

DESIGN TECHNOLOGY Year 7 Curriculum End Points and Key Vocabulary

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Ethos Links	Milton Keynes – Links with local nurseries or playgroups for research into client needs. STEM – Investigation process. Careers links. Character – Peer feedback, working safely in the textiles workshop. Consideration of others views. Sustainability – through understanding of where materials come from, and the social and economic impact of the manufacturing industry.	Milton Keynes – Links to local nurseries or playgroups for client feedback. STEM – Understanding how to construct textiles products Calculating waste. Character – Peer feedback, working safely in the Textiles workshop, using shared equipment. Sustainability – Upcycling shirts.	Milton Keynes - Links to the local engineering companies engineers will use CAMs. <u>STEM</u> - understanding mechanisms and different types of movements. <u>Character</u> – Peer feedback, working safely in the RM workshop, using shared equipment. <u>Sustainability</u> - understanding the origin of different Timbers and manufactured boards and the impact only environment.	STEM - understanding the life cycle of aluminium and its presence in the engineering world as a sustainable metal. Character - peer feedback, working safely in the RM workshop and using shared equipment. Sustainability - understanding why aluminium is considered a sustainable metal.	STEM - Investigating hygiene and the scientific characteristics and nutritional value of ingredients. Character - Peer feedback and working safely and considerately with shared equipment. Sustainability -Food miles, packaging and advertising. Food waste – composting.	Milton Keynes - Food Waste in MK. Where to buy food with less packaging. Character - peer feedback and working safely and considerately with shared equipment.
Learning End Points	Sensory Soft Toys 'How can we design with another user in mind?' By the end of this unit students will know and understand:	Sensory Soft Toys 'How can we design with another user in mind?' By the end of this unit students will know and understand:	CAM toys 'How do CAMs work? By the end of this unit students will know and understand:	Alimals 'Why is modelling and prototyping so important? By the end of this unit students will know and understand:	5 a day 'Why is it important to include food and vegetables in our diet?' By the end of this unit students will know and understand:	5 a day 'Why is it important to include food and vegetables in our diet?' By the end of this unit students will know and understand:

	 How to classify materials by structure e.g. woven, knitted and bonded. About textile fibre sources e.g. natural and synthetic and fabrics. How to select and modify patterns to create their soft toy. Issues surrounding sustainability in textile production of synthetic fibres. 	 How to use a sewing machine to create a straight stitch and satin stitch. How to create applique, embroidery and hand cut felt designs. How to construct a soft toy prototype using a variety of joining methods. 	 How to classify different types of timber eg soft wood, hard wood and manufactured boards. Basic CAM shapes and reciprocal movements. Where CAMs are used in real life applications. How to use a range of hand tools safely. How to use a range of hand tools safely. How to join timber using simple joints. How to construct a simple CAM toy. The importance of using a jig. 	 origins and uses in design and engineering. Why modelling and prototyping is important in design and technology. The properties of aluminium. How to achieve a good quality finish through different finishing techniques including filing, sanding 	 Basic nutrition using the Eatwell guide. What can be done with fruit and vegetable waste. Safe use of the oven and grill. Correct food handling How to complete a sensory analysis and evaluation. 	 Why we package food, legal requirements of a food label and other ingredients. How to source less packaged food. How to adapt a recipe.
Key Vocabulary	Design Criteria	Presser foot	Design Criteria	Prototype	Claw grip	Hob
	Specification	Quality control	Specification	Iteration	Eatwell	Grill
	Surface design	Sewing	Analysis	Modifications	Fruit	Rubbing in method

Analysis	Production	Evaluation	Sustainable	Vegetables	All in one method
Sustainability	Evaluation	Production	Alloy	Carbohydrates	Recipe
Fabric	Pattern	Sustainability	Strength	Protein	Evaluation
Fibres	Seam	Quality control	Hardness	Dairy	Adaptation
Design iteration	Surface design	Client	Toughness	Oils and Spreads	Knife
Upcycling	Bobbin	User	Malleability	Stirring	Chopping board
Sensory	Thread	Annotation	Ductility	Measuring	Hygiene
Client	Needle	Shaping	Elasticity	Peeling	Savoury
User	Pin	Finishing	Durability	Slicing	Packaging
Bonded	Chalk	Softwood	Ferrous	Simmering	Sustainability
Knitted	Embroidery	Manufactured	Non ferrous	Sensory analysis	Food miles
Woven	Applique	board	Aluminium		
Annotation		Jig	Recycling		
6Rs		CAM	Filing		
		Motion	Polishing		
		follower	Bending		
			Extraction		
			Refining		
			Sheet		
			Quality Control		
			Specification		
			Design brief		
			File		
			Hegner saw		
			Tin snips		
			Marking out		