	DT Rotation 1 Learning Overview	DT Rotation 2 Learning Overview
Students rotate with Food and ICT throughout the year. Students complete two units of work in each. Each unit of work lasts 6 weeks.		
Year 7	Pupils start by looking at colour theory and a range of technical drawing techniques including 1- and 2-point perspective, isometric projection and oblique. Pupils explore different properties of polymers, timbers and SMART materials. Pupils also look at the work of 'De Stilj'. Pupils are then given a real-world design context, and will conduct research to produce design ideas. Pupils produce a prototype of their design idea using modelling materials.	Pupils will develop and create an electronic product relating to a design brief and context. Pupils will start by exploring existing products, researching their own theme, material properties and characteristics, different electronic components and their purpose within a circuit. Pupils will then complete an evaluation of their work. Pupils will learn valuable practical skills starting with health and safety in the workshop. They will then move on to develop their skills in the following areas; use of a coping saw, filing techniques, finishing techniques, soldering, vacuum forming and assembly. Pupils will then complete an evaluation of their work.
Year 8	Pupils are given a Design Brief to batch produce a multi-functional pen and phone holder. Pupils experiment with combination of finishes and applications. To then develop creative designs and a technical drawing for their final design.	Pupils create a final product of their pen and phone holder, with all pupils having their own unique finish/ twist to it. Pupils will develop practical skills starting with health and safety in the workshop. They will then move onto the; use of a coping saw, filing techniques, finishing techniques, and assembly. Pupils will then complete an evaluation of their work.
Year 9	Pupils are introduced to a range of technical drawing techniques, but will focus on in more detail on 2-point perspective and be able to confidently create a street and a building using it. Pupils will learn how to render realistically and apply this knowledge to their work.	Pupils are introduced to the CAD software '2D Design'. Pupils develop their skills using the software to draw using tools such as shapes, arcs, lines, contouring, filling, text and dimensions. Pupils also learn how to draw in isometric and oblique using 2D Design. Pupils explore different computer aided manufacturing outputs. Pupils use skills and knowledge learnt to produce design ideas for a given context which will then see their final design being cut by a laser cutter.