

Year 10 Term 1	• <b>Prior knowledge</b>	• <b>Current learning</b>	• <b>Future knowledge</b>
Design and Technology	<ul style="list-style-type: none"> <li>Students in year 10 have not experienced Design and Technology previously – this course is new starting in September 2022.</li> </ul>	<ul style="list-style-type: none"> <li>The theory focus this term will be understanding materials and their working properties – with an emphasis on natural and manufactured timbers, material management, and familiarising themselves with specialist tools and equipment.</li> <li>Students will start working on the ‘skills bot’ project where students will develop 10 different manufacturing skills to support their ‘Making Principles’ element of their GCSE studies.</li> <li>Manufacturing techniques will include marking out using try square and steel rule, wasting using a variety of hand and power tools, (tenon saw / coping saw / scroll saw / pillar drill and disc or belt sander and quality control checks.</li> <li>The 4 key making skills covered in this term are: Marking out wood, shaping and drilling wood, cutting a knuckle joint and cutting a housing joint.</li> <li>Drawing skills will include – sketching, orthographic and isometric projection.</li> </ul>	<ul style="list-style-type: none"> <li>Students continue to investigate a wide range of manufacturing processes using both traditional and modern methods (CAD/CAM) including 3d printing.</li> <li>Manufacture a Skills Bot using a variety of different materials and processes including pewter casting, strip heating, vacuum forming with metal, polymers and timber.</li> <li>Develop skills to produce ‘working drawings’ using both traditional and modern techniques.</li> </ul>