Curriculum Overview

Year 9 Curriculum

	Autumn	Spring	Summer
Art and Design	• **3D Sculpture** Primary and secondary resources and the work of other 3D artists are used to inspire sketches, paintings and 3D sculptures on a variety of themes. Clay, soap, wire and plaster are the 3D materials used to create the final outcomes.	• **3D Sculpture - continues**	• **Portrait** Students create work using a variety of materials and techniques and other artists work as inspiration. Self-portrait and portrait is used as a theme to produce a wide variety of work on the theme of portrait.
Computer Science	• Students begin with learning the fundamentals of programming ensuring they are proficient at all parts of the programming element of the GCSE.	• Students will continue with programming but will also study the computer systems element of the course including; Systems architecture, memory and storage.	• Topics covered are Network topologies along with wired and wireless networks. • Topics covered are system security and system software.

Curriculum Overview

Design and Technology	**Pop Up** • This project increases student's independent and creative thinking skills. • They have to design and make an educational pop-up book for a focussed target market. • This is to be finished to a professional quality, incorporating appropriate mechanisms and images.	**Nutritional Main Course Dishes** • Developing confidence with ingredients and equipment, making savoury dishes. • Using a nutrition programme to analyse the food value of dishes cooked. • Experimental work to develop imagination in how foods can be developed to give an original outcome. • Views of a target market are considered through the use of a questionnaire.	**Nutritional Main Course Dishes** • Bringing together research, to enable students to write a specification and create their own original main course dish. • In the Summer term, students will have an opportunity to choose which area of Design Technology they would like to focus on.
Drama	• GCSE Unit 1 Introduction – • Goodbye • Missing Dan Nolan - Scripted	• Reasonable Force – Devised Unit • Grimms Fairy Tales – Physicality and Voice	• GCSE Unit 2 Introduction – Our Country is Good • Stage Combat

Curriculum Overview

English	**How do Modern Campaign Writers Persuade their Audience to Agree with them?** Propaganda and Political Persuasion: Students will write a speech on a theme/ cause close to their own heart which will lead to a year group debating competition. **War Poetry Comparison** Students will make a multi-media presentation of a WW1 poem for a competition. Students will also write a formal poetry essay.	**Modern Class Reader:** Students will study a modern novel on the theme of conflict. Students will read critically and independently, and focus on how conflict is presented across the novel. **How is War and Conflict Presented in and by the modern media?** This unit focuses on how news is presented to different audience's e.g Newsround, Crimewatch, News programmes, tabloid and broadsheet newspaper articles, webpages. Students will write in different media forms when presenting their own news.	**Shakespeare** **GCSE-style Controlled assessment.** This unit is a study of a whole play, although the final essay question will be based on a specific theme or issue. **English Language GCSE-style Creative Writing Controlled Assessment** This GCSE type assessment will consist of writing a short story in response to a theme or idea.
French	• My Town and Local Area • Home Life	• Keeping Fit and Healthy Eating • Holidays	• Holidays • A Visit Abroad
Geography	**Physical –Weather and Climate Change** • Causes and impacts of long terms climate change both global and local. • TRS and Droughts as hazards. **UK Climate Change Challenges** • Global climate impacts on UK, people and landscapes. • IPCC – UKs roles and responsibilities. Responses to CC locally and nationally.	**Physical –UK Landscapes –Geology and Land Uses** • Structures of the UK and rock types and linked landscapes. Explore how the landscape is used. **Phys/Hum –UK Landscapes: National Parks (NF/ SD)** • Approaches to conservation and development of UK National Parks. • Comparison to worldwide.	**Physical –Coasts and Fieldwork** • Understanding coastal processes, landforms and management. • Flood risk. • Incorporating fieldwork. Complete Full 6 Stage Investigation
History	• Crime and punishment • c1000-present	• Whitechapel c1870-1900 environmental study • Germany 1918-1939	• Germany 1918-1939

Curriculum Overview

ICT	• Students begin with completing an introduction unit which teaches them the key skills of copyright, public domain and creative commons licensing. They will also study project management.	• Students will study the internet including methods of communication, cloud computing, data transmission and connection methods.	• Advanced animation. Students will design their own animation for an unfamiliar audience. • Students will become proficient at using graphic software and understand the differences between vector and bitmap image file types.

