Design & Technology, Textiles and Food Preparation Curriculum (Years 7 - 9)

Overview of the Curriculum

The Key Stage 3 curriculum is delivered across four specialisms - Textiles, Product Design, Graphics and Food Preparation. Students will experience each specialism during the course of the academic year on a carousel.

The curriculum reflects our emphasis on practical skills at Key Stage 3, with students using our specialist workshops and equipment to create quality products in each of the projects they study. Students use tools and equipment safely and accurately to demonstrate the technical skills they have learnt with a particular discipline. Alongside the practical curriculum, students are taught the knowledge and skills required to engage in an iterative design process, with a focus on the language skills required as part of the design process.

In Textiles, Product Design and Graphics, the programmes of study are taught as stand alone units of work with the common skills and assessment areas of investigation, design, make and evaluate sequenced throughout the schemes of work.

The **Design & Technology** units of work (Product Design and Graphics) are delivered through creative and practical projects and are sequenced to continually build on prior knowledge and skills. Across all projects students are taught the importance of the design process. We integrate investigation, design, manufacturing, testing, and evaluation into every project. The investigation includes the exploration of cultures and understanding the work of a broad range of influential designers, both historical and current. This holistic approach ensures that students not only develop their creative abilities but also gain practical experience in bringing their designs to life, assessing their functionality and effectiveness, and refining their skills through iterative improvement. Explicit links to the creative industry are made so students can contextualise their learning and understand possible future pathways.

In **Food Preparation** students enjoy a range of practical tasks that develop their cookery skills, with recipes that build in complexity and technical skills as they move through Key Stage 3. Through practical work, students experience some aspects of food science including sensory analysis, tasting experiments and food investigations and build an understanding of nutrition. Embedded within the projects are opportunities for students to explore issues around environment, equality and diversity

Through the **Textiles** curriculum students enjoy a range of project themes based on sustainability, equality and diversity. Students are introduced to the basic fundamentals of textile techniques, and then build more advanced technical skills so they become confident using the specialist textiles machinery, including sewing machines and the printmaking tools and machines. Students have the opportunity to explore a range of contemporary and traditional textiles skills and techniques.

SMSC in Design & Technology

Spiritual development in Design & Technology is encouraged through creativity, innovation, and opportunities for pupils to express their individuality through practical design work. The curriculum encourages reflection, self-awareness, and a sense of purpose as students explore their own ideas and respond to real-world problems. Pupils develop resilience and confidence through the iterative design process, evaluating their work and learning from challenges. They consider the emotional, aesthetic, and functional impact of products, reflecting on how design can improve lives and meet human needs. Inspiration is drawn from nature and design influences, encouraging curiosity and a sense of wonder about the world, materials, and technologies. Students are given meaningful contexts that support personal expression, such as adapting designs for specific users, including different age groups and abilities. Spiritual engagement is further enriched through co-curricular clubs, design competitions, and visits that connect learning to wider cultural and environmental contexts.

Moral development is actively promoted in Design & Technology through the exploration of ethical issues related to materials, manufacturing, and product use. Students are taught to make informed, responsible decisions by evaluating the environmental and social impact of their design choices. Key themes such as sustainability, fair trade, recycling, pollution, and responsible sourcing are embedded throughout the curriculum. Pupils consider the full lifecycle of products and reflect on the consequences of design decisions for individuals, communities, and the planet. Through the analysis of real-world case studies, current issues, and legislation, including health and safety and environmental law, students develop an awareness of their responsibilities as future consumers and potential designers. They are encouraged to design for inclusivity and diverse needs, including empathy, critical thinking, and a strong sense of moral responsibility.

Social development is nurtured through collaborative, hands-on learning that promotes communication, teamwork, and mutual respect. Students regularly engage in group-based design projects, peer assessment, and team problem-solving, helping them to build essential interpersonal and organisational skills. The curriculum encourages students to consider the needs of different user groups and social contexts, promoting inclusive, user-centred design. Pupils explore how design can respond to real-world social challenges, such as accessibility, health, and safety, developing empathy and an awareness of how products can serve individuals, communities, and society. Social responsibility is a key theme, with students encouraged to design for others and to reflect on the broader impact of their decisions. Diversity and inclusion are embedded throughout the course, supported by examples of designers from a range of cultural backgrounds and genders. Opportunities for leadership and wider participation, such as student-led clubs, "Proud to be Me" activities, and celebration schemes of work, further enrich students' social development within the subject.

