



Through our technology curriculum pupils have opportunities to learn through practical activities, developing them to be resilient, resourceful, innovative and capable citizens with an understanding of a designer's responsibility to protect the in which we live. Pupils work towards designing and making products that solve real and relevant problems within a variety of contexts considering their own and others needs, wants and values

Year 7 Curriculum			
Learning Focus	Introduction to Textiles materials, techniques and equipment	Introduction to Food techniques, equipment and healthy eating	Introduction to Resistant Materials, techniques and equipment
Learning Hours Associated	Approx. 13 Hours	Approx. 13 Hours	Approx. 13 Hours
What pupils will know, understand and be able to do.	<ul style="list-style-type: none"> ✓ Know sources, origins and properties of textile materials ✓ Know a range of decorative textile techniques including tie dye, applique and fabric pens ✓ Know a range of construction techniques including a plain seam and double turned hem ✓ Know the role of professional designers ✓ Understand the design process to include design briefs, task analysis, design specifications and designing. ✓ Understand how to apply research to design ideas ✓ Understand how to thread up and program the sewing machine ✓ Understand the methods and quality control procedures of decorative and construction techniques ✓ Understand the importance of reviewing, testing and evaluating own and other work to inform decisions 	<ul style="list-style-type: none"> ✓ Know how to work safely to prevent the spread of bacteria and cross contamination when handling low and high-risk foods ✓ Know types of equipment and end use ✓ Know methods and techniques used in food preparation including knife skills, use of hob/oven to apply and control heat and combining ingredients to form and shape a product ✓ Know the purpose and principles of the Eatwell guide ✓ Understand types of nutrients, sources and function in the diet ✓ Understand the benefits/consequences of a balanced/unbalanced diet on physical health ✓ Understand how to adapt recipes ✓ Be able to apply safety and hygiene requirements when producing food ✓ Be able to weigh and measure ingredients accurately 	<ul style="list-style-type: none"> ✓ Know sources, origins and properties in resistant materials ✓ Know a range of manufacturing and finishing techniques when using different materials such as wood and acrylic ✓ Know how to use CAD/CAM to develop design ideas ✓ Know the role of professional designers ✓ Understand the design process to include design briefs, task analysis, design specifications and designing. ✓ Understand how to apply research to design ideas ✓ Understand how to use a variety of hand held and electric machinery ✓ Understand the methods and quality control procedures used in construction procedures ✓ Understand the importance of reviewing, testing and evaluation own and other work to inform decisions

	<ul style="list-style-type: none"> ✓ Be able to use a variety of specialist textiles equipment safely ✓ Be able to apply research to produce design ideas for an intended user ✓ Be able to apply the correct decorative and construction methods to produce a final outcome ✓ Be able to apply quality control procedures to produce high quality practical outcomes ✓ Be able to test and evaluate own and others work throughout the design process 	<ul style="list-style-type: none"> ✓ Be able to apply quality control procedures to produce high quality practical outcomes ✓ Be able to plan and evaluate a nutritionally balanced meal 	<ul style="list-style-type: none"> ✓ Be able to use a variety of specialist resistant materials equipment safely ✓ Be able to research and analyse the work of others ✓ Be able to apply research to produce design ideas for an intended user ✓ Be able to use 2D design to create computer aided design ideas ✓ Be able to apply the correct construction and finishing techniques to produce a final outcome ✓ Be able to apply quality control procedures to produce high quality practical outcomes ✓ Be able to test and evaluate own and others work throughout the design process
Subject Vocabulary	Design brief, task analysis, product analysis, mood boards, design, design specification, annotation, fibres, fabrics and properties, tie dye, applique, fabric pens, plain seam, double turned hems, quality control, evaluate	Balanced diet, eatwell guide, nutrient, function, source, carbohydrates, protein, calcium, high risk foods, cross contamination, bacteria, quality control, bridge and claw methods, rubbing in and all in one methods, simmering and boiling	Design brief, task analysis, product analysis, design specification, isometric design, annotation, materials and properties, CAD/CAM, plywood, acrylic, templates, finger joints, quality control, evaluate
Subject Texts Used	Kelly Hoppen – My design agenda article Textile-based materials - Textile-based materials - AQA - GCSE Design and Technology Revision Textile fibres and fabrics - Material categories and properties - OCR - GCSE Design and Technology Revision	NHS – Eatwell Guide WHO – Healthy Diet	Philippe Starck- 10 Iconic Products - RTF Rethinking The Future (re-thinkingthefuture.com) Timbers - Timber-based materials - AQA - GCSE Design and Technology Revision
Cultural Enrichment Opportunities	Exploring careers in Textiles Technology Leaders in discipline fields – video and text exposure	Exploring cultural dishes Opportunity to join baking club Leaders in discipline fields – video and text exposure	Exploring careers in product design industry Leaders in discipline fields – video and text exposure
Learning Behaviours	Safety - Pupils will explore, explain and follow health and safety rules to prevent hazards and injury to self and others. Correct procedures will be explained and modelled by teacher.	Safety - Pupils will explore, explain and follow health and safety rules to prevent hazards and injury to self and others. Correct procedures will be explained and modelled by teacher.	Safety - Pupils will explore, explain and follow health and safety rules to prevent hazards and injury to self and others. Correct procedures will be explained and modelled by teacher.

