

DESIGN TECHNOLOGY Year 7 Curriculum End Points and Key Vocabulary

	Rotation 1	Rotation 2	Rotation 3	Rotation 4
Subject	Food and Nutrition	Graphic Products	Textiles	Product Design
	In year 7 students rotate round on a carousel between four subject areas, Food and Nutrition, Graphics Products, Textiles and Product Design. Students study in each area for 10 weeks before moving on to the next specialist area.			
Project	Fantastic Five	Mini Figure	Eco Tote Bag	Wooden Hook & phone stand
Ethos Links	<u>Milton Keynes</u> - Shop local and make use of local farmers markets. - Diverse range of eateries where some students get to experience dishes from different countries and are taught how different cultures make up the hospitality industry in Mk and the different job opportunities available locally . <u>STEM</u> - Introduction to the working characteristics of some food ingredients and scientific keywords linked to their characteristics e.g. enzymic browning and how different	<u>STEM</u> - Light source and shading (physics of light); material properties - Use of drawing tools - Technical drawings, packaging design, stock forms - One-point perspective involves geometry, spatial reasoning, and measurement <u>Sustainability</u> Origins of Paper and Card: Opens discussion on renewable vs. non-renewable resources, deforestation, and recycling. Understanding Materials: Encourages students to consider the environmental impact of	<u>Milton Keynes</u> - Real-world pathways in textiles, fashion – Career and opportunities in MK <u>STEM</u> - Material properties, dye chemistry, and fiber origins - Sewing machines, CAD for pattern design, and textile innovation - Construction techniques, problem-solving with machinery - Measuring, pattern drafting, scaling, and symmetry <u>Sustainability</u> Sustainable Fabrics: Students explore the environmental impact of textile choices—organic	<u>Milton Keynes</u> - MK has a strong sustainability ethos, with green spaces and smart city initiatives. <u>STEM</u> - Material properties, origins of timber, finishes and their chemical makeup - Safe use of tools and machines, possibly CAD/CAM integration - Understanding fixtures, fittings, and structural integrity - Measuring, cutting techniques, and spatial reasoning in design

	cooking methods affect's different ingredients. - Exposure to new kitchen technology use of electric and induction hobs digital timers and weighing scales and how to use these effectively when cooking to save time and energy. <u>Sustainability</u> - Introduction to the eat well guide and how it contributes to a healthy and balanced diet - Adapt simple dishes to make them healthier and suitable for different diets e.g. people with allergies, religious beliefs e.g. Muslims can't eat pork and meat has to halal and vegetarians. - Importance of eating a variety of different foods and that all food contains different nutrients and the role nutrients play in our body. - Exact quantities of ingredients to prevent food waste and if any leftovers how to repurpose this at home. - Use of seasonal ingredients and shopping local. - Students are also encouraged to create cultural dishes as the school	material choices (e.g. FSC-certified paper, biodegradable packaging). Packaging and Its Uses: A chance to critique excessive packaging and explore eco-friendly alternatives. Designing for a Client: Can include sustainability as part of the design brief—e.g. "Design a logo and packaging for a brand that values sustainability." <u>Character</u> Resilience & Perseverance: Through iterative design, shading practice, and refining technical drawings. Creativity: Logo development, client-focused design, and visual communication. Critical Thinking: Evaluating work against success criteria, making design decisions. Responsibility & Safety: Learning and applying health and safety protocols with cutting tools. Empathy & Communication: Designing for a client encourages understanding	cotton, bamboo, recycled polyester, etc. Fabric Origins & Production: Encourages critical thinking about water usage, energy consumption, and ethical labor in textile manufacturing. Surface Dyeing Techniques: Tie-dye and batik can be taught using low-impact dyes or natural alternatives. 6 Rs of Sustainability: Though not listed, you could easily integrate these principles—especially "Reuse" and "Rethink"—into product design. <u>Character</u> Resilience: Students learn to troubleshoot sewing machine issues and refine their techniques. Independence: Threading machines and constructing products builds confidence and autonomy. Creativity: Surface dyeing and product design allow for personal expression. Responsibility: Health and safety in the workshop fosters accountability. Empathy & Purpose: Designing for real users or community needs	<u>Sustainability</u> Origins of Timber & Boards: Encourages discussion on deforestation, reforestation, and ethical sourcing (e.g. FSC-certified wood). Renewable Materials: Students explore the benefits of using sustainable resources and the environmental impact of different wood types. Wood Finishes & Waste: Comparing finishes opens up conversations about VOCs, eco-friendly alternatives, and lifecycle thinking. Designing with Purpose: Embedding sustainability into the design brief—e.g. "Design a product that minimizes waste or uses reclaimed materials." <u>Character</u> Responsibility & Safety: Following workshop procedures and using tools safely fosters accountability. Resilience & Craftsmanship: Cutting and shaping materials requires patience, precision, and perseverance.
--	--	--	---	--

