## KS3 'Design and Technology' Curriculum Coverage: 2022 – 2023



## Year 7

Sequenced	Timbers: The aeroplane	Paper and Board: CUBEE	Food and Nutrition: Passport to food
Key Knowledge	<ul> <li>introduction as to what a specification is and why we write them (a specific list of decisions that have been made by the students through their research)</li> <li>how to use the correct tools and equipment (marking gauge, try square, steel rule, tenon saw, coping saw, mortise and bevel chisel, mallet, vice, pillar drill, sander)to create housing and a dowel joints</li> <li>how to use redwood, dowels, acrylic and using water based acrylic paint accurately</li> <li>how to spot hazards such as debris on the floor and inappropriate use of tools and equipment</li> <li>the safety procedures such as when to wear goggles, correct use of tools and machinery</li> <li>why accurate measuring and marking skills are important to a good outcome for instance using a template a try square and marking gauge correctly</li> </ul>	<ul> <li>the correct terminology for drawing techniques and materials.</li> <li>the safe working practices.</li> <li>how to develop a specification and understand why we write them and how they fit into a part of the design process.</li> <li>the fundamentals of key drawing techniques (isometric, development of typography skills, one point and two-point perspective.</li> <li>how to write an evaluation (fact-based opinion) and annotate (credit and add depth) to work.</li> <li>how to have a critical awareness of your own work, working effectively as an individual to create a high-end product.</li> <li>the importance of assessment as part of the design process.</li> </ul>	To know:      personal hygiene rules and their importance     safety rules and their importance     the importance of effective washing up     understand sensory testing and its importance     which equipment to use     how to weigh & measure     a range of different cuisines     how to work individually and as a pair     how to demonstrate ideas through practical and design tasks
Key Skills	To be able to:      work effectively as an individual to produce a high-quality product     write and develop an effective specification with the use of a writing frame     develop the use tools equipment and machinery safely and accurately (marking gauge, try square, steel rule, tenon saw, coping saw, mortise and bevel chisel, mallet, vice, pillar drill, sander) to manufacture an accurate product     demonstrate accurate measuring and marking out using a template     self-assess their work against the mark scheme	<ul> <li>To be able to:         <ul> <li>develop the ability to research independently and then use these new skills and ideas to create their own project.</li> </ul> </li> <li>analyse and develop ideas from existing designs</li> <li>select the correct tools and equipment</li> <li>accurately measure and mark out, working towards the development of a high-quality finished product.</li> <li>use key drawing techniques – including isometric, one-point and two-point perspective.</li> <li>evaluate and annotate their work using the correct terminology</li> <li>work effectively as an individual</li> </ul>	To be able to:  use the bridge hold and claw grip effectively wash up use sensory testing follow personal hygiene rules follow safety rules use equipment correctly accurately weigh and measure work effectively as an individual and in paired work express ideas through practical and design tasks use an introductory range of cooking techniques: stir-frying, boiling, baking, frying, knife skills
	Tier 3 key vocabulary	Tier 3 key vocabulary	Tier 3 key vocabulary
Subject specific	<ul> <li>Housing joint</li> <li>tenon saw</li> <li>coping saw</li> <li>marking gauge</li> <li>evaluate</li> <li>design</li> <li>annotate</li> <li>dowel</li> <li>pillar drill</li> </ul>	<ul> <li>Component</li> <li>isometric</li> <li>typography</li> <li>perspective</li> <li>oblique</li> <li>specification</li> <li>cuboid</li> <li>prototype</li> <li>evaluation</li> <li>tabs</li> <li>analyse</li> <li>net</li> <li>measure</li> </ul>	<ul> <li>Personal hygiene</li> <li>claw grip</li> <li>bacteria</li> <li>sensory testing</li> <li>hazard</li> <li>cuisine</li> <li>multi-culture</li> <li>bridge hold</li> </ul>