	<p>Reflection and setting goals - Pupils will use constructive feedback when reviewing and critically assessing own and others work to support progress</p> <p>Resilience - Pupils will practice key skills and reflect on the quality of their outcome.</p> <p>Where appropriate, pupils will practice and revisit skills and knowledge to ensure progress is made.</p>	<p>Reflection and setting goals - Pupils will use constructive feedback when reviewing and critically assessing own and others work to support progress</p> <p>Resilience - Pupils will practice key skills and reflect on the quality of their outcome.</p> <p>Where appropriate, pupils will practice and revisit skills and knowledge to ensure progress is made.</p>	<p>Reflection and setting goals - Pupils will use constructive feedback when reviewing and critically assessing own and others work to support progress</p> <p>Resilience - Pupils will practice key skills and reflect on the quality of their outcome.</p> <p>Where appropriate, pupils will practice and revisit skills and knowledge to ensure progress is made.</p>
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Year 8 Curriculum

Learning Focus	Textiles Sustainability	Food Sustainability	Resistant Materials Sustainability
Learning Hours Associated	Approx. 13 Hours	Approx. 13 Hours	Approx. 13 Hours
What pupils will know, understand and be able to do.	<ul style="list-style-type: none"> ✓ Know the stages of a product's life cycle ✓ Know how the textile industry impacts the environment ✓ Know a range of components, suitability and end uses ✓ Know a range of construction techniques including fastenings and double turned hem ✓ Understand the impact of the fashion industry on the environment and how to be an ethical consumer of products ✓ Understand the design process to include design briefs, task analysis and design specifications ✓ Understand how to use research to identify and understand consumer needs ✓ Understand how to thread up and program the sewing machine ✓ Understand the methods and quality control procedures of decorative and construction techniques ✓ Understand the importance of reviewing, testing and evaluation 	<ul style="list-style-type: none"> ✓ Know how to work safely to prevent the spread of bacteria and cross contamination when handling low and high risk foods ✓ Know types of equipment and end use ✓ Know methods and techniques used in food preparation including knife skills, use of hob/oven to apply and control heat and combining ingredients to form and shape a product ✓ Know the purpose and principles of the Eatwell guide ✓ Know environmental, social and moral issues associated with food manufacturing and distribution ✓ Understand the benefits/consequences of a balanced/unbalanced diet on physical health ✓ Understand how to adapt recipes ✓ Understand how food miles, seasonality and farming methods can impact the world in which we live and the consumer ✓ Be able to competently apply safety and hygiene requirements when producing food ✓ Be able to weigh and measure ingredients accurately 	<ul style="list-style-type: none"> ✓ Know the impact of a range of materials on the environment ✓ Know the benefits ethical sourcing ✓ Know a range of manufacturing and finishing techniques when using different materials ✓ Know mechanical systems and mechanisms used in product design ✓ Understand origin of materials and ethical sourcing/ecological footprint ✓ Understand the design process to include design briefs, task analysis and design specifications ✓ Understand how to apply research to design ideas ✓ Understand how to use a variety of hand held and electric machinery ✓ Understand the methods and quality control procedures used in construction procedures ✓ Understand the importance of reviewing, testing and evaluation own and other work to inform decisions ✓ Be able to competently use a variety of resistant materials equipment safely

