – Health and Well-being</p>	<ul style="list-style-type: none"> • AO1 Demonstrate knowledge and understanding of factors that affect health and wellbeing - Learners will explore how factors can affect an individual's health and wellbeing positively or negatively • AO2 Interpret health indicators- Learners will interpret indicators that can be used to measure physiological 	<p>Students will be asked to research a career of interest and establish the positives and negatives of their chosen career.</p> <p>If you can use the following resources online with your child.</p> <p style="text-align: center;">Websites</p>

		health, interpreting data using published guidance.	https://www.healthcareers.nhs.uk/explore-roles%20 https://www.allaboutcareers.com/careers/industry/health-social-care <p>Discuss with your child the different careers and any that may be of interest to pursue.</p>
Spring & Summer	<u>What's up Doc?</u> Component 3 – Health and Well-being	<ul style="list-style-type: none"> • Prepare for external assessment • 40% of the course. 	<p>Practise past papers with your child to prepare them for the examination.</p> <p> https://qualifications.pearson.com/en/qualifications/btec-tech-awards/health-and-social-care.coursematerials.html#filterQuery=category:Pearson-UK:Category%2FExternal-assessments </p>

Contact details:

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		<p>Part 4: c1900–present: Crime and punishment in modern Britain</p> <p>Historic Environment: Whitechapel, c1870–c1900: crime, policing and the inner city</p> <ul style="list-style-type: none"> • Conditions and events in Whitechapel (Jack the Ripper) 	
Spring & Summer	Recap of knowledge on all subjects.	<p>Germany</p> <p>Crime and Punishment</p> <p>Elizabeth (Intervention study)</p>	<p>My Revision Notes: Edexcel GCSE (9-1) History: Weimar and Nazi Germany, 1918-39</p> <p>My Revision Notes: Edexcel GCSE (9-1) History: Early Elizabethan England, 1558–88</p> <p>My Revision Notes: Edexcel GCSE (9-1) History: Crime and punishment in Britain, c1000-present and Whitechapel, c1870-c1900 (Hodder GCSE History for Edexcel)</p> <p>Online resources:</p> <ul style="list-style-type: none"> • GCSEPod • Seneca Learning • BBC Bitesize

Contact details:

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Your Guide to Year 11 Digital Information Technology (BTEC)

- **Exam board:** Edexcel/Pearson
- **Specification:** <https://qualifications.pearson.com/en/qualifications/btec-tech-awards/digital-information-technology.html>

Assessment Criteria

The qualification consists of three components that give the learners the opportunity to develop broad knowledge and understanding of the digital sector and specialist skills and techniques in project planning, user interfaces and manipulating and interpreting data at PASS, MERIT and DISTINCTION.

Expectations of students			
<p>Student must attend all lessons and be punctual. Students must be fully equipped with all essential stationary including a calculator, their planner and a USB stick to save work completed on the School PC's. Students will be informed of deadlines in advance and this must be adhered to. Any work submitted after a given deadline and that a prior arrangement with their teacher has not been made for a late submission will unfortunately fail the task. This may lead to a failure of the course and therefore all deadlines must be met.</p>			
	Topic Title and unit	What students will be learning	How you can specifically help your child
Autumn 1	Collecting presenting and interpreting data	[B] Create a dashboard using data manipulation tools B1 Data processing methods B2 Produce a dashboard	Discuss with your child how individuals can safely use online systems and the responsibility of organisations to ensure that this is the case. Discuss the use of usernames and passwords as well as threats to and methods of preventing misuse of personal information.
Autumn 2	Effective digital working practices	Exploring how organisations use digital systems and their wider applications Skills Covered <ul style="list-style-type: none"> • Draw conclusions and make logical recommendations on data intelligence 	Discuss with your child how individuals can safely use online systems and the responsibility of organisations to ensure that this is the case. Discuss the use of usernames and passwords as well as threats to and methods of

		<ul style="list-style-type: none"> Explain how data interpretation can affect understanding. 	preventing misuse of personal information.
Spring 1	Prepare for externally set assignment	<p>Student will learn how the developments in technology over recent years have enabled modern organisations to communicate and collaborate more effectively than ever before. Students will explore how developments in technology have led to more inclusive and flexible working environments, and how regulation and ethical and security concerns influence the way in which organisations operate.</p> <p>This will be an external exam.</p>	Support them with any exam questions and discuss how they can give a balanced answer to an exam question.
Spring 2	Collecting presenting and interpreting data	[C] Draw conclusions and review data presentation methods	Encourage your child to think about the differences between data, information and knowledge.

Contact details

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Your Guide to Year 11 Maths (GCSE)

- **Exam board:** Edexcel
- **Specification:** <https://qualifications.pearson.com/en/qualifications/edexcel-gcses/mathematics-2015.html>

Assessment criteria

The mathematics curriculum is categorised under the following content domain: Number, Ratio, Rates & Proportion, Algebra, Statistics & Probability, Geometry & Measures. These areas are assessed using three assessment objectives. The table below gives an overview of the three assessment objectives, every strand and element will be assessed in every examination series.

Assessment Objectives	Weighting
AO1 is about using and applying standard mathematical techniques	50% Foundation paper, 40% Higher.
AO2 is about reasoning, interpreting and communicating mathematically	25% Foundation and 30% Higher.
AO3 is about solving problems in mathematics and in other contexts.	25% Foundation, 30% Higher'

Examination units:

Foundation and Higher

- Paper 1: Non Calculator. (80 marks)
- Paper 2: Calculator. (80 marks)
- Paper 3: Calculator. (80 marks)

Each paper will last 1 hour and 30 minutes

Additional guidance and resources can be found on the exam board website:

<https://qualifications.pearson.com/en/qualifications/edexcel-gcses/mathematics-2015.html>

Expectations of Students

Students are expected to come equipped with black pens, red pens for marking, a pencil, a ruler and a Casio Scientific Calculator.

All independent learning must be completed on time and they also need to read their teacher's comments in their books and act on the feedback given.

Students will be expected to complete on-going revision of the material covered during year 9 and 10.

Working must be shown for all questions in compliance with the new GCSE specification. Questions with more than 1 mark have method marks allocated for working out.

Whenever a student is invited to extra revision sessions, the student must attend, as these sessions are used to close gaps, which are essential to achieving successful outcomes.

How to support your child at home

- Ensure that students complete all of the assignments and homework on Classcharts.
- Ensure your child is fully equipped for all lessons, the preferred calculator is a Casio (VPAM) scientific calculator.
- Encourage your child to use the internet to find instructional videos and resources from websites such as Youtube, BBC GCSE Bitesize , www.hegartymaths.com, <https://corbettmaths.com/>, <https://www.mathsgenie.co.uk/gcse.html>, on the topics listed in the course content below, to develop their independent learning skills.
- Complete the revision guide and workbook provided by the school on a regular basis at home. Set a target of completing about 8 pages a week and in about 12 weeks, your child would have completed the workbook.
- Encourage your child to attend all extra intervention sessions and seek extra support from their teacher in areas of difficulty.
- Encourage your child to start revising from the beginning of the school year and to do as many past question papers as possible.

