



Year 8 Curriculum

Ambitious and Challenging
Broad and Balanced
Equality of Opportunity

	Maths	English	Science	RE	History	Geography	MFL	Music	PE	Technology	Art	Food	Drama	Computing
Term 1	<p>STAGE 3S Factors & multiples of numbers. Mentally multiply & divide up to 3 digit numbers. Estimate lengths Equivalent fractions; convert improper & mixed numbers. Find area of simple shapes. Find median & range of a set of integers. Column method for adding & subtracting up to 4 digit integers MATHS WEEK</p> <p>STAGE 4 Find the sum of angles in polygons. State values which round a number to 10, 100, 1000. Solve worded problems including negative numbers. Simplify expressions incl. single brackets & factorise. Solve worded problems. Comparison, sum & difference probs. with vertical line chart, frequency polygons & diagrams, & pie charts. Solve worded problems involving FDP & ratio Substitute FDP into functions & formulae</p> <p>STAGE 5 Decimal places & significant figures. Solve & represent inequalities on a number line. Solve problems involving circumference of a circle. Convert between metric units of area & volume. Write time in various units & combinations of units Multiply & divide integers & decimals; understand the effects & solve problems. Plot & interpret time series & scatter graphs. Construct triangles, quadrilaterals & a hexagon</p> <p>STAGE 6 Perimeter of circle sectors, congruency & similarity. Work with area & volume of similar shapes. HCF & LCM using prime decomposition. Find the nth term & quadratic sequence given nth term. Bearings; calculate using exterior angles. Categorise using suitable diagrams; use stratified sampling. Apply the laws of indices for all integers</p>	<p>Gothic Story Writing Pupils develop the skills to build drama and tension in their own creative writing.</p> <p>Topical Issues Pupils develop critical thinking in order to form written arguments.</p> <p>John Ryland's Library Trip. Rotary Youth Speaks.</p>	<p>Health & Humans Separation Techniques Energy & its interactions</p> <p><i>Solving practical problems using knowledge and applying this.</i></p> <p>Robotics visitor, Renewable Energy-Runshaw, STEM club</p>	<p>Meaning and significance of God's covenant. The Fall and original sin, Abraham and Moses. Unconditional love. Reconciliation—conscience, forgiveness and the Sacrament of Reconciliation (contrition, confession, absolution, penance).</p> <p>Skills - Being able to identify a key feature and explain it. Understanding that history shapes faith communities. Reflecting on how forgiveness / lack of forgiveness can affect people's lives.</p>	<p>Making of UK—how England, Scotland, Wales and Ireland unified. Exam. Empire, beginnings 1500s, America, India, Africa, Boer War, Trafalgar, Waterloo. Exam Africa before slavery, trade triangle, middle passage, auctions, plantations, abolition, civil war, Jim Crow laws.</p> <p>December visit for 100 pupils to Slavery Museum in Liverpool.</p>	<p>Exploring the U.K. - Physical and human geography and relationship with Europe population/urbanisation/migration. Main physical features. Skills-Land use on maps/OSmaps/choro pleth maps/atlas Environmental Hazards-global issues relating to the environment Skills—issue evaluation U.K. in Europe and Brexit. Impacts of migration and stereotypes of migration. Issue campaigning</p>	<p>FRENCH Holidays & school trips. Describing festivals & special days Skills Perfect tense. Present tense IR/RE verbs. Understanding questions in the future proche.</p> <p>SPANISH Introductions, greetings word patterns, instructions, numeracy, and literary text. Skills Tener, Vivir, possessive adjectives/ adjectival agreements.</p> <p>GERMAN Introducing yourself & others. Numbers 1-100. Family & pets. Physical description. Skills Articles and gender of nouns. Regular present tense conjugation. Basic German Word Order. Plurals.</p>	<p>12-bar blues— performance and improvisation Jazz and blues influences on popular music.</p> <p>Performance, improvisation and evaluation. (Links: 7 tm2 notation and keyboard skills; Yr 9 throughout; KS4 conventions of pop)</p> <p>Watch History of the Blues documentary.</p>	<p>Develop advanced skills in invasion games, using a range of tactics and strategies. Football - dribbling, feints, movement, defensive tactics / shape, striking ball Netball—running footwork, evasion, shooting, defending stages Basketball - dribbling, lay-ups, full-court tactical play, time infringements, rebounding Handball - dribbling, movement, simple defence, zonal marking Rugby - tackling, off-loading, running with the ball Hockey - tackling: block, jab; evading opponent, hitting the ball</p>	<p>Rotation 1 (8 weeks) DESIGN, MAKE & EVALUATE CLOCK</p> <p>Clock mechanisms (how they work and their components) Input/process/output Mechanism (Gears, pulleys, gear ratio)</p> <p>Product analysis (no writing frame. Sub headings and key words available, along with exemplar)</p> <p>Sketching and annotations (ACCESSFM used to guide annotations)</p> <p>Modelling/prototyping/third party feedback with graphs.