	<p>own and other work to inform decisions</p> <ul style="list-style-type: none"> ✓ Be able to use a variety of specialist textiles equipment safely and competently ✓ Be able to critically analyse and assess existing products ✓ Be able to apply research to produce products which meets the needs, wants and values of a target market ✓ Be able to competently apply the correct decorative and construction methods to produce a final outcome ✓ Be able to competently apply quality control procedures to produce high quality practical outcomes ✓ Be able to test and evaluate own and others work throughout the design process 	<ul style="list-style-type: none"> ✓ Be able to competently apply quality control procedures to produce high quality practical outcomes ✓ Be able to plan and evaluate a nutritionally balanced meal ✓ Be able to analyse the impact of environmental, social and moral issues in the food industry 	<ul style="list-style-type: none"> ✓ Be able to critically analyse and assess existing products ✓ Be able to apply research to produce design ideas for an intended user ✓ Be able to apply the correct mechanisms, mechanical systems, construction and finishing techniques to produce a final outcome ✓ Be able to apply quality control procedures to produce high quality practical outcomes ✓ Be able to test and evaluate own and others work throughout the design process
Subject Vocabulary	Design brief, task analysis, product analysis, mood boards, product life cycle, sustainability, recycling, components, plain seam, fastenings, quality control, evaluate	Food miles, seasonality, free range, nutrient, function, source, carbohydrates, protein, calcium, dietary related conditions, moderation, high risk foods, cross contamination, bacteria, quality control, bridge and claw methods, rubbing in methods, simmering and boiling	Design brief, task analysis, product analysis, mood boards, design, annotation, laser cutter, mechanical systems, finite and non-finite resources quality control, evaluate.
Subject Texts Used	How fast fashion fuels climate change, plastic pollution and violence Greenpeace UK Planet fashion: the 10 coolest ethical fashion brands The Guardian 18 Sustainable Fashion Brands to Support in 2023 Earth.Org	The importance of eating seasonally – Seasonal Food Guide Seasonal eating - BBC Bitesize Cool Geography - GCSE - Changing food demand	Impact on sustainability - New and emerging technologies - AQA - GCSE Design and Technology Revision 9 reasons why wooden toys are better than plastic GoodTo https://www.mechanical-toys.com/cams.html CAMS - AUTOMATA (mechanical-toys.com)
Cultural Enrichment Opportunities	Current affairs/topical news articles	Exploring cultural dishes Opportunity to join baking club	Current affairs/topical news articles

	Leaders in discipline fields – video and text exposure R4GM visit to explore recycling processes	Leaders in discipline fields – video and text exposure	Leaders in discipline fields – video and text exposure R4GM visit to explore recycling processes
Learning Behaviours	<p>Problem Solving - Pupils will explore, research and apply research and practical skills to answer a design problem.</p> <p>Reflection and setting goals - Pupils will use constructive feedback when reviewing and critically assessing own and others work to support progress.</p> <p>Structured ways of working - Pupils will practice key skills and reflect on the quality of their outcome. Pupils will select and apply suitable techniques to work independently to choose the suitable methods to answer the design brief.</p>	<p>Safety - Pupils will explore, explain and follow health and safety rules to prevent hazards and injury to self and others. Correct procedures will be explained and modelled by teacher.</p> <p>Organising time - Pupils will work independently and follow recipes/instructions to produce products in a timely fashion and allow for correct hygiene procedures to be undertaken.</p> <p>Purposeful Conversation - Pupils will be able to discuss and contribute to class discussions on sustainability issues. Pupils will be able to communicate own opinions and respectfully listen to the opinions of others.</p>	<p>Safety - Pupils will explore, explain and follow health and safety rules to prevent hazards and injury to self and others. Correct procedures will be explained and modelled by teacher.</p> <p>Problem Solving - Pupils will explore, research and apply research and practical skills to answer a design problem.</p> <p>Precision - Pupils will practice key skills and reflect on the quality of their outcome. Pupils will apply correct quality control procedures to ensure product is made to a high quality.</p>

Year 9 Curriculum – Pupils to choose 2 from ...				
Learning Focus	Textiles Industrial Practice	Food Technology Industrial Practice	Resistant Materials Industrial Practice	Graphics Industrial Practice
Learning Hours Associated	Approx. 13 Hours	Approx. 13 Hours	Approx. 13 Hours	Approx. 13 Hours