Foundation Tier

	Topic Title and unit	What students will be learning (Foundation tier)
Week 1	1.1 Calculations	Use priority of operations with positive and negative numbers.
		Simplify calculations by cancelling.
		Use inverse operations.
	1.2 Decimal numbers	Round to a given number of decimal place.
		Multiply and divide decimal numbers.
	1.3 Place value	Write decimal numbers of millions.
		Round to a given number of significant figures.
		Estimate answers to calculations.
		Use one calculation to find the answer to another.
	1.4 Factors and multiples	Recognise 2-digit prime numbers.
		Find factors and multiples of numbers.
		Find common factors and common multiples of two numbers.
		Find the HCF and LCM of two numbers by listing.
	1.5 Squares, cubes and roots	Find square roots and cube roots.
		Recognise powers of 2, 3, 4 and 5.
		Understand surd notation on a calculator.
	1.6 Index notation	Find square roots and cube roots.
		Recognise powers of 2, 3, 4 and 5.
		Understand surd notation on a calculator.
1.7 Prime factors	Write a number as the product of its prime factors.	
	Use prime factor decomposition and Venn diagrams to find the HCF and LCM.	

Week 2	2 Ratio and proportion	
	2.1 Writing ratios	Use ratio notation.
		Write a ratio in its simplest form.
		Solve problems using ratios.
	2.2 Using ratios 1	Solve simple problems using ratios.
	2.3 Ratios and measures	Use ratios to convert between units.
		Write and use ratios for shapes and their enlargements.
	2.4 Using ratios 2	Divide a quantity into 2 parts in a given ratio.
		Divide a quantity into 3 parts in a given ratio.
		Solve word problems using ratios.
	2.5 Comparing using ratios	Use ratios involving decimals.
		Compare ratios.
		Solve ratio and proportion problems.
	2.6 Using proportion	Use the unitary method to solve proportion problems.
		Solve proportion problems in words.
		Work out which product is better value for money.
2.7 Proportion and graphs	Recognise and use direct proportion on a graph.	
	Understand the link between the unit ratio and the gradient.	
2.8 Proportion problems	Recognise different types of proportion.	
	Solve word problems involving direct and inverse proportion.	
Week 3	3 Fractions and percentages	
	3.1 Working with fractions	Compare fractions.
		Add and subtract fractions.
		Use fractions to solve problems.
	3.2 Operations with fractions	Find a fraction of a quantity or measurement.
		Use fractions to solve problems.
	3.3 Multiplying fractions	Multiply whole numbers, fractions and mixed numbers.
		Simplify calculations by cancelling.
	3.4 Dividing fractions	Divide a whole number by a fraction.
		Divide a fraction by a whole number or a fraction.
	3.5 Fractions and decimals	Convert fractions to decimals and vice versa.
		Use decimals to find quantities.
		Write one number as a fraction of another.
	3.6 Fractions and percentages	Convert percentages to fractions and vice versa.
		Write one number as a percentage of another.
	3.7 Calculating percentages 1	Convert percentages to decimals and vice versa.
		Find a percentage of a quantity.
		Use percentages to solve problems.
		Calculate simple interest.
	3.8 Calculating percentages 2	Calculate percentage increases and decreases.

		Use percentages in real-life situations.
		Calculate VAT (value added tax).
Week 4	4 Fractions, indices and standard form	
	4.1 Multiplying and dividing fractions	Multiply and divide mixed numbers and fractions.
	4.2 The laws of indices	To know and use the laws of indices.
	4.3 Writing large numbers in standard form	Write large numbers in standard form.
		Convert large numbers from standard form into ordinary numbers.
	4.4 Writing small numbers in standard form	Write small numbers in standard form.
		Convert numbers from standard form with negative powers of ordinary numbers
	4.5 Calculating with standard form	To multiply and divide numbers in standard form.
		To add and subtract numbers in standard form.
Week 5	5 Algebra	
	5.1 Algebraic expressions	Use correct algebraic notation.
		Write and simplify expressions.
	5.2 Simplifying expressions	Use the index laws.
		Multiply and divide expressions.
	5.3 Substitution	Substitute numbers into expressions.
	5.4 Formulae	Recognise the difference between a formula and an expression.
		Substitute numbers into a simple formula.
	5.5 Expanding brackets	Expand brackets.
		Simplify expressions with brackets.
		Substitute numbers into expressions with brackets and powers.
	5.6 Factorising	Recognise factors of algebraic terms.
		Factorise algebraic expressions.
		Use the identity symbol \equiv and the not equals symbol \neq
	5.7 Using expressions and formulae	Write expressions and simple formulae to solve problems.
		Use maths and science formulae.
Week 6	6 Equations, inequalities and sequences	
	6.1 Solving equations 1	Understand and use inverse equations.
		Rearrange simple linear equations.
		Solve simple linear equations.
	6.2 Solving equations 2	Solve two-step equations.
	6.3 Solving equations with brackets	Solve linear equations with brackets.

		Solve equations with unknowns on both sides.
	6.4 Introducing inequalities	Use correct notation to show inclusive and exclusive inequalities.
		Solve simple linear inequalities.
		Write down whole numbers which satisfy an inequality.
		Represent inequalities on a number line.
	6.5 More inequalities	Solve two-sided inequalities.
	6.6 More formulae	Substitute values into formulae and solve equations.
		Change the subject of a formula.
		Know the difference between an expression, an equation, a formula and an identity.
	6.7 Generating sequences	Recognise and extend sequences.
	6.8 Using the nth term of a sequence	Use the nth term to generate terms of a sequence.
		Find the nth term of an arithmetic sequence.
Week 7	7 Graphs	
	7.1 Coordinates	Find the midpoint of a line segment.
		Recognise, name and plot straight-line graphs parallel to the axes.
	7.2 Linear graphs	Generate and plot coordinates from a rule.
		Plot straight-line graphs from tables of values.
		Draw graphs to represent relationships.
	7.3 Gradient	Find the gradient of a line.
		Identify and interpret the gradient from an equation.
		Understand that parallel lines have the same gradient.
	7.4 $y = mx + c$	Understand what m and c represent in $y = mx + c$.
		Find the equations of straight-line graphs.
		Sketch graphs given the values of m and c .
	7.5 Real-life graphs	Draw and interpret graphs from real data.
	7.6 Distance-time graphs	Use distance–time graphs to solve problems.
		Draw distance–time graphs.
		Interpret rate of change graphs.
	7.7 More real-life graphs	Draw and interpret a range of graphs.
		Understand when predictions are reliable.
Week 8	8 Quadratic equations and graphs	
	8.1 Expanding double brackets	Multiply double brackets.
		Recognise quadratic expressions.
		Square single brackets.
	8.2 Plotting quadratic graphs	Plot graphs of quadratic functions.
		Recognise a quadratic function.
		Use quadratic graphs to solve problems.
	8.3 Using quadratic graphs	Solve quadratic equations $ax^2 + bx + c = 0$ using a graph.
		Solve quadratic equations $ax^2 + bx + c = k$
		Using a graph.

