Subject Year Curriculum Overview-Year 7 Design Technology

	Design Technology 1	**Design Technology 2**	**Food**	**Textiles**
Topic	Sustainability	CAD/CAM	An introduction to food preparation & nutrition	Basic sewing skills and decorative techniques.
Critical Prior Knowledge	Students will have limited DT knowledge so this scheme will run as a focussed practical task with the ability to differentiate and adapt the final outcomes. Depending where this scheme falls in the rotations students could have experienced Food and Textiles, and will have had an introduction to the workshop, tools and equipment to produce a key fob and packaging.	Understanding of what some product packaging looks like. Most students will have seen blister packaging but would not necessarily know that it's called 'blister' packaging. Understanding of classroom routines and safe behaviour. Possess some sequencing skills and the ability to follow instructions.	Variable: most feeder schools do very little. Some basic knowledge in H&S and food hygiene.	Understanding of safe behaviour in the classroom.
Overall Intent (Big ideas and key concepts)	Students will develop an understanding of the term sustainability and its impact on the designing and manufacturing of products.	To develop student's knowledge of CAD/CAM and its use in manufacturing. To understand how designs are used to create products using CAD/CAM.	Learn how to work safely and hygienically in the kitchen (HATTIE) Be able to use the cooker safely. Develop their knowledge and understanding of ingredients and healthy eating. Develop the creative, technical and practical expertise needed to perform everyday tasks confidently.	Learn the process of hand sewing and using the sewing machine. To understand how to do a range of decorative techniques.
Essential Knowledge milestones (What students must master)	Safe working in the workshop and use of tools such as soldering irons, tenon saws and pillar drill. To use research to inform design and decision making. To understand a client's needs and to design for them. Design to meet the needs of a specification.	To be able to translate and edit a drawn design into a digital design. Be able to use 2D Design to create basic shapes and be able to use the editing tools to make adjustments to fit to a specification.	Safety rules to follow in the kitchen Hygiene rules to follow in the kitchen Basic routines to follow at the start of practical lessons including preparing to cook (HATTIE), washing up, drying and putting equipment away. Basic kitchen equipment. Safe use of the knife: bridge hold and claw grip. Safe use of the cooker: grill, hob and oven. The Eatwell guide. Basic nutrition.	Safe working in the Textiles room Safe use of the sewing machine (some with support) Safe use of the iron Threading up a needle and hand sewing. How to do at least one decorative technique.

			Fruit and fruit preparation / vegetables and vegetable preparation. The rubbing-in method. Muffin batter . Hygienic handling of raw fish / poultry. The 8 tips for healthy eating.	
Cultural Capital	Ikea-sustainable design and mass manufacture.	Students will understand how different stages of manufacture can be done at separate locations across the world.	'Great British Bake-Off'	Students should investigate, analyse and evaluate the work of Mark Hearld to inform their own designing.
Mode of Retrieval	**Technical knowledge-** Aim to master the spelling of 10 key words. *sustainability/reduce/re-use/recycle/research/product analysis/ design/solder/circuit board/specification* **Practical-** safely produce a USB lamp from suitable materials. **Evaluation-**Identify 3 Strengths and weaknesses about their practical work.	**Technical knowledge-** Aim to master the spelling of 10 key words. **Practical-** Produce a successful key fob with blister packaging. **Evaluation-**Identify 3 Strengths and weaknesses about their practical work.	**Technical knowledge-** Aim to master the spelling of 10 key words. **Practical-** Completed dish. **Evaluation-**Identify 3 Strengths and weaknesses about their practical work.	**Technical knowledge-** Aim to master the spelling of 10 key words. **Practical-** Safely produce a fabric case with decorative techniques inspired by Mark Hearld's art work. **Evaluation-**Identify 3 Strengths and weaknesses about their practical work.
ECC Student Characteristics	Resilient individuals-*to problem solve, learn from each other.* Embrace challenge-*overcome obstacles each lesson, work with others, push themselves to try new things.* Creativity-*designing for a client using recycled materials.* Reflective learners-*evaluative conversations*	Resilient individuals- *over-come designing issues on 2D Design* Creativity-*designing for a client using a specification.* Reflective learners-*evaluative conversations*	Integrity (*Working appropriately in the kitchen)* resilient individuals – *learning from mistakes.* reflective learners - *evaluative conversations*	
Connection to future learning	Sustainability is revisited in KS4 as part of GCSE DT. It also forms decision making in KS3 when selecting materials and processes for products.	Specification is revisited throughout Yr7, 8 and 9 which supports GCSE DT and Engineering. CAD/CAM is used extensively in KS4 and 5.	In year 8: Deepen knowledge of nutrition and health with a particular focus on starchy carbohydrates and the energy balance They will build on their ability to work safely, hygienically and efficiently in the kitchen	In Year 8 students will build on the key words they have learn to spell this year and will aim to learn a new set, with definitions. Students will add to their knowledge of practical skills by revisiting

(When is this developed / revisited)?	Yr8 Textiles reviews sustainability and the use of plastics and recycled materials as well as up cycling.		They will extend the range of recipes they are able to make and become more competent in their ability to use equipment	some they have learnt in year 7, and learning some new ones too.