	is very diverse so most of the dishes created can be enjoyed by themselves and their families. • Introduction to more plant based foods and are taught how to incorporate this into meals. • Avoid single used plastics and use more environmentally friendly packaging. <u>Character</u> • Developing cultural appreciation through food. Being able to understand that all culture are unique and some the reasons why they eat what they eat. • To respect each other and be able to communicate in an effective manner when discussing ideas etc. • Develop great organisational skills through planning for practical assessments and being able to execute this within the given time. Evaluate own work and the work of others giving constructive feedback. • Developing independence and great team working skills.	others' needs and preferences.	encourages ethical thinking and compassion. •	• Empathy & Purpose: Designing with a user in mind teaches students to consider others' needs. • Reflection & Growth: Giving and receiving feedback nurtures humility, communication, and self-improvement.
--	---	---------------------------------------	--	--

Learning End Points	By the end of this topic the students will know and understand: • About different kitchen equipment and how to use them safely. • What enzymic browning is, to know that some fruits and vegetables that are affected by this and how to prevent it • The importance of having a healthy and balanced diet. • About different types of fruits and vegetables, how they are classified and their importance in our diet • Some of the different factors that affects food choice and how to take these into consideration when planning to cook • The importance of health & safety issues. • How to carry out a sensory analysis on different food products and use appropriate words when describing foods. • An awareness of the characteristics of ingredients. • About food seasonality • How to read and follow a recipe to make a dish • How to safely and independently make	By the end of this topic, students will be able to: • Draw shapes in one-point perspective • Draw letters in one-point perspective • Understand the principles of technical drawing • Apply shading techniques using a light source and three tones • Enhance the quality of their technical drawings • Understand the purpose and function of packaging • Design with a client brief in mind • Develop logos based on a given specification • Explain the origins of paper and card • Understand stock forms of materials • Evaluate their own work against success criteria • Develop practical making skills • Identify and describe properties of paper and card • Follow health and safety procedures when using cutting equipment	By the end of this topic, students will be able to: • Identify the characteristics of natural and manmade fibres • Understand the concept and importance of sustainable fabrics • Describe the working properties of different fabrics • Explain the production processes involved in fabric manufacturing • Name the parts of a sewing machine and demonstrate health and safety in the workshop • Problem-solve and identify issues when the sewing machine malfunctions • Understand surface dyeing techniques such as tie-dye and batik • Thread a sewing machine independently • Construct a textile product using appropriate techniques • Use pattern pieces accurately in the making process •	By the end of this topic, students will be able to: • Follow health and safety procedures in the workshop • Use tools and machines accurately and safely • Demonstrate techniques for cutting a variety of materials • Identify differences between softwood, hardwood, and manufactured boards • Explain the origins of timber and manufactured boards • Understand stock forms of materials • Recognise common fixtures and fittings • Analyse and compare different wood finishes • Design with a clear purpose and user in mind • Give and respond to constructive feedback • Understand sustainability and the use of renewable materials
-----------------------------------	--	---	---	---

	arrange of simple balanced and healthy dishes			
Key Vocabulary	Recipe Equipment ingredients vegetables healthy Cross contamination Enzymic browning Fruits evaluation analysis texture Appearance smell safety range of sensory keywords e.g. Appetising attractive juicy etc	Technical drawing One point perspective Vanishing point Construction lines Tone Light Source Packaging Blister Pack Materials Lamination Card Paper Stock Form Sustainability Environment	Sustainable Fabrics Working Properties Fabric Production Sewing Machine Health and Safety Troubleshooting Surface Dyeing Tie-Dye Batik Threading Construction Pattern Pieces Client Brief Natural Fibres Manmade Fibres	Timber Health and safety Machines Chisel Coping saw Tennon saw Medium density fibreboard (MDF) Pine Softwood Hardwood Pillar drill Finishes Sustainability Environment Renewable Materials