	Year 9 Design and Technology Curriculum Overview Students in Year 9 will spend one half of the year studying food and the next half studying Product design and Textiles		
	Food	Textiles	Product design
BIG Q Content *(max 5)*	How can I use cooking skills, food science and knowledge of international cuisines to prepare safe, balanced and flavourful dishes? 1. Understand food safety, hygiene and temperature control when preparing and cooking food. 2. Explore international cuisines and recognise the origins and characteristics of popular dishes. 3. Apply advanced practical skills including vegetable and meat preparation, frying, boiling and heat control. 4. Understand food science concepts including gelatinisation, energy balance and the effect of heat on ingredients. 5. Use food labelling and nutritional knowledge to make informed and healthy food choices.	How can I use textile techniques, pattern and natural forms inspiration to create a stitched textile artwork based on nature? 1. Explore natural and microscopic forms through artist research, observational studies and mind mapping. 2. Develop creative ideas using continuous line drawing, watercolour techniques and repeat pattern design. 3. Understand and apply pattern concepts including symmetry, rotation and repetition. 4. Use a range of textile techniques safely and effectively, including a variety of hand stitch, machine stitch, embroidery and mixed media. 5. Create a textured textile artwork inspired by nature and cells, evaluating and refining ideas throughout the design process.	How can I use electronics, workshop skills and the design process to create a functional and commercially viable USB lamp? 1. Analyse existing products and use the design process to develop and improve creative design ideas. 2. Understand electronic components, circuits and soldering techniques, applying them safely and accurately. 3. Apply advanced workshop skills including marking out, cutting, drilling, shaping and assembly. 4. Consider ergonomics, sustainability, market pull and technology push when designing for users. 5. Manufacture and evaluate a high-quality USB lamp using appropriate materials, tools and techniques.
Vocabulary *(max 10)* Please log into MAPPER to support your child to learn these words	1. Cuisine 2. Gelatinisation 3. Temperature Control 4. Food Labelling 5. Hygiene 6. Measurement 7. Flavour 8. Aroma 9. Boiling 10. Frying	1. Dying processes 2. Nature 3. Continuous Line 4. Repeat Pattern 5. Symmetry 6. Rotation 7. Embroidery 8. Machine Stitch 9. Texture 10. Mixed Media	1. Electronics 2. Soldering 3. Circuit 4. Component 5. Ergonomics 6. Sustainability 7. Assembly 8. Drilling 9. Market Pull 10. Technology Push
Catholic Link	**Community and Solidarity** Students explore foods from different cultures and learn respect and appreciation for global communities through cooking and shared food traditions.	**Stewardship of God's Creation** Students explore the beauty and complexity of the natural world through art and textiles, developing an appreciation for creation and the importance of caring for the environment.	**Stewardship of God's Creation** Students consider sustainability and responsible design choices, recognising the importance of using resources wisely and reducing environmental impact.
Careers Link	Links to careers in Hospitality, Catering, Nutrition and Food Science through practical cooking, food safety and international cuisine knowledge. Gatsby Benchmarks Benchmark 4: Linking food science and cooking skills to real careers. Benchmark 7: Introduction to pathways in Catering, Hospitality and Food industries.	Links to careers in Textile Design, Surface Pattern Design, Fashion, Illustration and Scientific Illustration through creative, observational and technical textile skills. Gatsby Benchmarks Benchmark 4: Linking textile design and creative skills to real careers. Benchmark 7: Introduction to pathways in Art, Textiles, Fashion and Design industries.	Links to careers in Product Design, Electronic Engineering, Manufacturing and Industrial Design through electronics, CAD and practical workshop skills. Gatsby Benchmarks Benchmark 4: Linking design, electronics and manufacturing skills to real careers. Benchmark 7: Introduction to pathways in Engineering, Product Design and Technology industries.

Ways to enrich the year 9 curriculum at home…*(max 3)*

- Visit a botanical garden, nature reserve or museum to collect visual inspiration. Explore beginner CAD tutorials and product design challenges online. Practise safe food preparation, temperature control and cooking techniques.