Cultural development in Design & Technology is encouraged through the exploration of global design traditions, movements, and innovations. Students investigate how different cultures, time periods, and communities influence design decisions, materials, aesthetics, and product functionality. Through case studies, practical projects, and design analysis, pupils develop a respect for cultural diversity and an appreciation of how identity, heritage, and tradition shape the design landscape. They are encouraged to incorporate cultural influences into their own work,

promoting open-mindedness, inclusivity, and creative expression. The curriculum also examines the impact of globalisation and technological advancement on design and manufacturing, helping students understand the interconnected nature of the modern world. This broadens their worldview and encourages sensitivity to different values, beliefs, and customs in both historical and contemporary contexts.

Examples of Spiritual, Moral, Social and Cultural development in Design & Technology include:

- Reflecting on the creative and emotional aspects of design, including how products can influence mood, behaviour, or wellbeing.
- The design of Eco-Homes in our co-curricular club enables students to debate the environmental and ethical consequences of using certain materials, such as plastics or rare metals.
- During the Battle Bots co-curricular club, students are encouraged to collaborate on group projects that promote teamwork, communication, and leadership.
- Exploring how traditional craftsmanship from different cultures influences modern design and product development.
- In KS4 & KS5 investigating the global supply chain and considering issues such as working conditions, sustainability, and consumer rights.
- In KS4 & KS5 designing inclusive products that address the needs of people with disabilities, the elderly, or other user groups.

SMSC in Food preparation and Nutrition

Spiritual development in food preparation and nutrition is encouraged through creativity, it adds depth to students' understanding of how food is related to culture, identity, ethics and well being. Spirituality is typically included by:

- Encourage mindful food consumption, developing awareness of where food comes from, how it nourishes the body and its impact on the environment.
- Respecting all living beings and preparing food in a humane and environmentally friendly manner.

Moral issues develop student awareness of right and wrong and develop a moral code. Moral issues are typically included by:

- Focusing on ethics and values related to food choice and food production. Incorporating how food production affects workers fair wages, safe working conditions, child labour, and exploitation in agriculture and food industries. The scheme of work covers humane treatment of animals in farming and ethical concerns about factory farming versus free-range or plant-based diets. The aqa specification covers topics surrounding these issues.
- Highlight the moral implications of wasting food when many people face hunger globally.
- Explore the right to access healthy, nutritious food as a basic human right and the moral responsibility to help reduce food insecurity.
- Discussions surrounding ethical sourcing and production that avoids cruelty, exploitation, and environmental harm, including supporting humane farming, fair labour practices, and sustainable agriculture.

Social issues in food schemes of work helps students understand the wider impact of food on society and develop critical thinking about their choices. Food schemes of work include social issues by addressing topics such as food poverty, hunger, and unequal access to nutritious food. They explore ethical considerations like fair trade, animal welfare, and sustainable farming practices, encouraging students to make responsible and compassionate food choices. Cultural diversity and inclusion are emphasised through understanding different dietary traditions. Additionally, environmental concerns like food waste and carbon footprint are discussed. Overall, schemes develop critical thinking about how food connects to society, ethics, and personal values.

Cultural development is encouraged through celebrating diverse food traditions, recipes, and practices from different cultures, recognising food as a key element of cultural identity and heritage. Including cultural issues in a scheme of work promotes inclusivity, respect, and understanding among students from diverse backgrounds. It helps students appreciate different food traditions, dietary practices and ethical beliefs.

- Cultural issues are included throughout KS3 & 4, in particular SMSC issues are covered at GCSE content, specifically: Factors that affect food choice, British and international cuisine, environmental impact and sustainability, processing and production.
- Schemes of work are designed to include recipes from different cultures and learn about global food traditions and customs.