<p>What pupils will know, understand and be able to do.</p>	<ul style="list-style-type: none"> ✓ Know the production systems used in the manufacturing industry ✓ Know the moral issues relating to clothing manufacture ✓ Know a range of materials, suitability and end uses ✓ Know how to develop and communicate design ideas for a specified target market ✓ Know a range of commercial construction techniques ✓ Understand the principles of one-off and batch production ✓ Understand the moral impact of sweatshops and child labour in the fashion industry ✓ Understand the design process to include design briefs, task analysis and design specifications ✓ Understand how designers communicate ideas through fashion illustration ✓ Understand how to thread up and program the sewing machine ✓ Understand the methods and quality control procedures commercial construction techniques ✓ Understand the importance of reviewing, testing and evaluation own and other work to inform decisions ✓ Be able to analyse the efficiency of production systems 	<ul style="list-style-type: none"> ✓ Know how to work safely to prevent the spread of bacteria and cross contamination when handling low and high risk foods ✓ Know types of equipment and end use ✓ Know methods and techniques used in food preparation including knife skills, use of hob/oven to apply and control heat and combining ingredients to form and shape a product ✓ Know commercial process in developing successful food products ✓ Know purpose, information and types of food packaging used in commercial food production purpose ✓ Understand types of nutrients, sources and function in the diet/products ✓ Understanding dietary related conditions ✓ Understand how to cost and scale up recipes ✓ Understand how to complete a sensory analysis to critically analyse and improve outcomes ✓ Understand how food labelling informs and protects consumers ✓ Be able to competently apply safety and hygiene requirements when producing food 	<ul style="list-style-type: none"> ✓ Know new and emerging technologies ✓ Know how to use electronics in products ✓ Know a range of materials, suitability and end uses ✓ Know how to develop and communicate design ideas for a specified target market ✓ Know a range of commercial construction techniques including electrical and electronic systems ✓ Understand the impact of new and emerging technologies on individuals and society ✓ Understand how electronic systems can be powered and used in products ✓ Understand the design process to include design briefs, task analysis and design specifications ✓ Understand how to apply research to design ideas ✓ Understand how to use a variety of hand held and electric machinery including electrical components ✓ Understand the methods and quality control procedures used in construction procedures ✓ Understand the importance of reviewing, testing and evaluation own and other work to inform decisions ✓ Be able to competently use a variety of resistant materials equipment safely ✓ Be able to critically analyse and assess existing products 	<ul style="list-style-type: none"> ✓ Know the principles of iterative design ✓ Know the technical drawing skills used in commercial graphic design ✓ Know a range of commercial illustration and construction techniques ✓ Understand the principles of iterative design and feedback to inform the development of ideas ✓ Understand how to use one point and two point perspective, isometric drawing, pictograms and rendering to communicate design ideas ✓ Understand the methods, design principles and materials used in commercial packaging ✓ Understand the design process to include design briefs, task analysis and design specifications ✓ Understand how to apply research to design ideas ✓ Know a range of materials, suitability and end uses ✓ Know how to develop and communicate design ideas for a specified target market ✓ Understand the iterative design process to review, test and evaluate ideas ✓ Understand how to apply research to design ideas ✓ Be able to competently use a variety of graphic design equipment safely ✓ Be able to critically analyse and assess existing products
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	<ul style="list-style-type: none"> ✓ Be able to use a variety of specialist textiles equipment safely and competently ✓ Be able to critically analyse and assess existing products ✓ Be able to apply correct technical drawing skills to produce fashion illustrations ✓ Be able to competently apply the correct commercial construction methods to produce a final outcome ✓ Be able to competently apply quality control procedures to produce high quality practical outcomes ✓ Be able to test and evaluate own and others work throughout the design process 	<ul style="list-style-type: none"> ✓ Be able to weigh and measure ingredients accurately including scaling up ✓ Be able to competently apply quality control procedures to produce high quality practical outcomes ✓ Be able to plan and evaluate a nutritionally balanced meal ✓ Be able to analyse food outcomes using sensory analysis and suggest improvements ✓ Be able to evaluate the effectiveness of food packaging 	<ul style="list-style-type: none"> ✓ Be able to apply research to produce design ideas for an intended user ✓ Be able to apply the correct electronic systems, construction and finishing techniques to produce a final outcome ✓ Be able to apply quality control procedures to produce high quality practical outcomes ✓ Be able to test and evaluate own and others work throughout the design process 	<ul style="list-style-type: none"> ✓ Be able to apply research to produce design ideas for an intended user ✓ Be able to use technical drawing skills to produce designs for an identified market ✓ Be able to apply the correct surface development, construction and finishing techniques to produce a final outcome ✓ Be able to apply quality control procedures to produce high quality practical outcomes ✓ Be able to test and evaluate own and others work throughout the design process
<p style="text-align: center;">Subject Vocabulary</p>	<p>Design brief, task analysis, product analysis, mood boards, one off and batch production, sweat shops, child labour, construction techniques, fashion illustration, quality control, evaluate</p>	<p>Packaging, scaling up, costing, sensory analysis, nutrient, function, source, carbohydrates, protein, calcium, dietary related conditions, high risk foods, cross contamination, bacteria, quality control</p>	<p>Design brief, task analysis, product analysis, mood boards, design, annotation, electronic systems, circuit, input, outputs, programmable components, quality control, evaluate</p>	<p>Design brief, task analysis, product analysis, mood boards, iterative design, annotation, one point and two point perspective, isometric drawing, pictograms and rendering, quality control, evaluate</p>
<p style="text-align: center;">Subject Texts Used</p>	<p>Exploitation and sweatshops are at the core of fast fashion: It's time to dismantle the system - Euronews</p>	<p>How dietary factors influence disease risk National Institutes of Health (NIH) Childhood obesity: a plan for action - GOV.UK (www.gov.uk)</p>	<p>Biomimicry: technology inspired by nature (theecologist.org)</p>	<p>What is Iterative Design? (and Why You Should Use It) Enginess Insights</p>

