FOOD

Year	What content (units)?	Why this content now? Why this order?	What are the key skills practised?
7	• Healthy eating and nutrition	• Underpins appropriate food choices.	• Making and development of independence • Evaluation/reflective thinking
	• Rules and routines of the subject	• Ensures pupils are able to work safely, respectfully and within the constraints of 1 hour lessons.	
	• Evaluation skills	• Pupils can describe dishes and are able to eloquently reflect and suggest improvements.	
	• Basic practical skills, including: knife skills, baking, cooking pasta	• Pupils can make a range of quality dishes suited to their ability and age	
	• Planning	• Demonstration that pupils can think ahead.	
	• Food Science	• Pupils can understand why ingredients are combined and the effect of this.	
8	• Healthy eating and nutrition	• Underpins appropriate food choices.	• Making and further development of independence
	• Evaluation skills	• Pupils can describe dishes and are able to eloquently reflect and suggest improvements. Make comparisons	
	• Developing skills, including: pastry making, bread doughs, independent making	• Pupils can make a range of quality dishes suited to their ability and age. Demonstrate skill suited to individual ability	
	• Researching suitable dish choices and planning	• Pupils are able make choices and demonstrate that they can think ahead.	
	• Food science with a specific focus on pastry	• Pupils can understand why ingredients are combined and the effect of this.	
	• Developing creativity and inquisivity in relation to food choices	• Develop a positive relationship with food and a love of food.	
9	• Food choices current dietary advice	• Underpins appropriate food choices	• Focus of work is to ensure that practical skills are well developed to take into adulthood.
	• Evaluation skills	• Pupils can predict and reflect on outcomes. Link to SMSC issues	
	• Developing and practising wide range of practical skills	• Pupils able to finish KS3 with a repertoire of nutritious dishes that they will be able to make in the future.	
	• Researching suitable dish choices and planning	• Pupils are able make choices and demonstrate that they can think ahead.	

	• Practical independence	• Able to follow a process to successfully manage time and resources to make a range of dishes	
	• Awareness of a range of SMSC issues related to Food	• Aware of the impact of the choices made and to be valuable members of society.	
10	• Exemplify what creativity, complexity and challenge in practical work looks. Including visit to local restaurant.	• Ensures that pupils are able to access the highest grades for making	• Developing practical skills to the highest levels of creativity, complexity and challenge
	• Food, nutrition and health	• Ensures that a fundamental understanding is established and can be applied throughout the GCSE	• Ability to assimilate theory concepts and apply in practical work, reflective opportunities and examination scenarios.
	• Nutritional needs and health	• Pupils are able to use their knowledge of nutrition to make dishes that are suitable for a variety of groups, explaining their choices.	• Preparation for GCSE NEA tasks
	• Food science	• Pupils are aware of how to combine ingredients and the functional and chemical properties they have. Allows pupils to make higher quality dishes.	
	• Food safety	• Dishes are able to be prepared, cooked and stored safely both in school and at home	
	• Food choice	• Establish what influences food choice so that dishes are suitable for a variety of groups	
	• Food provenance	• Aware of the impact of the choices made and to be valuable members of society.	
11	NEA 1 – Food Investigation Task	• Food Science Task issued annually by exam board - AQA on 1st September • 15% GCSE grade awarded • 10 hours • 1500 – 2000 word report	• Investigate the functional and chemical properties of ingredients. • Showcase a range of technical skills. Demonstrate reflective thinking, nutritional and costing analysis.
	NEA 2 – Food Preparation Task	• Plan, prepare and cook task issued annually by exam board - AQA on 1st November • 35% GCSE grade awarded • 20 hours • Includes 3 hour practical assessment.	

	Revision Programme	• 3 months intense consolidation of knowledge in preparation for 1 hour 45 minute written examination.	• Pupils are able to demonstrate a secure understanding of all theory concepts from the course.

Design and Technology (Graphics)

