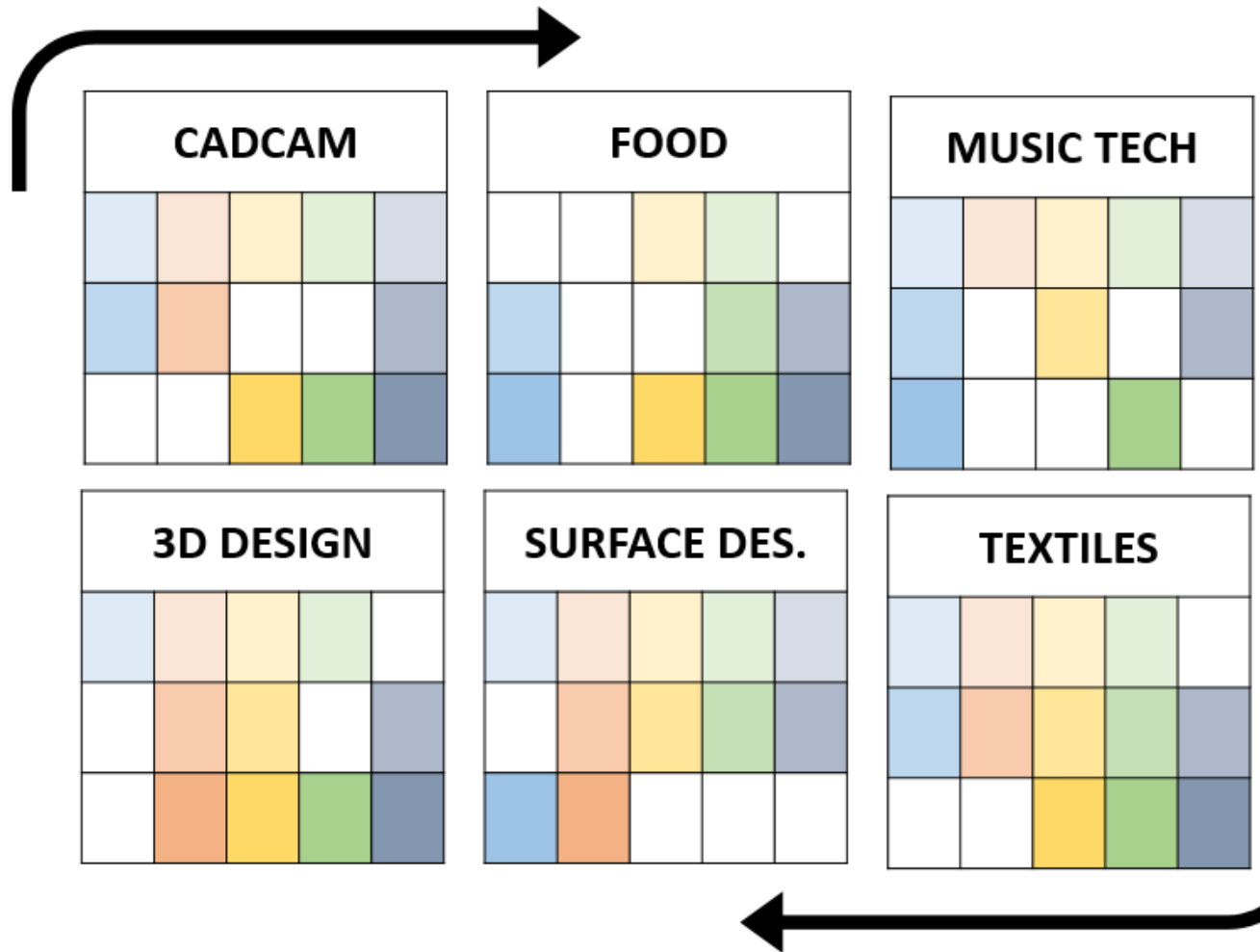


RESPONDING TO DESIGN SCENARIOS	DESIGN DEVELOPMENT	HEALTH AND SAFETY	MARKING AND MEASURING	USING SOFTWARE
PRODUCT ANALYSIS	VISUAL COMMUNICATION TECHNIQUES	PROPERTIES OF MATERIALS	OPERATING MACHINERY	QUALITY CONTROL
CLIENT PROFILING	ANTHROPOMETRICS AND ERGONOMICS	SUSTAINABILITY	PROTOTYPING	3D MODELLING