Overview of schemes of work at each key stage

Year 7		
Design & Technology	**Food Preparation**	**Textile Design**
Proud to Be Me Students are introduced to the workshop environment and develop the practical skills required to transform their design ideas into functional outcomes. They complete a project to design and make a hinged wooden box, decorated with a personalised digital design that represents their identity. Through this project, students develop: ● Confidence in working safely and independently in a workshop setting. ● An understanding of key health and safety expectations. ● Competence in using tools such as the pillar drill, tenon saw and disc sander accurately and safely. ● Technical drawing and design communication skills. ● Proficiency in digital design, using Canva for surface graphics and	**Essential Culinary Skills, Nutrition and Food Science** Students begin their food journey by combining practical cookery with theoretical knowledge, building the foundations for a lifelong understanding of healthy eating and food science. A series of structured projects develop both technical ability and wider awareness of food and nutrition. Through this programme, students learn to: ● Apply safe and accurate knife skills (bridge and claw techniques) when preparing fruit and vegetables. ● Plan, sequence and present dishes such as layered salads and sandwiches, focusing on creativity, organisation and time management. ● Develop weighing, measuring and mixing skills through baking tasks	**Cultural Celebrations Project** Students explore the role of textiles in design and culture by creating a felt keychain and a lined purse or wallet inspired by cultural celebrations. This project enables them to develop core textile skills, while also developing an appreciation of how textiles communicate identity and heritage. Through this project, students develop: ● Safe and confident use of textiles tools and equipment, including needles, pins, scissors and sewing machines. ● Fundamental hand-sewing skills such as threading, running stitch and back stitch, progressing to more advanced stitches including cross stitch and blanket stitch. ● Design development through the creation of mood boards, templates

OnShape CAD software for 3D modelling. ● Knowledge of timber classification and the benefits of using wood as a material. ● The ability to test, evaluate and refine their designs to improve quality and function.	such as scones and fairy cakes, while understanding the science behind different cake-making methods. ● Handle proteins safely when preparing stir fry dishes, learning about correct cooking times, flavour balancing and seasoning. ● Make informed food choices using nutritional knowledge, the Eatwell Guide and an awareness of healthy diets. ● Apply food science principles to understand the function of ingredients, cooking methods and sensory evaluation. ● Explore wider industry topics including food labelling, processing methods, fair trade and ethical considerations.	and pattern cutting, with a focus on scale, proportion and accuracy. ● Embellishment techniques, incorporating beads, sequins and buttons to enhance creativity and personal expression. ● Basic machine sewing skills, enabling them to produce a lined purse or wallet with a button closure. ● Knowledge of textile materials, including the classification of natural and synthetic fibres and their properties. ● An understanding of fabric construction, explored through paper weaving and non-woven materials research. ● Reflective practice, using subject-specific language to evaluate their work and identify areas for improvement.

Year 8		
Design & Technology	**Food Preparation**	**Textile Design**
Book/Tablet Stand Project Students extend their creative	***Expanding Skills, Nutrition and Food Science***	***Craig and Karl Cushion Cover Project***

thinking and problem-solving skills through the design and manufacture of a book/tablet stand. Building on their Year 7 experience, they refine their ability to use materials and equipment effectively, while exploring the work of contemporary designer Yinka Ilori to inspire their outcomes. Through this project, students develop: ● 3D design skills using OnShape CAD software, producing orthographic drawings and exploded diagrams. ● Safe and accurate use of a wider range of hand tools and workshop equipment, including the pillar drill, disc sander, centre lathe and strip heater. ● Knowledge of material classification, with a focus on the benefits and applications of polymers and timbers. ● Skills in using Canva and CAD software to support the design process. ● An understanding of quality control methods to ensure accuracy and consistency in production. ● The ability to test and evaluate products, identifying possible modifications and improvements.	Students build on their foundational food preparation skills, developing greater independence in the kitchen and broadening their knowledge of nutrition and food science. Practical lessons provide opportunities to experiment with a variety of dishes while reinforcing key health and safety practices. Through this programme, students learn to: ● Apply bread-making techniques, understanding the role of ingredients and processes such as fermentation and lamination. ● Refine knife skills for precision cutting, decorative scoring and accurate preparation of fruit and vegetables. ● Prepare a wider range of dishes, including bread, macaroni cheese, fruit tarts, puff pastry apple slices and spaghetti bolognese. ● Develop sauce-making techniques, exploring flavour, texture and consistency, and measuring viscosity as part of food science integration. ● Apply accurate measuring and weighing to ensure consistency and quality in practical outcomes. ● Handle meat safely, revisiting rules on cross-contamination, hygiene and cooking methods, while also exploring	Students explore portraiture and bold graphic design through a textile project inspired by artists Craig Redman and Karl Maier. They design and make a unique cushion cover, combining vibrant artistic influence with technical sewing and decorative skills. Through this project, students develop: ● Reinforced hand-sewing techniques such as threading, knotting and running stitch. ● Increased confidence in machine sewing, including safe operation, stitch length variation and construction techniques for high-quality outcomes. ● Design skills informed by the study of Craig and Karl's work, focusing on bold use of colour, geometric forms and stylised portraiture. ● Fabric painting skills, including colour mixing, brush control and line work, alongside applique and embellishment techniques to add pattern and texture. ● Safe and responsible use of sewing machines, with attention to posture, hand placement and equipment care. ● Knowledge of Smart and Modern technical materials, explored through collaborative activities and group