Curriculum Overview

Maths 9H– Class 9X1	**Calculation 1** Use known facts, place value, knowledge of operations and brackets to calculate including using all four operations with decimals to two places. Recognise and use number patterns and relationships. Divide a quantity into two or more parts in a given ratio and solve problems involving ratio and direct proportion. Use a calculator efficiently and appropriately to perform complex calculations with numbers of any size. Add and subtract, multiply and divide an integer. Understand and use an appropriate non-calculator method for solving problems that involve multiplying and dividing any three digit number by any two digit number. Use the equivalence of fractions, decimals and percentages to compare proportions. Add, subtract, multiply and divide fractions. Use fractions to solve problems.	**Shape 3** Solve geometrical using properties of angles, of parallel and intersecting lines, and of triangles and other polygons (includes bearings). Understand and apply Pythagoras' Theorem when solving problems in 2-D. Know that translations, rotations and reflections preserve length and angle and map objects onto congruent images. Describe fully combinations of transformations and translation vectors.	**Revision for End of Key stage assessment in May**

Curriculum Overview

Maths 9H– Class 9X1	**Algebra 1** Revise important rules of algebra, including brackets. Construct and solve linear equations with integer coefficients, using an appropriate method. Manipulate algebraic formulae & equations.	**Handling Data 3** Interpret graphs and diagrams, including pie charts and draw conclusions. Select, construct and modify on paper and using ICT – simple time graphs for time series.	**After half term, students will start Unit 2 of the GCSE course.**
	Shape 1 Use straight edge and compasses to do standard constructions.	**Calculation 4** Calculate percentages and find the outcome of a given percentage increase or decrease. Calculate the result of any proportional change using multiplicative methods.	
	Handling Data 1 Answer questions about averages and range of data. Estimate the mean of a set of grouped data. Select, construct and modify frequency polygons. Estimate and find the median, quartiles and interquartile range for large data sets, including using a cumulative frequency diagram.	**Algebra 4** Use algebraic and graphical methods to solve simultaneous linear equations in two variables.	
	Calculation 2 Solve problems involving calculating with powers, roots and numbers expressed in standard index form, checking for correct order of magnitude and using a calculator as appropriate	**Shape 4** Visualise and use 2-D representations of 3-D objects. Calculate lengths, areas and volumes in plane shapes and right prisms (includes problem solving).	

Curriculum Overview

Maths 9H– Class 9X1	**Algebra 2** Square a linear expression, and expand and simplify the product of 2 linear expressions in the form (x ± n) and simplify the corresponding quadratic expression. Use systematic trial and improvement methods and ICT to find approximate solutions to equations such as $x^2 + x = 20$.	**Algebra 5** Solve inequalities in one variable and represent the solution on a number line. Solve inequalities in two variables and find the solution set. Plot the graphs of linear functions where y is given explicitly in terms of x; recognise that equations of the form y=mx+c correspond to straight line graphs. Derive a formula and in simple cases change its subject.	
	Shape 2 Solve geometrical problems using properties of angles, of parallel and intersecting lines, and of triangles and other polygons. Classify quadrilaterals by their geometric properties**.**	**Shape 5** Understand and use trigonometrical relationships in right angled triangles and use these to solve problems including those involving bearings. Understand and use measures of speed (and other compound measures such as density or pressure) to solve problems.	
	Handling Data 2 Select, construct and modify scatter graphs on paper and using ICT. Select, construct and modify lines of best fit on scatter graphs.		
	Calculation 3 Make and justify estimates and approximations of calculations; estimate calculations by rounding to one significant figure and multiplying and dividing mentally. Recognise that measurements given to the nearest whole unit may be inaccurate by up to one half of the unit in either direction.		