</p> <p>Working drawing (dimensions, annotations)</p> <p>CAD (2D Design)</p> <p>Making diary and record of manufacture</p> <p>Packaging research/theory and design</p> <p>Evaluating (key words available but there is an expectation to write this independently)</p> <p>MIDLEVEL MANUFACTURING SKILLS CAD (majority of time), laser cutting, filing, sanding, finishing. Package design and construction.</p>	<p>Rotation 1 (8 weeks) THEORY & DESIGNING</p> <p>The jungle Task/target set Home works to enhance the work done in class. Showing connections and understanding.</p> <p>Power points.</p> <p>Develop ideas from a design brief—given out and discussed. Power point.</p> <p>Demonstrate their ability to bring together their knowledge, understanding connections and skills.</p> <p>Evidence of written annotation. Research on an artist showing connections within their own work. Creative skills. Experimentations using a mixture of materials and techniques. Imprints/batik/printing skills... Primary studies using mixed materials. Secondary studies using mixed materials. Introducing different techniques and skills. Exploring and experimenting. Test pieces using mixed materials. Final designs refined. In the style of the artist.</p> <p>Personal response.</p>	<p>Rotation 1 (8 weeks) Theory and Practical</p> <p>Food Poisoning / Bacteria</p> <p>Risk Assessments</p> <p>Hygiene rules in a kitchen</p> <p>Equipment and the uses</p> <p>Literacy in Food Technology</p> <p>Cereals different types</p> <p>Types of Contamination</p> <p>Starch in food</p> <p>Product analysis- (bread)</p> <p>Evaluating</p> <p>Knife Skills (veg cut, brunoised, macedoine, julienne etc.)</p> <p>Primary / Secondary Processing</p> <p>High risk foods</p> <p>Key Words homework</p> <p>Weighing/ measuring ingredients</p> <p>Practical - Cookies, Tomato and Basil Tart, Chilli Con Carne, Scones, Sweet and Sour</p> <p>Different countries dishes discussed and cooked.</p>	<p>Carousel (8 weeks) PHYSICAL THEATRE/SCRIPT WORK</p> <p>The jungle Task/target set Home works to enhance the work done in class. Showing connections and understanding. Power points. *Develop ideas from a design brief—given out and discussed. Power point. *Demonstrate their ability to bring together their knowledge, understanding connections and skills. *Evidence of written annotation. Research on an artist showing connections within their own work. Creative skills. Experimentations using a mixture of materials and techniques. Imprints/batik/printing skills. Primary studies using mixed materials. Secondary studies using mixed materials. Introducing different techniques and skills. Exploring and experimenting. Test pieces using mixed materials. Final designs refined. In the Style of the artist. Personal response.</p>	<p>Carousel—16 lessons approximately over two blocks.</p> <p>TERM 1 Intro. to Python programming Programming skills using a high level language:</p> <p>Strings and variables</p> <p>Functions, procedures repetitions & loops</p> <p>Debugging logical & syntax errors</p> <p>Use of programs in everyday life</p> <p>TERM 2 Understanding computers Practical skills of using binary in computer systems:</p> <p>Boolean logic, gates (AND, OR, NOT)</p> <p>Binary representation</p> <p>Hardware software & CPU</p> <p>Artificial systems and how they impact our lives</p>
	Term 2	<p>STAGE 3S Round numbers to the nearest 10, 100, & 1000. Substitute into simple algebraic expressions. Measure, draw & estimate angles. Read & draw bar charts. Know the place value of numbers up to 10000000. Identify decimals on a number line; know simple FDP. Estimate volume & capacity. Find the midpoint of two coordinates NSPCC Numbers Day</p> <p>STAGE 4 Solve problems involving four operations on fractions. Calculate with roots & positive integer indices; estimate roots of decimals. Recognise shapes from plans & elevations. Find the nth term & linear sequence given nth term. Justify if a number is in a sequence. Solve problems involving percentages of amounts Understand $y=mx+c$. Compare & solve problems - volume of cubes & cuboids</p> <p>STAGE 5 Multiply & divide a combination of positive & negative integers, F&D including with a calculator & solve problems. Solve problems involving area of a circle. Calculate angles in parallel lines & give reasons. Solve problems involving Pythagoras' theorem in 2D. Add & subtract a combination of positive & negative integers, F&D including with a calculator & solve problems. Increase/ decrease an amount by a percentage. Calculate & solve problems involving volume of prisms</p> <p>STAGE 6 Solve problems including four operations on mixed numbers Solve problems involving area of circle sectors. Decide which average is most appropriate to use. Sketch & interpret real life graphs. Expand double brackets & factorise quadratics (a=1). Interpret & use ratio & fractions in context & graphically</p>	<p>Shakespeare Pupils develop the skills to understand writer's craft and challenging language.