

DT Framework - Milestone 1

Intent		
<ul style="list-style-type: none"> • Significant levels of originality and the willingness to take creative risks to produce innovative ideas and prototypes. • An excellent attitude to learning, resilience and independent working. • The ability to use time efficiently and work constructively and productively with others. • The ability to carry out thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs. • The ability to act as responsible designers and makers, working ethically, using finite materials carefully and working safely. • A thorough knowledge of which tools, equipment and materials to use to make their products. • The ability to apply art, mathematical, science and computing knowledge as well as other skills gained across the curriculum. • The ability to manage risks exceptionally well to manufacture products safely and hygienically. • A passion for the subject and knowledge of, up-to-date technological innovations in materials, products and systems. 		
Threshold Concepts	Skills	
Master practical skills This concept involves developing the skills needed to make high quality products (we have highlighted a range of skills but they may be added to or changed	Food	<ul style="list-style-type: none"> • Cut, peel or grate ingredients safely and hygienically. • Measure or weigh using measuring cups or electronic scales. • Assemble or cook ingredients.
	Materials	<ul style="list-style-type: none"> • Cut materials safely using tools provided. • Measure and mark out to the nearest centimetre. • Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling). • Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen).

	Textiles	<ul style="list-style-type: none"> • Shape textiles using templates. • Join textiles using running stitch. • Colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing).
	Electricals and electronics	<ul style="list-style-type: none"> • Diagnose faults in battery operated devices (such as low battery, water damage or battery terminal damage).
	Computing	<ul style="list-style-type: none"> • Model designs using software.
	Construction	<ul style="list-style-type: none"> • Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.
	Mechanics	<ul style="list-style-type: none"> • Create products using levers, wheels and winding mechanisms.
<p>Design, make, evaluate and improve This concept involves developing the process of design thinking and seeing design as a process.</p>		<ul style="list-style-type: none"> • Design products that have a clear purpose and an intended user. • Make products, refining the design as work progresses. • Use software to design.
<p>Take inspiration from design throughout history This concept involves appreciating the design process that has influenced the products we use in everyday life.</p>		<ul style="list-style-type: none"> • Explore objects and designs to identify likes and dislikes of the designs. • Suggest improvements to existing designs. • Explore how products have been created.