	8.4 Factorising quadratic expressions	
	8.5 Solving quadratic equations algebraically	
Week 9	9 Angles	
	9.1 Properties of shapes	Solve geometric problems using side and angle properties of quadrilaterals.
		Identify congruent shapes.
	9.2 Angles in parallel lines	Understand and use the angle properties of parallel lines.
		Find missing angles using corresponding and alternate angles.
	9.3 Angles in triangles	Solve angle problems in triangles.
		Understand angle proofs about triangles.
	9.4 Exterior and interior angles	Calculate the interior and exterior angles of regular polygons.
	9.5 More exterior and interior angles	Calculate the interior and exterior angles of polygons.
		Explain why some polygons fit together and some others do not
	9.6 Geometrical patterns	Solve angle problems using equations.
		Solve geometrical problems showing reasoning.
Week 10	10 Constructions, loci and bearings	
	10.1 3D solids	Recognise 3D shapes and their properties.
		Describe 3D shapes using the correct mathematical words.
		Understand the 2D shapes that make up 3D objects.
	10.2 Plans and elevations	Identify and sketch planes of symmetry of 3D shapes.
		Understand and draw plans and elevations of 3D shapes.
		Sketch 3D shapes based on their plans and elevations.
	10.3 Accurate drawings 1	Make accurate drawings of triangles using a ruler, protractor and compasses.
		Identify SSS, ASA, SAS and RHS triangles as unique from a given description.
		Identify congruent triangles
	10.4 Scale drawings and maps	Draw diagrams to scale.
		Correctly interpret scales in real-life contexts.
		Use scales on maps and diagrams to work out lengths and distances.
		Know when to use exact measurements and estimations on scale drawings and maps.
		Draw lengths and distances correctly on given scale drawings.
	10.5 Accurate drawings 2	Accurately draw angles and 2D shapes using a ruler, protractor and compasses.
		Construct a polygon inside a circle.
		Recognise nets and make accurate drawings of nets of common 3D objects.
	10.6 Constructions	Draw accurately using rulers and compasses.
		Bisect angles and lines using rulers and compasses.
	10.7 Loci and regions	Draw loci for the path of points that follow a given rule.
		Identify regions bounded by loci to solve practical problems.
	10.8 Bearings	Find and use three-figure bearings.

		Use angles at parallel lines to work out bearings.
		Solve problems involving bearings and scale diagrams.
Week 11	11 Congruence, similarity and vectors	
	11.1 Similarity and enlargement	Understand similarity.
		Use similarity to solve angle problems.
	11.2 More similarity	Find the scale factor of an enlargement.
		Use similarity to solve problems.
	11.3 Using similarity	Understand the similarity of regular polygons.
		Calculate perimeters of similar shapes.
	11.4 Congruence 1	Recognise congruent shapes.
		Use congruence to work out unknown angles.
	11.5 Congruence 2	Use congruence to work out unknown sides.
	11.6 Vectors 1	Add and subtract vectors.
		Find the resultant of two vectors.
	11.7 Vectors 2	Subtract vectors.
		Find multiples of a vector.
Week 12	12 Perimeter, area and volume 1	
	12.1 Rectangles, parallelograms and triangles	Calculate the perimeter and area of rectangles, parallelograms and triangles.
		Estimate lengths, areas and costs.
		Calculate a missing length, given the area.
	12.2 Trapezia and changing units	Calculate the area and perimeter of trapezia.
		Find the height of a trapezium given its area.
		Convert between area measures.
	12.3 Area of compound shapes	Calculate the perimeter and area of shapes made from triangles and rectangles.
		Calculate areas in hectares, and convert between ha and m ² .
	12.4 Surface area of 3D solids	Calculate the surface area of a cuboid.
		Calculate the surface area of a prism.
	12.5 Volume of prisms	Calculate the volume of a cuboid.
		Calculate the volume of a prism.
	12.6 More volume and surface area	Solve problems involving surface area and volume.
		Convert between measures of volume.
Week 13	13 Perimeter, area and volume 2	
	13.1 Circumference of a circle 1	Calculate the circumference of a circle.
		Solve problems involving the circumference of a circle.
	13.2 Circumference of a circle 2	Calculate the circumference and radius of a circle.
		Work out percentage error intervals.
	13.3 Area of a circle	Work out the area of a circle.
		Work out the radius or diameter of a circle.

		Solve problems involving the area of a circle.
		Give answers in terms of π .
	13.4 Semicircles and sectors	Understand and use maths language for circles and perimeters.
		Work out areas of semicircles and quarter circle and perimeters.
		Solve problems involving sectors of circles.
	13.5 Composite 2D shapes and cylinders	Solve problems involving areas and perimeters of 2D shapes.
		Work out the volume and surface area of cylinders.
	13.6 Pyramids and cones	Work out the volume of a pyramid.
		Work out the surface area of a pyramid.
		Work out the volume of a cone.
		Work out the surface area of a cone.
	13.7 Spheres and composite solids	Work out the volume of a sphere.
		Work out the surface area of a sphere.
		Work out the volume and surface area of composite solids.
Week 14	14 Transformations	
	14.1 Translation	Translate a shape on a coordinate grid.
		Use a column vector to describe a translation.
	14.2 Reflection	Draw a reflection of a shape in a mirror line.
		Draw reflections on a coordinate grid.
		Describe reflections on a coordinate grid.
	14.3 Rotation	Rotate a shape on a coordinate grid.
		Describe a rotation.
	14.4 Enlargement	Enlarge a shape by a scale factor.
		Enlarge a shape using a centre of enlargement.
	14.5 Describing enlargements	Identify the scale factor of an enlargement.
		Find the centre of enlargement.
		Describe an enlargement.
	14.6 Combining transformations	Transform shapes using more than one transformation.
		Describe combined transformations of shapes on a grid.
Week 15	15 Probability	
	15.1 Calculating probability	Calculate simple probabilities from equally likely events.
		Understand mutually exclusive and exhaustive outcomes.
	15.2 Two events	Use two-way tables to record the outcomes from two events.
		Work out probabilities from sample space diagrams.
	15.3 Experimental probability	Find and interpret probabilities based on experimental data.
		Make predictions from experimental data.
	15.4 Venn diagrams	Use Venn diagrams to work out probabilities.
		Understand the language of sets and Venn diagrams.
	15.5 Tree diagrams	Use frequency trees and tree diagrams.
		Work out probabilities using tree diagrams.
		Understand independent events.