Cultural Enrichment Opportunities	Northern Fashion Week Current affairs/topical news articles Leaders in discipline fields – video and text exposure	Extra Curricular Advanced Baking Club Cadburys World – Product Development workshop	Jaguar Land Rover Factory Education Tour Current affairs/topical news articles Leaders in discipline fields – video and text exposure	Jaguar Land Rover Factory Education Tour Current affairs/topical news articles Leaders in discipline fields – video and text exposure
Learning Behaviours	Organising Time - Pupils will work independently and follow instructions to produce products in a timely fashion and allow for correct quality control procedures to be undertaken. Resilience - Pupils will practice key skills and reflect on the quality of their outcome. Where appropriate, pupils will practice and revisit skills and knowledge to ensure progress is made. Precision - Pupils will practice key skills and reflect on the quality of their outcome. Pupils will apply correct quality control procedures to ensure product is made to a high quality.	Organising time - Pupils will work independently and follow recipes/instructions to produce products in a timely fashion and allow for correct hygiene procedures to be undertaken. Reflection and setting goals - Pupils will use constructive feedback when reviewing and critically assessing own and others work to support progress. Structured ways of working - Pupils will practice key skills and reflect on the quality of their outcome. Pupils will select and apply suitable techniques to work independently to choose the suitable methods to answer the design brief.	Precision - Pupils will practice key skills and reflect on the quality of their outcome. Pupils will apply correct quality control procedures to ensure product is made to a high quality. Safety - Pupils will explore, explain and follow health and safety rules to prevent hazards and injury to self and others. Correct procedures will be explained and modelled by teacher. Problem Solving - Pupils will explore, research and apply research and practical skills to answer a design problem.	Organising time - Pupils will work independently and follow recipes/instructions to produce products in a timely fashion and allow for correct hygiene procedures to be undertaken. Problem Solving - Pupils will explore, research and apply research and practical skills to answer a design problem. Resilience - Pupils will practice key skills and reflect on the quality of their outcome. Where appropriate, pupils will practice and revisit skills and knowledge to ensure progress is made.

For Information:

Autumn Term – 15 Weeks (Week 1 – 15)

Spring Term – 11 Weeks (Week 16 – 26)

Summer Term – 13 Weeks (Week 27-39)

Technology Curriculum Time – 2 hours per fortnight (2 Week Timetable)