Year	What content (units)?	Why this content now? Why this order?	What are the key skills practised?
7	• Product Analysis: Introduction	• ACCESSFM Criteria to identify and judge features of past pupil work.	• Making and development of independence
	• The Design Process 1: Research	• Use analysis to inform and select appropriate theme	
	• Design Skills	• Use analysis/research to write a design specification (Literacy target 1: connectives) to design a suitable idea (annotate, evaluate)	• Evaluation/reflective thinking
	• Practical Skills: CAD	• Use CAD to create simple shapes and surface decorate with imported images and text. Product made with hand tools (one-off production)	• Design/ simple CAD Skills
	• Sequence	• Demonstration that pupils can recall processes and use terminology to describe (Literacy target 2: Key terms) in order.	
	• D&T Theory: Core Principle (link to KS4 D&T GCSE)	• Identify different energy sources and understand advantages disadvantages of each.	
8	• Product Analysis: Recall from Year 7	• ACCESSFM Criteria to identify and judge features of past pupil work to research appropriate theme.	• Making and further development of independence and complexity.
	• The Design Process 2: Planning and Prototyping	• Analysis/research informs selection appropriate images to plan and test future products	
	• Design Skills	• Design specification used to inform range of ideas (annotate, evaluate and select using connectives- literacy target 1)	
	• Practical Skills: CAD/CAM	• Use CAD to create complex shapes to be made with CAM tools (batch/mass production)	
	• Sequence	• Demonstration that pupils can recall processes and use terminology to describe them (Literacy target 2: Key terms) in	

		order, identifying areas of the design process.	
	• D&T Theory: Core Principle (link to KS4 D&T GCSE)	• Identify technology used (automation and robotics) in large scale production and understand advantages disadvantages.	
9	• Product Analysis: Recall from Year 7/8	• Identify and judge features of real life work to research and select appropriate theme and user type.	• Focus of work is to ensure that practical skills are well developed to take onto GCSE level and beyond.
	• The Design Process 3: Planning for target user	• Analysis/research informs selection appropriate images to plan product for user type.	
	• Design Skills	• Design specification used to inform range of ideas (annotate, evaluate and select (literacy target 1) with input from others'.	
	• Practical Skills: Photo-Editing and CAD/CAM (unaided test)	• Use Photo-Editing software to create complex original graphics. CAD/CAM skills gained in 7/8 tested without aid.	
	• Sequence	• Demonstration that pupils can plan complex processes and use terminology to describe them (Literacy target 2: Key terms) in order, identifying areas of Quality Control in the design process.	
	• D&T Theory: Core Principle (link to KS4 D&T GCSE)	• Identify and use Systems (input/process/output) in range of instruction/operation scenarios.	
10	• Practice Project 1: Logo Design	• Ensures that pupils are able to use colour/typography intelligently. • Use design specification to select and justify techniques selected. • Produce ideas to specified scales. • Produce original graphics to context requirements.	• Developing practical skills to the highest levels of creativity, complexity and challenge • Ability to assimilate theory concepts and apply in practical work, reflective opportunities and examination scenarios. • Specialist Design Principles tested in preparation for the GCSE NEA task/section B of the GCSE Exam • Core Principles tested in
	• Practice Project 2: CAD Design	• Ensures that pupils are able to use analysis to inform primary and secondary research. • Use design specification to select, justify and verify. • Produce working drawings to inform making • Produce CAD design to context requirements	
	• Practice Project 3: CAD CAM Manufacture	• Ensures that pupils are able to select materials from a variety of sources to better meet the needs of the brief/user.	

		• Use design specification to select, justify, verify and plan forward. • Produce isometric representations of products to show intentions. • Produce CAD designs to context requirements and make products using different CAM tools.	preparation for section A of the GCSE Exam in: -New Technology -Energy -New Materials -Systems -Mechanisms -Material Properties
	• Practice Project 3: Hand Tools	• Pupils are aware of how to select/use different tools, equipment and adhesives to make products in different scales of production.	
	• Core Principles	• Stand Alone lessons incorporated into practice projects to re-affirm knowledge gained in KS3.	
11	NEA Task	• A variety of different contexts issued annually by exam board - AQA on 1st June • 50% GCSE grade awarded • 35 teaching hours • 20 A3 Pages and a practical outcome	• Investigate context requirements and show design skills to reflect. • Develop, model and test to make a quality product prototype with complexity and innovation. • Demonstrate understanding of theory concepts.
	Revision Programme	• 3 months intense consolidation of knowledge in preparation for 2 hour written examination.	

Design and Technology (Resistant Materials)

Year	What content (units)?	Why this content now? Why this order?	What are the key skills practised?
7	• Design 1: CAD (fridge magnet)	• Understanding how CAD is used to work quickly and efficiently	• Understanding how CAD/CAM is used in industry to design and evaluate through rapid prototyping. • Practicing workshop and workplace safety. • Learning how to handle tools and equipment safely.
	• Manufacturing 1: CAM (fridge magnet)	• Understanding how CAM is repeatable, precise and fast.	
	• Design 2: Using abstract patterns (key fob)	• In order to contrast against CAD traditional design techniques are used to inspire creativity and individuality.	
	• Manufacturing 2: Workshop safety and hand tools (key fob)	• In order to contrast against CAM traditional hand tools are used in the workshop to give pupils the opportunity to experience skills requiring dexterity.	