	15.6 More tree diagrams	Understand when events are not independent.
		Solve probability problems involving events that are not independent.
Week 16	16 Graphs, tables and charts	
	16.1 Frequency tables	Designing tables and data collection sheets.
		Reading data from tables.
	16.2 Two-way tables	Use data from tables.
		Design and use two-way tables.
	16.3 Representing data	Draw and interpret comparative and composite bar charts.
		Interpret and compare data shown in bar charts, line graphs and histograms.
	16.4 Time series	Plot and interpret time series graphs.
		Use trends to predict what might happen in the future.
	16.5 Stem and leaf diagrams	Construct and interpret stem and leaf and back-to-back stem and leaf diagrams.
	16.6 Pie charts	Draw and interpret pie charts.
	16.7 Scatter graphs	Plot and interpret scatter graphs.
		Determine whether or not there is a relationship between sets of data.
	16.8 Line of best fit	Draw a line of best fit on a scatter graph.
		Use the line of best fit to predict values.
Week 17	17 Averages and range	
	17.1 Mean and range	Calculate the mean from a list and from a frequency table.
		Compare sets of data using the mean and range.
	17.2 Mode, median and range	Find the mode, median and range from a stem and leaf diagram.
		Identify outliers.
		Estimate the range from a grouped frequency table.
	17.3 Types of average	Recognise the advantages and disadvantages of each type of average.
		Find the modal class.
		Find the median from a frequency table.
	17.4 Estimating the mean	Estimate the mean of grouped data.
	17.5 Sampling	Understand the need for sampling.
		Understand how to avoid bias.
Week 18	18 Multiplicative reasoning	
	18.1 Percentages	Calculate a percentage profit or loss.
		Express a given number as a percentage of another in more complex situations.
		Find the original amount given the final amount after a percentage increase or decrease
	18.2 Growth and decay	Find an amount after repeated percentage change.
		Solve growth and decay problems.
	18.3 Compound measures	Solve problems involving compound measures.

	18.4 Distance, speed and time	Convert between metric speed measures.
		Calculate average speed, distance and time.
		Use formulae to calculate speed and acceleration.
	18.5 Direct and inverse proportion	Use ratio and proportion in measures and conversions.
		Use inverse proportions.
Week 19	19 Right-angled triangles	
	19.1 Pythagoras' theorem 1	Understand Pythagoras' theorem.
		Calculate the length of the hypotenuse in a right-angled triangle.
		Solve problems using Pythagoras' theorem.
	19.2 Pythagoras' theorem 2	Calculate the length of a line segment AB.
		Calculate the length of a shorter side in a right-angled triangle.
	19.3 Trigonometry: the sine ratio 1	Understand and recall the sine ratio in right-angled triangles.
		Use the sine ratio to calculate the length of a side in a right-angled triangle.
		Use the sine ratio to solve problems.
	19.4 Trigonometry: the sine ratio 2	Use the sine ratio to calculate an angle in a right-angled triangle.
		Use the sine ratio to solve problems.
	19.5 Trigonometry: the cosine ratio	Understand and recall the cosine ratio in right-angled triangles.
		Use the cosine ratio to calculate the length of a side in a right-angled triangle.
		Use the cosine ratio to calculate an angle in a right-angled triangle.
		Use the cosine ratio to solve problems.
	19.6 Trigonometry: the tangent ratio	Understand and recall the tangent ratio in right-angled triangles.
		Use the tangent ratio to calculate the length of a side in a right-angled triangle
		Use the tangent ratio to calculate an angle in a right-angled triangle.
		Solve problems using an angle of elevation or depression.
	19.7 Finding lengths and angles using trigonometry	Understand and recall trigonometric ratios in right-angled triangles.
		Use trigonometric ratios to solve problems.
		Know the exact values of the sine, cosine and tangent of some angles.
Week 20	20 More algebra	
	20.1 Graphs of cubic and reciprocal functions	Draw and interpret graphs of cubic functions.
		Draw and interpret graphs of $y = 1/x$.
	20.2 Non-linear graphs	Draw and interpret non-linear graphs to solve problems.
	20.3 Solving simultaneous equations graphically	Solve simultaneous equations by drawing a graph.
		Write and solve simultaneous equations.

	20.4 Solving simultaneous equations algebraically	Solve simultaneous equations algebraically.
	20.5 Rearranging formulae	Change the subject of a formula.
	20.6 Proof	Identify expressions, equations, formulae and identities.
		Prove results using algebra.

Higher Tier

	Topic Title and unit	What students will be learning (Higher tier)
Week 1	1.1 Number problems and reasoning	Work out the total number of ways of performing a series of tasks.
	1.2 Place value and estimating	Estimate an answer.
		Use place value to answer questions.
	1.3 HCF and LCM	Write a number as the product of its prime factors.
		Find the HCF and LCM of two numbers.
	1.4 Calculating with powers (indices)	Use powers and roots in calculations.
		Multiply and divide using index laws.
		Work out a power raised to a power.
	1.5 Zero, negative and fractional indices	Use negative indices.
		Use fractional indices.
	1.6 Powers of 10 and standard form	Write a number in standard form.
		Calculate with numbers in standard form.
1.7 Surds	Understand the difference between rational and irrational numbers.	
	Simplify a surd.	
	Rationalise a denominator.	
Week 2	2 Fractions, ratio and percentages	
	2.1 Fractions	Add, subtract, multiply and divide fractions and mixed numbers.
		Find the reciprocal of an integer, decimal or fraction.
	2.2 Ratios	Write ratios in the form 1 : n or n : 1.
		Compare ratios.
		Find quantities using ratios.
		Solve problems involving ratios.
	2.3 Ratio and proportion	Convert between currencies and measures.
		Recognise and use direct proportion.
		Solve problems involving ratios and proportion.
	2.4 Percentages	Work out percentage increases and decreases.

		Solve real-life problems involving percentages.
	2.5 Fractions, decimals and percentages	Work out percentage increases and decreases.
		Solve real-life problems involving percentages.
Week 3	3 Multiplicative reasoning	
	3.1 Growth and decay	Find an amount after repeated percentage changes.
		Solve growth and decay problems.
	3.2 Compound measures	Calculate rates.
		Convert between metric speed measures.
		Use a formula to calculate speed and acceleration.
	3.3 More compound measures	Solve problems involving compound measures.
	3.4 Ratio and proportion	Use relationships involving ratio.
	Use direct and indirect proportion.	
Week 4	4 Algebra	
	4.1 Algebraic indices	Use the rules of indices to simplify algebraic expressions.
	4.2 Expanding and factorising	Expand brackets.
		Factorise algebraic expressions.
	4.3 Equations	Solve equations involving brackets and numerical fractions.
		Use equations to solve problems.
	4.4 Formulae	Substitute numbers into formulae.
		Rearrange formulae.
		Distinguish between expressions, equations, formulae and identities.
	4.5 Linear sequences	Find a general formula for the n th term of an arithmetic sequence.
		Determine whether a particular number is a term of a given arithmetic sequence.
	4.6 Non-linear sequences	Solve problems using geometric sequences.
		Work out terms in Fibonacci-like sequences.
	Find the n th term of a quadratic sequence.	
4.7 More expanding and factorising	Expand the product of two brackets.	
	Use the difference of two squares.	
	Factorise quadratics of the form $x^2 + bx + c$.	
Week 5	5 Equations and inequalities	