Curriculum Overview

Maths 9H– Class 9X1	**Algebra 3** Generate terms of a sequence using term-to-term and position-to-term definitions of the sequence, on paper and using ICT; write and expression to describe the nth term of an arithmetic sequence. Find the next term and nth term of quadratic sequences and functions and explore their properties.	**Handling Data 4** Find and record all possible mutually exclusive outcomes for single events and 2 successive events in a systematic way. Know that the sum of mutually exclusive outcomes is 1 and use this when solving problems. Understand relative frequency as an estimate of probability and use this to compare outcomes of an experiment. Know when to add or multiply two probabilities. Use tree diagrams to calculate probabilities of combinations of independent events.	
		Algebra 6 Plot graphs of linear functions where y is given explicitly in terms of x. Plot graphs of simple quadratic and cubic functions. Derive formulae and in simple cases change its subject. Derive and use more complex formulae and change the subject of a formula.	
		Shape 6 Find the locus of a point that moves according to a given rule, both by reasoning and using ICT. Enlarge 2-D shapes given a centre of enlargement. Recognise the similarity of the resulting shape. Understand and use congruency and mathematical similarity.	

Curriculum Overview

Maths 9C – Class 9X2 and 9X3	**Calculation 1** Use known facts, place value, knowledge of operations and brackets to calculate including all four operations with decimals to two places. Add, subtract, multiply and divide fractions.	**Handling Data 2** Interpret charts and diagrams, including pie charts, and draw conclusions. Understand and use the mean of discrete data and compare two simple distributions. Communicate interpretations and results of a statistical survey using selected tables, graphs and mean from frequency tables. Estimate the mean, median and range of a set of grouped data.	
	Algebra 1 Construct, express in symbolic form, and use simple formulae involving 1 or 2 operations. Multiply out brackets, factorise a single common factor.		
	Shape 1 Use a wider range of properties of 2-D (and 3-D) shapes and identify all the symmetries of 2-D shapes. Solve geometrical problems using properties of angles, of parallel and intersecting lines, and of triangles and other polygons.	**Calculation 4 (inc number)** Understand simple ratio. Divide a quantity into two or more parts in a given ratio and solve problems involving ration and direct proportion. Use proportional reasoning to solve a problem.	

Curriculum Overview

Maths 9C – Class 9X2 and 9X3	**Handling Data 1** Select, construct and modify scatter graphs on paper and using ICT.	**Algebra 4** Generate terms of a sequence using term-to-term and position-to-term definitions of the sequence; write an expression to describe the nth term of an arithmetic sequence. Find the next term and nth term of quadratic sequences and functions and explore their properties.	
	Calculation 2 Use index form and square roots. Understand and use all index laws.	**Shape 4** Know that translations, rotations and reflections preserve length and angle and map objects onto congruent images. Enlarge 2-D shapes, given a centre of enlargement and a positive whole number scale factor. Enlarge 2-D shapes, given a centre of enlargement and fractional scale factor, recognise the similarity of the resulting shapes. Combine transformations. Find the locus of a point that moves according to a given rule, both by reasoning and using ICT.	
	Algebra 2 Construct and solve linear equations with integer coefficients, using an appropriate method.	**Calculation 5** Use known facts, place value, knowledge of operations and brackets to calculate including all four operations with decimals to two places. Solve simple problems involving ordering, adding, subtracting negative numbers in context. Add and subtract fractions by writing with a common denominator, calculate fractions of quantities, multiply and divide integer by fraction. Add subtract multiply and divide fractions.	

Curriculum Overview

Maths 9C – Class 9X2 and 9X3	**Shape 2** Know and use the formulae for the circumference and area of a circle. Use straight edge and compasses to do constructions.	**Algebra 5** Construct functions arising from real-life problems and plot their corresponding graphs; interpret graphs arising from real-life situations. Construct, express in symbolic form, and use simple formulae involving 1 or 2 operations. Construct and solve linear equations with integer coefficients, using an appropriate method. Plot graphs of linear functions where y is given explicitly in terms of x; recognise that equations in the form y=mx+c correspond to straight line graphs.	
	Calculation 3 Use a calculator, where appropriate to calculate fractions/percentages of quantities/measurements. Make and justify estimates and approximations of calculations; estimate calculations by rounding to one significant figure and multiplying and dividing mentally. Use equivalence between fractions, decimals and percentages. Calculate percentages and find the outcome of a given percentage increase or decrease. Calculate the result of any proportional change using multiplicative methods.	**Shape 5** Understand and apply Pythagoras' Theorem when solving problems in 2-D. Use measures of speed (and other compound measures) to solve problems.	