## KS3 DESIGN ROTATION – CURRICULUM OVERVIEW



### Knowledge builds and connects over time

Each rotation will develop;

- Understanding of the design process
- Specialist technical skills
- Confidence using shared concepts and vocabulary

### The design process

Research

Ideas

Plan

Make

Evaluate



# KS3 Curriculum Intent

Intent		What new knowledge/content do we introduce?		How does this curriculum go beyond the National Curriculum? How does going beyond the NC ensure challenge?
By the end of KS3 students are able to...		Each teaching group rotates around our 6 specialisms in year 8 and 9		
<p><b>After following the complete rotation pupils will have;</b></p> <ul style="list-style-type: none"> <li>developed the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world</li> <li>build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users</li> <li>critique, evaluate and test their ideas and products and the work of others</li> <li>understand and apply the principles of</li> </ul>	<b>Food</b>	<b>Lesson sequence</b>	<b>Progression of knowledge and skill</b>	<p>Students are able to build and connect knowledge over time by revisiting the design process; research, ideas, plan, make and evaluate throughout each specialism.</p> <p>Students will also develop confidence using shared design concepts and vocabulary.</p> <p>Students are challenged through the range of specialisms they will experience, allowing them to explore a wide variety of ways of designing and making using specialist technical skills</p>
		Introduction to the kitchen; equipment, health, hygiene and safety	Students can show their understanding of good hygiene and safety, building on what they may already know from cooking at home or at KS2. Introduces Hospitality and Catering vocabulary such as 'cross contamination'. Students build on their knowledge of tools and equipment in food technology from cooking at home/KS2. Students complete a base line skills assessment to gauge where their understanding of food preparation and cooking is at the beginning of the project.	
		Evaluating cooking methods	Students work in pairs to prepare a potato based dish using up to 12 cooking methods, this gives students the opportunity to observe and model how a wide range of cooking methods are used to cook one food item. Students also discuss nutrition and how different cooking methods affect nutrients, e.g. water-soluble vitamins. Students evaluate their work, including the rating all outcomes. <i>Skill building from previous lessons: applying knowledge of where equipment is; as well as health, safety and hygiene methods.</i>	
		Knife skills; knife safety, bridge hold, claw grip	Students prepare a dish using the bridge method and claw grip. Establishes that there are correct cutting methods in professional environments to reduce the risk of personal injury. Students then immediately apply their learning. Students assess dish at EOL, choosing correct preparation and cooking methods as well as evaluating overall outcome. <i>Skill building from previous lessons: applying knowledge of where equipment is; as well as health, safety and hygiene methods.+ correct food storage</i>	
		Wet and dry method; baking techniques, special dietary needs	Prepare a baked good using the wet and dry method, developing by using new skills as well as new equipment. Students build on their knowledge of nutrition as well as special dietary needs, e.g. Low sugar, Diabetics. Discuss other methods of making baked goods, including what could go wrong e.g. not enough aeration and how to use your senses to know a baked item is fully cooked. <i>Skill building from previous lessons: applying knowledge of where equipment is; as well as health, safety and hygiene methods.+ correct food storage + proper time management, multiple components.</i>	
		Staple ingredients	Develop knowledge of food process and where bread comes from, the functional properties of ingredients (e.g. yeast) and practice food shaping and presentation methods. <i>Skill building from previous lessons: applying knowledge of where equipment is; as well as health, safety and hygiene methods.+ correct food storage + functional properties of ingredients</i>	
		Ethical diets and costing	Build on knowledge of special dietary needs, medical discussed previously, building on with ethical – vegetarian. Students discuss why potatoes are a staple food in vegetarian diets, referencing nutritional information (building on) and cost (new). <i>Skill building from previous lessons: applying knowledge of where equipment is; as well as health, safety and hygiene methods.+ correct food storage + nutritional content of ingredients</i>	
		Sensory analysis	Demonstration of Swiss roll, introduces the whisking method, building on knowledge of baking methods. Students discuss aeration and quality control whilst whisking to ensure a successful outcome. Health and safety in the kitchen builds with the addition of electrical equipment. Students complete a sensory analysis, further developing their sensory vocabulary. <i>Skill building from previous lessons: applying knowledge of where equipment is; as well as health, safety and hygiene methods.+ correct food storage + quality control</i>	
		Whisked sponge; baking methods	Apply learning from previous lesson to produce a Swiss roll using the baking method, use class notes from the previous lesson to work within a set time, developing time management skills. <i>Skill building from previous lessons: applying knowledge of where equipment is; as well as health, safety and hygiene methods.+ correct food storage + time management</i>	
		Careers in Hospitality and Catering	Understand the various career opportunities offered by the H&C industry Look at job roles and understand qualifications required and the job descriptions	
		Making a roux	Develop knowledge of the 'mother sauces' and how they are used in dishes around the world. Function of ingredients, what causes sauces to thicken (coagulation). Introduce sustainability and the 6 R's when planning, preparing and cooking dishes. <i>Skill building from previous lessons: applying knowledge of where equipment is; as well as health, safety and hygiene methods.+ correct food storage + time management + function of ingredients</i>	
		Rubbing in method	Understand the principles of pastry making, building on baking methods + rubbing in method. Developing knowledge of what can go wrong when baking. Discussing various types of pastry and where in the world they are from, building on previous learning of staple ingredients and provincial foods. <i>Skill building from previous lessons: applying knowledge of where equipment is; as well as health, safety and hygiene methods.+ correct food storage + time management</i>	
Time planning, recipe adaptation	Planning which dish to prepare from previous lessons, using their consistent evaluations to select a dish they feel most confident with or could most improve. Students are able to develop the dish to meet their sensory requirements or			