	5.1 Solving quadratic equations 1	Find the roots of quadratic functions.
		Rearrange and solve simple quadratic equations.
	5.2 Solving quadratic equations 2	Solve more complex quadratic equations.
		Use the quadratic formula to solve a quadratic equation.
	5.3 Completing the square	Complete the square for a quadratic expression.
		Solve quadratic equations by completing the square.
	5.4 Solving simple simultaneous equations	Solve simple simultaneous equations.
		Solve simultaneous equations for real-life situations.
	5.5 More simultaneous equations	Use simultaneous equations to find the equation of a straight line.
		Solve linear simultaneous equations where both equations are multiplied.
		Interpret real-life situations involving two unknowns and solve them.
	5.6 Solving linear and quadratic simultaneous equations	Solve simultaneous equations with one quadratic equation.
		Use real-life situations to construct quadratic and linear equations and solve them.
	5.7 Solving linear inequalities	Solve inequalities and show the solution on a number line and using set notation.
Week 6	6 Graphs	
	6.1 Linear graphs	Find the gradient and y-intercept from a linear equation.
		Rearrange an equation into the form $y = mx + c$.
		Compare two graphs from their equations.
		Plot graphs with equations $ax + by = c$.
	6.2 More linear graphs	Sketch graphs using the gradient and intercepts.
		Find the equation of a line, given its gradient and one point on the line.
		Find the gradient of a line through two points.
	6.3 Graphing rates of change	Draw and interpret distance–time graphs.
		Calculate average speed from a distance–time graph.
		Understand velocity–time graphs.
		Find acceleration and distance from velocity–time graphs.
	6.4 Real-life graphs	Draw and interpret real-life linear graphs.
		Recognise direct proportion.
		Draw and use a line of best fit.
	6.5 Line segments	Find the coordinates of the midpoint of a line segment.
		Find the gradient and length of a line segment.
		Find the equations of lines parallel or perpendicular to a given line.
	6.6 Quadratic graphs	Draw quadratic graphs.
		Solve quadratic equations using graphs.
	Identify the line of symmetry of a quadratic graph.	

		Interpret quadratic graphs relating to real-life situations.
	6.7 Cubic and reciprocal graphs	Draw graphs of cubic functions.
		Solve cubic equations using graphs.
		Draw graphs of reciprocal functions.
		Recognise a graph from its shape.
	6.8 More graphs	Interpret linear and non-linear real-life graphs.
		Draw the graph of a circle.
Week 7	7 Equations and graphs	
	7.1 Solving simultaneous equations graphically	Solve simultaneous equations graphically.
	7.2 Representing inequalities graphically	Represent inequalities on graphs.
		Interpret graphs of inequalities.
	7.3 Graphs of quadratic functions	Recognise and draw quadratic functions.
	7.4 Solving quadratic equations graphically	Find approximate solutions to quadratic equations graphically.
		Solve quadratic equations using an iterative process.
	7.5 Graphs of cubic functions	Find the roots of cubic equations.
		Sketch graphs of cubic functions.
		Solve cubic equations using an iterative process.
Week 8	8 Area and volume	
	8.1 Perimeter and area	Find the perimeter and area of compound shapes.
		Recall and use the formula for the area of a trapezium.
	8.2 Units and accuracy	Convert between metric units of area.
		Calculate the maximum and minimum possible values of a measurement.
	8.3 Prisms	Convert between metric units of volume.
		Calculate volumes and surface areas of prisms.
	8.4 Circles	Calculate the area and circumference of a circle.
		Calculate area and circumference in terms of π .
	8.5 Sectors of circles	Calculate the perimeter and area of semicircles and quarter circles.
		Calculate arc lengths, angles and areas of sectors of circles.
	8.6 Cylinders and spheres	Calculate volume and surface area of a cylinder and a sphere.
		Solve problems involving volumes and surface areas.
	8.7 Pyramids and cones	Calculate volume and surface area of pyramids and cones.
		Solve problems involving pyramids and cones.
Week 9	9 Similarity and congruence	

	9.1 Congruence	Show that two triangles are congruent.
		Know the conditions of congruence.
	9.2 Geometric proof and congruence	Prove shapes are congruent.
		Solve problems involving congruence.
	9.3 Similarity	Use the ratio of corresponding sides to work out scale factors.
		Find missing lengths on similar shapes.
	9.4 More similarity	Use similar triangles to work out lengths in real life.
		Use the link between linear scale factor and area scale factor to solve problems.
	9.5 Similarity in 3D solids	Use the link between scale factors for length, area and volume to solve problems.
Week 10	10 Transformations and constructions	
	10.1 3D solids	Draw plans and elevations of 3D solids.
	10.2 Reflection and rotation	Reflect a 2D shape in a mirror line.
		Rotate a 2D shape about a centre of rotation.
		Describe reflections and rotations.
	10.3 Enlargement	Enlarge shapes by fractional and negative scale factors about a centre of enlargement.
	10.4 Transformations and combinations of transformations	Translate a shape using a vector.
		Carry out and describe combinations of transformations.
	10.5 Bearings and scale drawings	Draw and use scales on maps and scale drawings.
		Solve problems involving bearings.
	10.6 Constructions 1	Construct triangles using a ruler and compasses.
		Construct the perpendicular bisector of a line.
		Construct the shortest distance from a point to a line using a ruler and compasses.
	10.7 Constructions 2	Bisect an angle using a ruler and compasses.
		Construct angles using a ruler and compasses.
		Construct shapes made from triangles using a ruler and compasses.
	10.8 Loci	Draw a locus.
		Use loci to solve problems.
Week 11	11 Angles and trigonometry	
	11.1 Angle properties of triangles and quadrilaterals	Derive and use the sum of angles in a triangle and in a quadrilateral.
		Derive and use the fact that the exterior angle of a triangle is equal to the sum of the two opposite interior angles.
	11.2 Interior angles of a polygon	Calculate the sum of the interior angles of a polygon.
		Use the interior angles of polygons to solve problems.
	11.3 Exterior angles of a polygon	Know the sum of the exterior angles of a polygon.
		Use the angles of polygons to solve problems.

	11.4 Pythagoras' theorem 1	Calculate the length of the hypotenuse in a right-angled triangle.
		Solve problems using Pythagoras' theorem.
	11.4 Pythagoras' theorem 1	Calculate the length of a shorter side in a right-angled triangle.
		Solve problems using Pythagoras' theorem.
	11.6 Trigonometry 1	Use trigonometric ratios to find lengths in a right-angled triangle.
		Use trigonometric ratios to solve problems.
	11.7 Trigonometry 2	Use trigonometric ratios to calculate an angle in a right-angled triangle.
		Find angles of elevation and angles of depression.
		Use trigonometric ratios to solve problems.
		Know the exact values of the sine, cosine and tangent of some angles.
Week 12	12 More trigonometry	
	12.1 Accuracy	Understand and use upper and lower bounds in calculations involving trigonometry.
	12.2 Graph of the sine function	Understand how to find the sine of any angle.
		Know the graph of the sine function and use it to solve equations.
	12.3 Graph of the cosine function	Understand how to find the cosine of any angle.
		Know the graph of the cosine function and use it to solve equations.
	12.4 The tangent function	Understand how to find the tangent of any angle.
		Know the graph of the tangent function and use it to solve equations.
	12.5 Calculating areas and the sine rule	Find the area of a triangle and a segment of a circle.
		Use the sine rule to solve 2D problems.
	12.6 The cosine rule and 2D trigonometric problems	Use the cosine rule to solve 2D problems.
		Solve bearings problems using trigonometry.
	12.7 Solving problems in 3D	Use Pythagoras' theorem in 3D.
		Use trigonometry in 3D.
	12.8 Transforming trigonometric graphs 1	Recognise how changes in a function affect trigonometric graphs.
	12.9 Transforming trigonometric graphs 2	Recognise how changes in a function affect trigonometric graphs.

