D. T. A. Year 9	**Curriculum Intent:** The broad aims of DTA are for students to be able to understand and intervene in the made natural worlds around them. These aims will be realised by students achieving a combination of technological capability and technological perspective. In **Year 9** students will consolidate their learning in each discipline and **with confidence** utilise their subject knowledge, skills and understanding to respond to a range of design opportunities that enable students to use their creativity and imagination. Students will learn to take design risks, helping them to become resourceful and innovative. Students will be encouraged to explore the iterative design process, making design decisions and critical judgements that inform their practice and the suitability of their outcome. Projects will include designing products that respond to needs in a variety of situations, open ended design problems, reverse engineering and working to technical drawings. Further investigation into the functionality and authenticity of the outcome will be a key focus that will enable students to purposefully reflect on their progress.				
	DT – Multi-Materials	**DT – Graphic Products**	**DT - Textiles**	**Art & Design**	**Food & Nutrition**
Interleaving	Properties of materials/ingredients and how they are used. Processes involved in the production of and uses of materials/ingredients.				
Practical Skills	CAD 2D Design, laser cutting. Timber box construction and joints. Polymers, recycled plastics and forming	Solidworks, 2D design, laser cutting and 3D printing	Hand sewing and machine sewing, including overlocker and embroidery machine.	Grid techniques, transfer techniques; combining artists' styles and acrylic painting. Mixed media.	Reduction sauce, complex yeast-based products, complex dishes such as lasagne and puff pastry.
Knowledge	Design context, working to a design brief, client, user needs and purpose. Polymers and forming	CAD tools, research exploration, iterative processes and emerging technologies. Ergonomics and anthropometrics	Overlock and embroidery. Taking account of user needs, functionality, purpose when designing.	Formal elements, proportions, composition and portraiture.	Where foods come from, specific dietary requirements and diet across life.
Understanding	Technological capability and understanding of workshop skills and practise. Polymers and closed loop recycling.	Technological capability and understanding of graphic skills and CAD practise. New and emerging technologies.	Technological capability and understanding of textile skills and practise.	Using artist research to develop own final piece idea.	The balance of nutrients across life stages and the impact of food miles.
Skills	Investigation / Analyse / Generate Ideas / Make / Evaluate	Investigation / Analyse / Generate Ideas / Make / Evaluate	Investigation / Analyse / Generate Ideas / Make / Evaluate	Investigation / Analyse / Generate Ideas / Make / Evaluate	Investigation / Analyse / Make / Evaluate
Assessment	Final prototype and booklet. Self, peer and teacher evaluation. DTA quiz on SMH.	Final product and booklet. Self, peer and teacher evaluation. DTA quiz on SMH.	Final product and booklet. Self, peer and teacher evaluation. DTA quiz on SMH.	RAG of skills. Peer and teacher assessment throughout sketchbook. DTA quiz on SMH.	RAG of skills. Booklet. Self and teacher assessment after practical. DTA quiz on SMH.