	• Sequence: Sequence diagram	• The diagram is used for reflection on all areas and to show understanding following the design and make project.	• Sequence diagrams are created to promote key terms used with connective words in justified statements.
	• D&T Theory: Mechanisms Core Principle (link to KS4 D&T GCSE)	• An introduction to mechanisms as pupils are beginning to build on understanding of how simple mechanisms are used in tools and equipment.	
8	• Design 3: Using imagery to create a recognisable form	• Using CAD to inspire a design that is well proportioned and iconic.	• Quality control, minimising waste and working with precision.
	• Development 1: Creating a 2:1 scale drawing and cutting list	• Using maths skills to create a workshop drawing/plan before starting manufacture.	• Putting maths skills into practice.
	• Manufacturing 3: Cutting metal safely and accurately	• Furthering skills with hand tools in the workshops with an emphasis on safety.	• Persevering with difficult tasks in order to achieve a rewarding outcome.
	• Manufacturing 4: Cold forming and brazing	• Understanding the limits and properties of steel. Experiencing the complexity of creating a brazed joint.	• Joining, shaping and finishing wood.
	• Manufacturing 5: Making a wooden base	• Understanding the properties of wood as a contrasting material.	• Understanding the meaning of finite and renewable materials.
	• D&T Theory: The Environment Core Principle (link to KS4 D&T GCSE)	• Ensuring an awareness of the responsibilities that designers/consumers must consider.	
9	• Developing a design for a particular customer/user	• Understanding the importance of designing a product for a real world client.	• Using CAD with precision and skill to create a complicated outcome.
	• Evaluating the design against the specification	• Checking the design will be suitable for manufacture.	• Problem solving skills to test and promote pupils' ability to innovate.
	• Design 4: Advanced use of CAD	• Working to high standards of tolerance and accuracy.	
	• Manufacturing 6: Assembly of CAM parts	• Creating templates to ensure accurate placement of parts in assembly.	
	• Problem solving	• Designing and making a stand to support the pupils individually shaped clock using limited tools equipment and time constraints.	
	• D&T Theory: Modern Materials Core Principle (link to KS4 D&T GCSE)	• Promoting an awareness of new and emerging materials.	
	• Practice Project 1- CAD/CAM and Specialist Technical Principles (Laminated Lamp)	• To understand how various materials can be laminated to improve their properties.	• Developing practical skills to the highest levels of creativity,

Year	What content (units)?	Why this content now? Why this order?	What are the key skills practised?
10		• Marking out and simple temporary joints in wood to further their skill sets. • Considering customer focussed design. • Core Principles 1 and 2	complexity and challenge • Ability to assimilate theory concepts and apply in practical work, reflective opportunities and examination scenarios. • Specialist Design Principles tested in preparation for the GCSE NEA task/section B of the GCSE Exam • Core Principles tested in preparation for section A of the GCSE Exam in: -New Technology -Energy -New Materials -Systems -Mechanisms -Material Properties
	• Practice Project 2- CAD/CAM and Specialist Technical Principles (Bookends)	• Working out their own skill level to attempt varying degrees of difficult joints. • Complicated joints in wood to further their skill sets. • Orthographic drawing and manufacturing specification. • Designing a product for a specific customer. • Core principles 3 and 4	
	• Practice Project 3- CAD/CAM and Specialist Technical Principles (Coat hook with casting)	• Designing a logo to represent themselves during the NEA. • Using CAD to create complicated 2 or 3 part moulds for pewter casting of their personalised logo. • Marking out on metal, cutting and cold forming metal. • Applying finishes to wood. • Core principles 5 and 6	
	•	•	
	• Begin NEA Task (1st June)	•	
11	NEA Task	• A variety of different contexts issued annually by exam board - AQA on 1st June • 50% GCSE grade awarded • 35 teaching hours • 20 A3 Pages and a practical outcome	• Investigate context requirements and show design skills to reflect. • Develop, model and test to make a quality product prototype with complexity and innovation. • Demonstrate understanding of theory concepts.
	Revision Programme	• 3 months intense consolidation of knowledge in preparation for 2 hour written examination.	