Week 13	13 Probability	
	13.1 Combined events	Use the product rule for finding the number of outcomes for two or more events.
		List all the possible outcomes of two events in a sample space diagram.
	13.2 Mutually exclusive events	Identify mutually exclusive outcomes and events.
		Find the probabilities of mutually exclusive outcomes and events.
		Find the probability of an event not happening.
	13.3 Experimental probability	Work out the expected results for experimental and theoretical probabilities.
		Compare real results with theoretical expected values to see if a game is fair.
	13.4 Independent events and tree diagrams	Draw and use frequency trees.
		Calculate probabilities of repeated events.
		Draw and use probability tree diagrams.
	13.5 Conditional probability	Decide if two events are independent.
		Draw and use tree diagrams to calculate conditional probability.
		Draw and use tree diagrams without replacement.
		Use two-way tables to calculate conditional probability.
13.6 Venn diagrams and set notation	Use Venn diagrams to calculate conditional probability.	
	Use set notation.	
Week 14	14 Interpreting and representing data	
	14.1 Statistical diagrams 1	Construct and use back-to-back stem and leaf diagrams.
		Construct and use frequency polygons and pie charts.
	14.2 Time series	Plot and interpret time series graphs.
		Use trends to predict what might happen in the future.
	14.3 Scatter graphs	Plot and interpret scatter graphs.
		Determine whether or not there is a linear relationship between two variables.
	14.4 Line of best fit	Draw a line of best fit on a scatter graph.
		Use the line of best fit to predict values.
	14.5 Averages and range	Decide which average is best for a set of data.
		Estimate the mean and range from a grouped frequency table.
		Find the modal class and the group containing the median.
	14.6 Statistical diagrams 2	Construct and use two-way tables.
		Choose appropriate diagrams to display data.
	Recognise misleading graphs.	
Week 15	15 Further statistics	
	15.1 Sampling	Understand how to take a simple random sample.
		Understand how to take a stratified sample.
	15.2 Cumulative frequency	Draw and interpret cumulative frequency tables and diagrams.
	Work out the median, quartiles and interquartile range from a cumulative frequency diagram.	

	15.3 Box plots	Find the quartiles and the interquartile range from stem-and-leaf diagrams.
		Draw and interpret box plots.
	15.4 Drawing histograms	Understand frequency density.
		Draw histograms.
	15.5 Interpreting histograms	Interpret histograms.
	15.6 Comparing and describing populations	Compare two sets of data.
Week 16	16 Circle theorems	
	16.1 Radii and chords	Solve problems involving angles, triangles and circles.
		Understand and use facts about chords and their distance from the centre of a circle.
		Solve problems involving chords and radii.
	16.2 Tangents	Understand and use facts about tangents at a point and from a point.
		Give reasons for angle and length calculations involving tangents.
	16.3 Angles in circles 1	Understand, prove and use facts about angles subtended at the centre and the circumference of circles.
		Understand, prove and use facts about the angle in a semicircle being a right angle.
		Find missing angles using these theorems and give reasons for answers.
	16.4 Angles in circles 2	Understand, prove and use facts about angles subtended at the circumference of a circle.
		Understand, prove and use facts about cyclic quadrilaterals.
		Prove the alternate segment theorem.
	16.5 Applying circle theorems	Solve angle problems using circle theorems.
		Give reasons for angle sizes using mathematical language.
		Find the equation of the tangent to a circle at a given point.
Week 17	17 More algebra	
	17.1 Rearranging formulae	Change the subject of a formula where the power of the subject appears.
		Change the subject of a formula where the subject appears twice.
	17.2 Algebraic fractions	Add and subtract algebraic fractions.
		Multiply and divide algebraic fractions.
		Change the subject of a formula involving fractions where all the variables are in the denominators.
	17.3 Simplifying algebraic fractions	Simplify algebraic fractions.
	17.4 More algebraic fractions	Add and subtract more complex algebraic fractions.
		Multiply and divide more complex algebraic fractions.
	17.5 Surds	Simplify expressions involving surds.
		Expand expressions involving surds.

		Rationalise the denominator of a fraction.
	17.6 Solving algebraic fraction equations	Solve equations that involve algebraic fractions.
	17.7 Functions	Use function notation.
		Find composite functions.
		Find inverse functions.
	17.8 Proof	Prove a result using algebra.
Week 18	18 Vectors and geometric proof	
	18.1 Vectors and vector notation	Understand and use vector notation.
		Work out the magnitude of a vector.
	18.2 Vector arithmetic	Calculate using vectors and represent the solutions graphically.
		Calculate the resultant of two vectors.
	18.3 More vector arithmetic	Solve problems using vectors.
		Use the resultant of two vectors to solve vector problems.
	18.4 Parallel vectors and collinear points	Express points as position vectors.
		Prove lines are parallel.
		Prove points are collinear.
	18.5 Solving geometric problems	Solve geometric problems in two dimensions using vector methods.
		Apply vector methods for simple geometric proofs.
Week 19	19 Proportion and graphs	
	19.1 Direct proportion	Write and use equations to solve problems involving direct proportion.
	19.2 More direct proportion	Write and use equations to solve problems involving direct proportion.
		Solve problems involving square and cubic proportionality.
	19.3 Inverse proportion	Write and use equations to solve problems involving inverse proportion.
		Use and recognise graphs showing inverse proportion.
	19.4 Exponential functions	Recognise graphs of exponential functions.
		Sketch graphs of exponential functions.
	19.5 Non-linear graphs	Calculate the gradient of a tangent at a point.
		Estimate the area under a non-linear graph.
	19.6 Translating graphs of functions	Understand the relationship between translating a graph and the change in its function notation.
	19.7 Reflecting and stretching graphs of functions	Understand the effect stretching a curve parallel to one of the axes has on its function form.
		Understand the effect reflecting a curve in one of the axes has on its function form.

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Your Guide to Year 11 Media (BTEC)

Exam Board: Edexcel/Pearson

Specification: <https://qualifications.pearson.com/en/qualifications/btec-tech-awards/creative-media-production.html>

Assessment criteria:

- 60% course work – internal assessments, marked by the teacher.
- 40% external exam.