	vegetarian alternatives. ● Understand theory linked to practical tasks, including ingredient functions, methods of heat transfer, pastry lamination, and the nutritional role of different food groups.	presentations. ● Reflective practice, evaluating their creative and technical progress throughout the design process.

Year 9		
Design & Technology	**Food Preparation**	**Textile Design**
Lamp Project & "This is Me" 3D Project Students refine their design and manufacturing skills through two major projects: the Anglepoise Lamp and the "This is Me" 3D project. Both units prepare students for GCSE-level expectations by encouraging them to work to a detailed design brief, follow the iterative design process, and consider the needs of a target audience. Through these projects, students develop: ● Independent ideation and design	***World Cuisines, Nutrition and Food Science*** Students explore global cuisines, expanding their repertoire of dishes while deepening their knowledge of nutrition, food science and cultural traditions. Practical lessons introduce increasingly complex techniques, building independence and precision in preparation and presentation. Through this programme, students learn to: ● Prepare international dishes such as guacamole, pizza, swiss roll, sweet and sour chicken, curry and spring	***Athleisure Fashion Project*** Students take on a contemporary design challenge by exploring the growing field of Athleisure fashion. This project combines creativity, cultural awareness and technical expertise, preparing students for GCSE Art Textiles and Design & Technology pathways. Through this project, students develop: ● An understanding of contemporary Athleisure design by studying influential designers and industry trends. ● Practical skills in resist textile

development techniques. ● Technical drawing skills, including isometric, orthographic and exploded diagrams. ● Proficiency in CAD software (OnShape), using rendering tools for surface decoration and producing accurate digital models. ● Use of AI design tools to generate personalised character concepts. ● Skills in branding and packaging design to communicate personal qualities, hobbies and aspirations. ● Industrial sketching methods to visualise and refine design ideas. ● Knowledge of paper and board classification, and an introduction to the work of designers such as Louis Comfort Tiffany. ● Safe and accurate use of a wider range of workshop tools and equipment, including the pillar drill, reciprocating saw, coping saw, vacuum former, 3D printer and soldering iron. ● Precision in manufacturing, working to tighter tolerances, and testing and evaluating finished products.	rolls. ● Apply specialist knife skills for precision cutting, dicing, decorative scoring and safe handling of a variety of ingredients. ● Develop dough and pastry skills, including fermentation, stretching, lamination and rolling techniques. ● Master cake-making skills such as sponge rolling, filling and presentation. ● Balance flavours and textures, particularly in sauces and spice blends, to reflect cultural flavour profiles. ● Apply health, hygiene and safety principles, including temperature control, safe meat handling and prevention of cross-contamination. ● Build knowledge of nutrition, exploring the functions and chemical properties of nutrients, with keywords such as coagulation, denaturation and dextrinisation. ● Conduct sensory analysis of ingredients and finished dishes, refining evaluation of taste, texture and aroma. ● Investigate the social, moral and environmental impact of food, including sustainability, fair trade and cultural heritage preservation.	techniques such as tie-dye and batik, exploring colour, pattern and surface design. ● Digital design skills to create repeat patterns for bespoke sublimation prints, applying these to Athleisure concepts. ● Knowledge of textile properties, including stretch, durability and moisture-wicking, to enhance garment function. ● Fabric manipulation skills, using techniques such as pleating and gathering through both hand and machine sewing. ● Insights into fashion design principles, including garment construction, silhouette development and fabric selection. ● Experience in integrating personal design elements (resist-dyed and printed textiles) into original fashion outcomes. ● Presentation skills through the creation of professional design boards. ● Collaboration through the Primark Challenge, linking with other subjects such as Computer Science to consider marketing and consumer research. ● Reflective practice, evaluating their own and peers' work using subject-specific vocabulary, and

		identifying strengths and areas for improvement.