Design and Technology (Textiles)

Year	What content (units)?	Why this content now? Why this order?	What are the key skills practised?
	• Design Specification: Introduction	• Pupils can create a list of criteria the product must meet to help	

		understand what the brief requires.	• Develop practical skills.
7	• Practical Skills: Exploration of decorative techniques	• Pupils are able to develop and perfect practical skills before making begins fully.	• Development of independence
	• Design Skills	• Pupils are able to show how they utilise research to create a range of design ideas. Pupils can then develop the designs into a final design that will be produced.	• Show consideration of guidelines used in the industry when designing.
	• Practical Skills: Completing the product	• Pupils can develop and perfect their skills whilst making a high quality product.	• Evaluation/reflective thinking
	• Evaluation	• This enables pupils to fully reflect on their work and give them an advantage when working in this area again.	
	• D&T Theory: Core Principle (link to KS4 D&T GCSE)	• Pupils gain an understanding of how and why products are developed for people and society.	
8	• Design Specification: Introduction	• Pupils can create a list of criteria the product must meet to help understand what the brief requires.	• Being able to meet strict constraints when designing.
	• Product Analysis:	• Pupils are able to consider other products before designing to help create high quality products.	• Continue to develop independence.
	• Design Skills: CAD/CAM	• Pupils develop CAD skills to produce a design which can be made using CAM.	• Show consideration of guidelines used in the industry when designing.
	• Practical Skills: Completing the product	• Pupils are able to develop and perfect new skills whilst making a high quality product.	• Evaluation/reflective thinking
	• Evaluation	• This enables pupils to fully reflect on their work and give them an advantage when working in this area again.	• Increased complexity in skills developed.
	• D&T Theory: Core Principle (link to KS4 D&T GCSE)	• Pupils expand knowledge of technical developments within the Textile industry.	
9	• Design Specification: Introduction	• Pupils are able to create a list of criteria the product must meet using the design brief given.	• Creating a 3D object from a 2D drawing, using paper to model it.
	• Product Analysis:	• Pupils are able to collate and analyse existing products to help with inspiration when designing high quality products.	• Independence is encouraged at every stage.
	• Design Skills:	• Pupils collaborate to produce a range of designs. Pupils then go on to produce a template which	

		will enable them to create a 3D product.	• Being able to work well with others and see this as a benefit.
	• Practical Skills: Templates	• Pupils are able to develop skills further to make a more complex product.	• Evaluation/reflective thinking
	• Evaluation	• This enables pupils to fully reflect on their work and give them an advantage when working in this area again.	
	• D&T Theory: Core Principle (link to KS4 D&T GCSE)	• Pupils expand knowledge of renewable energy and how it is used by companies to become more sustainable.	• Increased complexity in skills developed. •
10	• Project 1: Decorative Techniques	• Develop pupil's skills in decorative techniques. • Using an existing designer as inspiration to design and make a 3D product. • Begin to understand a variety of methods to add shape to garments. • Gain knowledge on fibres and fabrics, their origin, characteristics and the construction. • Pupils are able to show understanding and use quality control effectively.	• Developing practical skills to the highest levels of creativity, complexity and challenge • Ability to assimilate theory concepts and apply in practical work, reflective opportunities and examination scenarios. • Specialist Design Principles tested in preparation for the GCSE NEA task/section B of the GCSE Exam • Core Principles tested in preparation for section A of the GCSE Exam in: -New Technology -Energy -New Materials -Systems -Mechanisms -Material Properties
	• Project 2: Lunchbag	• Pupils are able to fully analyse products to help them realise a need for its development. • Gain an understanding on the effects of forces and stresses on products and why this an important consideration. • Be able to research and use it effectively when designing. • Demonstrate modelling skills in paper to create a 3D prototype of products to allow refinement of skills. • Show consideration of the properties and materials and components when selecting. Demonstrates knowledge.	
	• Project 3: Upcycled shirt	• Show a good understanding of the 6 R's, build this into the research and development of an upcycled product. • Consider sustainability and develop knowledge of the impact	

		• industries have on the environment. • Consider a customer's needs when deciding on design ideas to help create a suitable and effective product. • Learn how to disassemble products and why this is an important part in the process. • Be able to consider marketability of a product and what makes a retailer interested in a product.	
	• Core Principles	• Stand Alone lessons incorporated into practice projects to re-affirm knowledge gained in KS3.	
11	NEA Task	• A variety of different contexts issued annually by exam board - AQA on 1st June • 50% GCSE grade awarded • 35 teaching hours • 20 A3 Pages and a practical outcome	• Investigate context requirements and show design skills to reflect. • Develop, model and test to make a quality product prototype with complexity and innovation. • Demonstrate understanding of theory concepts.
	Revision Programme	• 3 months intense consolidation of knowledge in preparation for 2 hour written examination.	