Expectations of Students			
<p>Students are expected to come equipped with appropriate stationery. They also need to read their teachers comments in their books and act on the feedback given. Students are expected to complete their progress tracking in the front of their books after every assessment. A USB stick to back up work is highly recommended.</p>			
Year 11	Topic Title and unit	What students will be learning	How you can specifically help your child
Autumn	Developing Digital Media Production Skills	<p><u>Learning Aim 2B:</u> Students will learn to apply media production skills. They will will ‘re-imagine’ an existing online Media Production through the use of Photoshop for a specific target audience.</p> <p><u>Learning Aim 2C:</u> Students will review own progress and development of skills and practices. In this unit, students will analyse own development and application of skills and techniques, using considered examples to identify strengths and set targets for improvement.</p>	<p>Useful websites:</p> <p>https://www.youtube.com/user/photoshoptrainingch</p> <p>https://www.bbc.co.uk/bitesize/subjects/ztnygk7</p> <p>https://brianair.wordpress.com/film-theory/glossary-of-media-terminology/</p> <p>Useful Reading:</p> <p>Adobe Photoshop CS6 Classroom in a Book by Adobe Creative Team</p> <p>Revise BTEC National Creative Digital Media Production Revision Guide by Julia Sandford Cook</p>
Spring	Create a Media product in response to a brief	<p><u>Component 3</u> (Externally assessed)</p> <p>For this examined unit, students will learn to create a Media product in response to an</p>	<p>Useful websites:</p> <p>https://helpx.adobe.com/uk/premiere-pro/how-to/easy-video.html</p>

		<p>unseen brief — Students will prepare and practice the skills and knowledge required for an externally assessed project based on a print media product (the actual exam itself will take place for 10 hours across three days).</p>	<p>https://nofilmschool.com/learn-how-use-adobe-premiere-pro-tutorial</p> <p>Useful Reading: Adobe Premiere Pro CC Classroom in a Book by Maxim Jago</p>
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Contact Details:

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Your Guide to Year 11 Photography (GCSE)

- **Exam board:** Edexcel
- **Specification:** <https://qualifications.pearson.com/en/qualifications/edexcel-gcses/art-and-design-2016.html>

Assessment Criteria

- 100% course work – internally assessed. Due to Covid there will be no exam this year, so it is even more important that the Coursework shows the students' progress

Expectations of Students:			
<p>Students are expected to work creatively within their Sketchbook/Digital Sketchbooks, ensuring the projects are completed.</p> <p>The students should use a lunchtime/afterschool sessions each week to add detail to their portfolio, the more interpretations and exploration within the Sketchbook/Digital Sketchbook, the more imagination and marks are available to the student. The sketchbook needs to show a journey of exploring.</p>			
Term	Topic, title and unit	What students will be learning	How can you specifically help your child
Autumn	Reflecting on Reflection	<ul style="list-style-type: none"> • Students to finalise unfinished work in light of the time missed at the end of Yr10 due to Covid 19. Students will be working towards completing Reflection portfolio and producing Personal outcomes 	<p>Useful reading: '50 Photographers you should know' Prestel Publishing</p> <p>'Adobe Photoshop CS6 Classroom in a Book' by Adobe Creative Team</p> <p>Offer opportunities for students to take photos outside of school</p>
Spring	Order and Disorder	<ul style="list-style-type: none"> • Generate and develop a range of ideas relating to the theme "Order and Disorder." • Investigate the work of others demonstrating understanding and presenting their own insights. • Include their own ideas. • Develop own work in response to theme. 	<p>Things to see and do: www.tate.org.uk/ www.saatchigallery.com www.thephotographersgallery.org.uk</p> <p>Useful websites www.art2day.co.uk www.pinterest.com www.studentartguide.com</p>

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Your Guide to Year 11 Combined Science (GCSE)

- **Exam board:** AQA
- **Specification:** <https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/specification-at-a-glance>

Assessment Criteria

There are six papers: two biology, two chemistry and two physics. All papers follow the same format:

- Written exam: 1 hour 15 minutes
- Foundation and Higher Tier
- 70 marks
- 16.7% of GCSE

Expectations of Students:

Students are expected to come equipped with appropriate stationary. They also need to read their teacher's comments in their books and act on the feedback given. All independent learning must be completed on time and brought to the next lesson.

Students will be expected to complete on going revision of the material covered during year 9 and 10.

Term	Topic Title and unit	What students will be learning	How you can specifically help your child
Autumn 1	<p>Cells and transport</p> <p>Atoms and periodictable</p> <p>Energy</p> <p>Organisation</p> <p>Bonding</p>	<ul style="list-style-type: none"> • Types of cells • Microscopes • Diffusion • Osmosis • Active transport • Cell cycle • Stem cells • Atoms elements compounds • Atomic structure • Isotopes • Group 7 • Group 1 • Transition metals • KE • GPE • Elastically energy • Work done • Power • Specific heat capacity • Enzymes • Digestion • Lungs 	<p>BBC Bitesize On BBC bitesize, students have access to key information on each topic, video clips and tests.</p> <p>Biology http://www.bbc.co.uk/education/subjects/z9ddmp3</p> <p>Chemistry http://www.bbc.co.uk/education/subjects/zs6hvcw</p> <p>Physics http://www.bbc.co.uk/education/subjects/zpm6fg8</p> <p>Youtube MyGCSE Science and FuseSchool channels provide a wealth of video clips on youtube. https://www.youtube.com/user/myGCSEscience/videos https://www.youtube.com/results?search_query=mygcse-science</p>

		<ul style="list-style-type: none"> • Gas exchange • Heart • Heart diseases • Plat tissue and organs • Ions • Ionic bonding • Covalent bonding • Metallic bonding • Solid, liquid and gases 	https://www.youtube.com/user/virtualschooluk/videos https://www.youtube.com/results?search_query=fuse+school http://www.bbc.co.uk/education/guides/zk96fg8/revision
Autumn 2	Electrical circuits Infection and diseases Quantitate chemistry	<ul style="list-style-type: none"> • Circuits • Current • Potential difference • Resistance • IV • Power and energy • National grid <ul style="list-style-type: none"> • Diseases • Pathogens • Vaccines • Antibodies • Testing drugs <ul style="list-style-type: none"> • Ar and Mr • Balancing equations • Moles • Reactive masses • Solutions • 	<p>AQA Assessment resources (exam papers and mark schemes) can be found on the AQA website for Triple and Combined Science (Trilogy)</p> <p>Combined http://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources</p> <p>Biology http://www.aqa.org.uk/subjects/science/gcse/biology-8461/assessment-resources</p> <p>Chemistry http://www.aqa.org.uk/subjects/science/gcse/chemistry-8462/assessment-resources</p> <p>Physics http://www.aqa.org.uk/subjects/science/gcse/physics-8463/assessment-resources</p> <p>Specifications can also be found on the AQA website. These provide information on the subject content that is assessed.</p>
Spring 1	Particle model Nervous system and hormones Rates	<ul style="list-style-type: none"> • Density • Internal energy • Specific heat capacity • Gas pressure • Nerves • Reaction time • Hormones • Homeostasis • Blood sugar control • Diabetes and treatment's • Menstrual cycle • Contraception • Rates • Reactivity • Displacement • Surface area • Pressure 	<p>Combined http://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/specification-at-a-glance</p> <p>Biology http://www.aqa.org.uk/subjects/science/gcse/biology-8461/specification-at-a-glance</p> <p>Chemistry http://www.aqa.org.uk/subjects/science/gcse/chemistry-8462/specification-at-a-glance</p> <p>Physics</p>