</p> <p>War Novel Pupils develop empathy skills within a specific contextual theme.</p> <p>World Book Day Events. Author Visit. SMSC: Conflict/Friendship.</p>	<p>Ecosystems The Periodic Table Motion & Forces including Pressure</p> <p><i>Describing patterns found in data and communicating these to others</i></p> <p>LEGO robotics BSW Uni. Visit (Manchester Met)</p>	<p>Faith and Science— Creation literal vs symbolic interpretation. Advanced tech. & Catholic responses, e.g. stewardship, nuclear weapons. Vocation, Pentecost, Mary, Holy Orders, lay vocations. Skills - Understanding different Christians may have different views and interpretations. To be able to explain how faith can affect your actions / way of life. Priest speaking on vocation. Retreat to Alton Castle to reflect on relationships and faith</p>	<p>Completing black peoples of the Americas project: class and hw. Crime and punishment: intro, Saxons, Medieval, Tudor, torture, Bloody Code. Continuing crime and punishment: Victorian police, prisons and reform. Exam. Jack the Ripper: 1800s London, victims, History of law</p>	<p>Newly Emerging World-India, Russia, Middle East Skills-research and mapping/use of atlases/thematic maps/topographical maps/photo interpretation Development-focus on Africa. Skills-using indicators/interpretation of choropleth maps. Knowledge of contrasting areas of the world: where and how people live. Why some countries are rich and some countries are poor. Looking at NGOs eg Oxfam</p>	<p>FRENCH Digital tech. Making arrangements Leisure activities Describing where you live. Daily routine Skills. Using negative constructions, reflexive pres te, using 3 tenses</p> <p>SPANISH School subjects, Higher level adjectives & agreements, opinions & reasons, teacher descriptions. Skills Ar verb conjugations in the present tense.</p> <p>GERMAN Free-time & leisure activities. School subjects. Telling the time. Skills Using "gern" for opinions. Strong (irregular) verbs in the present tense. Word order with time markers. Using "weil".</p>	<p>Instruments of the orchestra - identification of instruments & study of classical genres.</p> <p>Film & programme music—how music creates an emotional impact. Listening and appraising, composition (Links: 7 tm major/minor emotions & characters; KS4 Concerto Through Time; KS4 Film Music)</p>	<p>Develop advanced skills in individual activities and net games, using a range of tactics and strategies. Badminton - drop shot, lift, block, high serve, singles rules and tactics Table Tennis - FH/BH drive, push shot, block, return of serve, doubles rules Gymnastics - vaulting: shaped flight, run-up / take-off / flight / landing; trampolining: basic jumps - tuck, pike, straddle etc., simple routines Fitness - training principles, additional training methods Dance - developing technical and expressive skills, choreographing short routines</p>	<p>Evaluating (key words available but there is an expectation to write this independently)</p> <p>MIDLEVEL MANUFACTURING SKILLS CAD (majority of time), laser cutting, filing, sanding, finishing. Package design and construction.</p> <p>Kuka and Kawasaki Robotics project and visit, recycling, commercial viability of products</p>	<p>Evidence of written annotation. Research on an artist showing connections within their own work. Creative skills. Experimentations using a mixture of materials and techniques. Imprints/batik/printing skills... Primary studies using mixed materials. Secondary studies using mixed materials. Introducing different techniques and skills. Exploring and experimenting. Test pieces using mixed materials. Final designs refined. In the style of the artist.</p> <p>Personal response.</p>	<p>Product analysis- (bread)</p> <p>Evaluating</p> <p>Knife Skills (veg cut, brunoised, macedoine, julienne etc.)</p> <p>Primary / Secondary Processing</p> <p>High risk foods</p> <p>Key Words homework</p> <p>Weighing/ measuring ingredients</p> <p>Practical - Cookies, Tomato and Basil Tart, Chilli Con Carne, Scones, Sweet and Sour</p> <p>Different countries dishes discussed and cooked.</p>	<p>Research on an artist showing connections within their own work. Creative skills. Experimentations using a mixture of materials and techniques. Imprints/batik/printing skills. Primary studies using mixed materials. Secondary studies using mixed materials. Introducing different techniques and skills. Exploring and experimenting. 