

Year 9 Curriculum Map : Design and Technology – Metal Animals

	Autumn	Spring	Summer
Assessment Objectives	AO1 - Core Technical Principles Materials and their working properties AO2 - Specialist Technical Principles Selection of materials or components, specialist techniques and processes, surface treatments and finishes. AO3 - Design & Making Principles investigating the work of others design strategies tools and equipment		
Unit Length	Topic: investigation (6 -7 lessons)	Topic: Designing and Making (6 - 7 lessons)	Topic: Making (8 lessons)
Key Learning Outcomes	1. Intro into standards / baseline assessment 2. Introduction to Metals 3. Manufacturing process of metals 4. Progress assessment - Knowledge audit – metals 5. Feedback and D.I.R.T lesson 6. Design brief and specification 7. Isometric drawing	1. 1pt and 2pt perspective drawing 2. Maths lesson – surface area 3. Design ideas 4. Design ideas 5. Progress check - Knowledge audit – design ideas 6. Feedback and D.I.R.T lesson 7. Model making – paper	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. Progress assessment - Knowledge audit – evaluation 8. End of unit practical assessment
Prior knowledge	KS2: 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].		
CEIAG Specific careers links	Link to careers routes: product designers, carpenters, interior design, jewellery Topics to be delivered by employers: employers from building merchants Link to personal skills: problem solving		
RRSA	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
Cross curricular links	Maths – surface area Science – classification of properties and range of materials - metals Literacy links in evaluation writing.		
Useful websites/videos	https://www.technologystudent.com/	http://mr-dt.com/	https://www.bbc.co.uk/bitesize/topics/zxhhvcw
Wider Reading	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		
Literacy Programme	<ul style="list-style-type: none"> • Decode it NOW • Guided practice/model answers • Sentence Starters • Writing strategies 	<ul style="list-style-type: none"> • Review it now • Guided practice/model answers • Sentence Starters • Writing strategies 	<ul style="list-style-type: none"> • Decode it NOW • Guided practice/model answers • Sentence Starters • Writing strategies
Independent Learning Tasks	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.