		<ul style="list-style-type: none"> • Catalysis 	http://www.aqa.org.uk/subjects/science/gcse/physics-8463/specification-at-a-glance
Spring 2	Radioactivity Organic chemistry Forces	<ul style="list-style-type: none"> • Alpha, beta, gamma • Half lives • Atom and neutrons • Crude oil • Alkanes • Fractional distillation and cracking • Forces • Weight, mass and gravity • Resulting forces • Speed and graphs • Acceleration • Velocity and acceleration • Terminal velocity • Stopping distances 	
Summer 1	Variation Acids/ salts Electrolysis Energy change	<ul style="list-style-type: none"> • Meiosis • Inherence • Variation • Natural selection • Evolution • Selective breeding • Genetic engineering • Acids, alkalis neutralisation • Salts • Electrolysis • Endothermic • Exothermic • Energy level • Waves • EM spectrum • Infrared practical • Communities • Abiotic • Biotic • Estimating population • Global warming • Biodiversity 	

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Your Guide to Year 11 Sport (BTEC)

- **Exam board:** Edexcel/Pearson
- **Specification:** <https://qualifications.pearson.com/en/qualifications/btec-firsts/sport-2012-nqf.html>

Assessment Criteria

- 75% - Three internally assessed assignment based units
- 25% - 1 hour online external exam

Expectations of Students:

Students are expected to meet any deadlines that are set for the completion of assignments, missing a deadline could result in failure of the course. Students are expected to come with the correct equipment for every lesson, including lessons where they may be injured. In this case students will not take an active part in the performance part of the lesson but may be required to act as a coach or an official.

Term	Topic, title and unit	What students will be learning	How can you specifically help your child
Autumn 1	Unit 3: Applying the Principles of Personal Training	<ul style="list-style-type: none"> • Learning aim A: Design a personal fitness training programme • Learning aim B: Know about the musculoskeletal system and cardiorespiratory system and the effects on the body during fitness training • Learning aim C: Implement a self-designed personal fitness training • Learning aim D: Review personal fitness programme 	You can support your child by encouraging them to ensure that their practical logbooks are kept up to date and they have accurately recorded a detailed log of each of the practical sessions completed in school
Autumn 2	Unit 1: Fitness for Sport and Exercise	<ul style="list-style-type: none"> • Learning aim A: Understand the components of fitness and the principles of training • Learning aim B: Explore different fitness training methods 	You can support your child by ensuring that they work outside of lesson time to make sure that assignments are completed to the highest standard before the deadline date. Ask your child when the deadline is and work with them to ensure this is met

Spring 1	Unit 1: Fitness for Sport and Exercise	<ul style="list-style-type: none"> • Learning aim C: Investigate fitness testing to determine fitness levels • Students will then sit the exam. 	<p>You can support your child by ensuring that they work outside of lesson time to make sure that assignments are completed to the highest standard before the deadline date.</p> <p>Ask your child when the deadline is and work with them to ensure this is met</p>
Spring 2	Unit 2 – Practical sports performance	<ul style="list-style-type: none"> • Learning aim B: Practically demonstrate skills, techniques and tactics in selected sports • Learning aim C: Be able to review sports performance 	<p>You can support your child by encouraging them to ensure that their practical logbooks are kept up to date and they have accurately recorded a detailed log of each of the practical sessions completed in school</p> <p>Useful websites</p> <ul style="list-style-type: none"> • www.uk sport.gov.uk • www.sportengland.org • www.revisionworld.com <p>Useful reading</p> <ul style="list-style-type: none"> • BTEC Level 2 Sport student book

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Emotional Wellbeing

Year 11 can be a stressful year for both your child and you. Our dedicated Student Support Team are here to help, and will be available to support any student experiencing excessive feelings of exam stress or pressure.

There are also many online support services that you may wish to use. Below are the details of just a couple you may find helpful

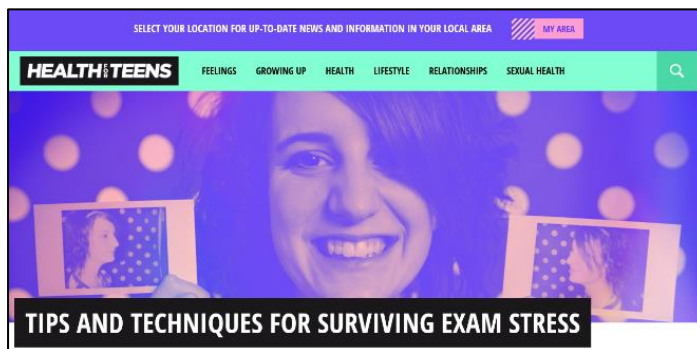
Health for Teens

<http://www.healthforteens.co.uk>

This website provides a wealth of health information for young people and includes signposting to health and support services within Hertfordshire.

There are various topics covered and the section on exam stress, which you and your child may find useful:

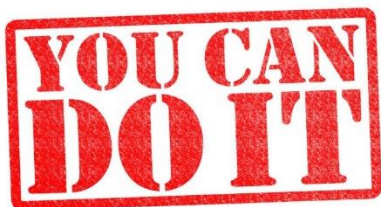
www.healthforteens.co.uk/feelings/exam-stress



Kooth

<https://kooth.com>

This website provides free, safe and anonymous online support for young people.



Do not underestimate the power of praise. Telling your child they '*can do it*' will provide them with confidence. Anything they are stuck on simply means they '*cannot do it yet!*' Please reinforce this with your child, they have more than enough time to practice in order to make perfect or as near as possible.

We encourage all of our students to eat, drink and sleep well. Regular fresh air and exercise is also vital to maintaining a healthy body and mind.

Of course, the best strategy is to put in the preparation before the examinations. All students should be continually revising throughout Year 11. They should never be coming home saying that they have no independent learning to do!

Academic Support Programmes

We will provide a comprehensive range of intervention and academic support activities for all students throughout the year. Your child will be specifically selected for these sessions in order to provide them with a personalised support programme, which targets their specific needs.

Attendance at these sessions is essential in order to fully prepare them for their exams. We would greatly appreciate your support in working with us to ensure your child's full attendance at all intervention sessions offered to them.

If you feel that your child would benefit from any additional support that has not be offered to them then please do not hesitate to contact Miss Taylor (Director of Learning for Year 11), who will be happy to discuss any additional strategies that we may be able to offer.

Next Steps

In order to support your child's transition to the next stage of their education we hope to take them to visit both Goff's School Sixth Form and Hertfordshire Regional College. However, we encourage you to attend the open days with your child to further assess the options available. Due to the current circumstances please see individual websites for when virtual open evenings may be take place.



Careers Information

As part of our continuing work on Careers Provision, I would like to take this opportunity to draw your attention to the Careers section of the school website.

<https://www.goffschurchgate.herts.sch.uk/720/careers-1>

This page is regularly updated and includes a wealth of information about careers education, current and up to date Labour Market Information, Work Experience and post 16 guidance.

Regardless of the Year Group your child is in this is a valuable resource and I encourage you to spend time looking at this together with your child.

In particular, I would like to draw your attention to the link to the Employability Skills page and the START page. Students have been provided with login details for these pages and they provide helpful resources.

As part of Year 11 students will all have at least one careers meeting with an external careers advisor to assist them in deciding on their next steps and support them in making their applications.