Curriculum Overview

Maths 9C – Class 9X2 and 9X3	**Algebra 3** Use and interpret coordinates in all four quadrants. Plot the graphs of linear functions where y is given explicitly in terms of x. Plot graphs of simple quadratic graphs. Recognise that equations with the form y=mx+c correspond to straight line graphs. Construct and solve linear equations with integer coefficients, using an appropriate method. Use systematic trial and improvement methods and ICT tools to find approximate solutions to equations such as $x^2 + x = 20$.	**Handling Data 4** Understand and use the probability scale from 0 to 1 In probability, select methods based on equally likely outcomes and experimental evidence, as appropriate. Find and record all possible mutually exclusive outcomes for single events and two events in a systematic way. Know that the sum of mutually exclusive events is 1 and use this when solving problems. Understand relative frequency as an estimate of probability and use this to compare outcomes of an experiment.	
	Shape 3 Deduce and use the formulae for the area of a triangle and parallelogram includes trapezia. Calculate (lengths), areas in plane shapes. Visualise and use 2-D representations of 3-D objects Calculate lengths, areas and volumes in plane shapes and right prisms.	**Algebra 6** Use algebraic and graphical methods to solve simultaneous linear equations in two variables. Solve inequalities in one variable and represent the solution set on a number line.	
		Shape 6 Recognise that measurements given to the nearest whole unit may be inaccurate by up to one half of the unit in either direction.	

Curriculum Overview

Music	• Rock Stars	• Mozart Rocks	• Film Music
Philosophy	For details please view our GCSE Philosophy section of our website.		
Photography	**Portrait** Students create portrait photographs using a variety of skills and techniques. The work of other photographers is researched and used as inspiration for their own images. Students will be introduced to lighting equipment and will use it in various set ups to create a range of effects. Photographs will also be enhanced using post production editing.	**Portrait continues**	**Landscape** Students create a variety of landscape themed photographs using a range of different skills and techniques. Some short tasks will be conducted during the previous terms to ensure a range of seasons are represented. The work of other photographers is researched and used as inspiration for their own images. Cityscapes, skyscapes and seascapes are included as well as more traditional rural settings.
Physical Education	• Football • Netball • Fitness Theory • OAA • Basketball • Hockey	• Fitness Theory • OAA • Basketball • Hockey • Option - Badminton • Option - Table Tennis • Option - Aerobics • Option - X-Country	• Athletics • Option - Rounders • Option - Cricket • Option - Ultimate Frisbee
Religious Education	**How Should we Deal with Conflicts?** • Buddhism	**How Should we Deal with Conflicts?** • Buddhism • The Search for Truth	**How Should we Deal with Conflicts?** • The Search for Truth

Curriculum Overview

Science	*All students are following AQA GCSE in the separate sciences; Biology, Chemistry and Physics*		
Biology	• Cell Biology	• Infection and Response	• Organisation
Chemistry	• Atomic Structure and the Periodic Table	• Bonding, Structure and Properties	• Rate and Extent of Chemical Change
Physics	• Particle Model of Matter	• Waves	• Forces

Curriculum Overview

Experience Days

Day 1	Day 2	Day 3	Day 4	Day 5
Financial Crisis How to manage your money. Banking systems and the causes of difficulties (debt and addiction) including how to avoid them.	**Drugs** Awareness of alcohol, smoking, drugs and peer pressure. Safety online.	**The Media and Politics** The place of the media in a democracy. A consideration of issues with the media and bias.	**Keeping Safe** A consideration of risks regarding relationships including the influence of alcohol, sex, contraception and STIs.	**House Day** A community building day based on a theme for the year.