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		Term 3	<p>STAGE 3S Percentages of shapes converting between FDP. Translate & reflect shapes on a grid. Substitute into simple word formulae. Order +ve and -ve integers & FDP. Use words associated with probability. Solve 1 & 2-step equations using function machines with positive integer solutions. Simplify ratio. Name & know the properties of 3D shapes</p> <p>STAGE 4 Solve 1& 2-step equations using balancing - negative & fractional integer solutions including brackets. Describe a rotation, translation & reflection on a grid Write a ratio in the form 1:n & n:1 Calculate averages from a frequency table. Use lists to find probabilities. Metric & imperial mass & length units. Construct & interpret maps & scale drawings</p> <p>STAGE 5 Calculate missing values in frequency trees. Identify parallel lines to graphs; solve problems on coordinate axes. Use equivalent ratios to solve harder problems. Write, convert, order & calculate standard form. Describe & draw all four transformations including enlargement with positive scale factors</p> <p>STAGE 6 Substitute & derive difficult formulae. Construct & use tree diagrams. Construct & solve linear equations with unknowns. Solve problems involving loci & constructions. Solve quadratic equations when a=1. Plot & interpret quadratic & cubic graphs.</p>	<p>Dragons' Den Project Pupils understand how persuasive techniques manipulate an audience and apply this to their own writing.</p> <p>Debating Skills Pupils listen critically and respond to arguments.</p> <p>Archdiocese Public Speaking.</p>	<p>Inheritance & Genetics Metals and their reactions Electricity & Magnetism</p> <p><i>Creating models to better understand abstract theories and explaining them.</i></p> <p>Big Bang, Land Based Science</p>	<p>Hinduism - dharma, karma, reincarnation. Prayer at the home shrine / mandir. Diwali and Sewa Day. Catholic Social Teaching—key principles e.g. love of neighbour, Laudato Si and Evangelii Gaudium. CST in action e.g. Mother Teresa and CAFOD Skills -To explain key beliefs. To explain how beliefs are lived out using examples. Learning to appreciate different beliefs. Develop tolerance & respect for other faiths /ways of life. To reflect on how to live a life of service to others.</p>	<p>Planning Ripper essay: skills and GCSE prep. Industrial Revolution, population growth, factories, living and working conditions, public health, transport, technology and inventions. Medicine 1750— early 1900s: Lister, Simpson, Jenner, Pasteur, Koch, germ theory.</p> <p>Medicine as a career</p>	<p>Rivers-Features of river landscapes Skills-Map skills review/identifying features from OS maps/relief patterns/cross sections/transects Flooding-including case studies Somerset and Bangladesh Skills-GIS flooding study</p> <p>Looking at different places and what makes them distinctive. Looking at how Bangladesh copes with flooding because of its geography.</p>	<p>FRENCH Opinions about sports. Asking the way & giving directions. Injuries & illness. Interviewing a sportsperson. Skills the comparative & imperative, using il faut SPANISH Free time, opinions & reasons, music, plans for the weekend Skills CONSOLIDATION Present tense, stem changing verbs, comparatives & superlatives, near future recap. GERMAN Describing a town. Food & drink. Holiday plans. Skills Using "es gibt + ein". Conditional tense using "ich möchte". Future tense & word order.</p>	<p>Working on own choice of material. Developing as a band. Working out own arrangements of songs.</p> <p>Listening, performing, arranging, composing and evaluating. Links: 7 tm3 mash-ups and medleys; 8 tm1 blues; 8 tm3 instrumental skills; solo and ensemble performance at KS4; composition at KS4)</p> <p>Battle of the Bands for Year group. Opportunities for talented pupils to perform in Summer concert.</p>	<p>Develop advanced skills in athletic activities and striking & fielding games, using a range of tactics and strategies. Athletics (track) - leg / arm action, posture Athletics (field) - stance, grip, preparation / run-up, take-off Cricket - bowling: grip, run-up, delivery; fielding: return to wicket-keeper or stumps; pairs games Rounders - hitting the ball tactically, fielding techniques Softball - fielding the ball, running for bases</p>	<p>Kuka and Kawasaki Robotics project and visit, recycling, commercial viability of products</p>	<p>Product analysis- (bread)</p> <p>Evaluating</p> <p>Knife Skills (veg cut, brunoised, macedoine, julienne etc.)</p> <p>Primary / Secondary Processing</p> <p>High risk foods</p> <p>Key Words homework</p> <p>Weighing/ measuring ingredients</p> <p>Practical - Cookies, Tomato and Basil Tart, Chilli Con Carne, Scones, Sweet and Sour</p> <p>Different countries dishes discussed and cooked.</p>	<p>Research on an artist showing connections within their own work. Creative skills. Experimentations using a mixture of materials and techniques. Imprints/batik/printing skills. 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