

## Year 9 Curriculum Map : Design and Technology

	Autumn	Spring	Summer
<b>Assessment Objectives</b>	<b>AO1 - Core Technical Principles</b> Materials and their working properties <b>AO2 - Specialist Technical Principles</b> Selection of materials or components, specialist techniques and processes, surface treatments and finishes. <b>AO3 - Design &amp; Making Principles</b> investigating the work of others design strategies tools and equipment		
<b>Unit Length</b>	<b>Topic:</b> investigation (6 -7 lessons)	<b>Topic:</b> Designing – Isometric drawing (6 - 7 lessons)	<b>Topic:</b> Making (8 lessons)
<b>Key Learning Outcomes</b>	1. Intro into standards / <b>baseline assessment</b> 2. Introduction to Metals 3. Manufacturing process of metals 4. <b>Progress assessment - Knowledge audit – metals</b> 5. <b>Feedback and D.I.R.T lesson</b> 6. Design brief and specification 7. Isometric drawing	1. 2 point perspective drawing 2. 2 point perspective go pro 3. 1 point perspective 4. 1 point perspective 5. Isometric drawing 6. Isometric draw 7. <b>Progress check - Knowledge audit – design ideas</b> 8. <b>D.I.R.T lesson</b>	1. Design development 2. Marking out the sides 3. Cutting, Folding and bending metal 4. Manufacturing plan 5. Evaluate against the specification 6. Testing and evaluating 7. <b>Progress assessment - Knowledge audit – evaluation</b> 8. <b>End of unit practical assessment</b>
<b>Prior knowledge</b>	<b>KS2:</b> Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].		
<b>CEIAG Specific careers links</b>	<b>Link to careers routes:</b> product designers, carpenters, interior design, jewellery <b>Topics to be delivered by employers:</b> employers from building merchants <b>Link to personal skills:</b> problem solving		
<b>RRSA</b>	Article 12: respect for the views of the child Article 13: freedom of expression Article 14: Freedom of thought, belief and religion	Article 3: best interests of the child Article 28: Right to education Article 29: Goals of education	Article 23: children with a disability Article 29: Goal of an education Article 42: knowledge of rights
<b>Cross curricular links</b>	<b>Maths</b> – surface area <b>Science</b> – classification of properties and range of materials - metals Literacy links in evaluation writing.		
<b>Useful websites/videos</b>	<a href="https://www.technologystudent.com/">https://www.technologystudent.com/</a>	<a href="http://mr-dt.com/">http://mr-dt.com/</a>	<a href="https://www.bbc.co.uk/bitesize/topics/zxhhvcw">https://www.bbc.co.uk/bitesize/topics/zxhhvcw</a>
<b>Wider Reading</b>	Identifying key words that are associated with research such a product analysis, anthropometric, ergonomics, design criteria, etc. Encourage students to books on design such as the design of everyday things by Don Norman		
<b>Literacy Programme</b>	<ul style="list-style-type: none"> <li>• Decode it NOW</li> <li>• Guided practice/model answers</li> <li>• Sentence Starters</li> <li>• Writing strategies</li> </ul>	<ul style="list-style-type: none"> <li>• Review it now</li> <li>• Guided practice/model answers</li> <li>• Sentence Starters</li> <li>• Writing strategies</li> </ul>	<ul style="list-style-type: none"> <li>• Decode it NOW</li> <li>• Guided practice/model answers</li> <li>• Sentence Starters</li> <li>• Writing strategies</li> </ul>
<b>Independent Learning Tasks</b>	Mind-map revision homework Retrieval practice homework Knowledge Organiser practice Questions.	Mind-map revision homework Retrieval practice homework Knowledge Organiser practice Questions.	Mind-map revision homework Retrieval practice homework Knowledge Organiser practice Questions.