<p>nutrition and learn how to cook.</p> <p>Pupils will also learn how to problem solve and take risks, becoming resourceful, innovative, enterprising and capable citizens. They will develop a critical understanding of design and its impact on daily life and the wider world and how high-quality design makes an essential contribution to the creativity, culture, wealth and well-being of the nation.</p>		specific dietary needs of intended customer. <i>Skill building from previous lessons: applying knowledge of where equipment is; as well as health, safety and hygiene methods.+ correct food storage + special dietary needs</i>	<p>We also offer additional opportunities such as</p> <p>Architecture day in partnership with local architecture firms and the University of Cambridge</p> <p>Design Ventura competition</p> <p>Drop down food days</p> <p>Extra-curricular music technology club</p> <p>Weekly After school art / textile club</p>
	Practical assessment	Students put in to practice all skills learnt throughout the food rotation, preparing a dish of their choice in a 100-minute time limit. Feedback is given and grades awarded.	
	Future of protein	Students receive feedback from their assessment lesson, revisit their initial skills audit and track their own progression, Evaluating what skills they learnt and which skills they have developed. Once complete, students look forward to the future of protein (+ building on 6 R's and sustainability lesson content) by trying bugs.	
	<b>Rationale for this sequence</b>	Initial lesson sets up rules, routine and expectation so that hazards and dangers are minimised throughout the course of this project. Those routines are embedded in all following lessons. The SOL is structured so that skills build and develop over time, accumulating in students completing a practical assessment that is entirely self-led. Knowledge and skills build over time, there are common techniques throughout the project with graduating difficulty. This is to ensure all students feel confident in their practical and theoretical knowledge of food, particularly enough to complete an independent practical successfully at the end of the project. The SOL introduces key GCSE Hospitality and Catering concepts which are crucial to success at KS4. This ensures that all students have a base on which to build from, should they choose Hospitality and Catering as a GCSE option.	
<b>How does the KS3 Curriculum build on previous learning at KS2?</b>	Students come to us with mixed knowledge and skills from KS2 so we build on prior learning, firstly establishing that all students can work safely in the kitchen and then introducing core preparation and cooking skills, which graduate in difficulty as the project progresses. The project also addresses common misconceptions and differences between cooking in your own home in comparison to cooking in a professional environment for customers. E.g., correct knife holds, use of different coloured chopping board. All with a focus on enjoying practical experiences.		

