Curriculum Long Term Plan

Time	7	8	9
Autumn	Health and Safety in the Workshop	Review H&S	Technical Drawing
Term 1	D&M Straw bridges	D&M - Flat pack animal	Isometric, single point perspective, two-point
	Structures, forces, problem solving, making design decisions, functional	Materials – Manufactured Boards	perspective, use a range of design strategies,
	products, select and use appropriate tools and materials, H&S,	Research, problem solving, making design decisions,	NC – Design, Make, Evaluate, Technical
	evaluating skills, responsibilities of designers and engineers, impact on	functional products, select and use appropriate tools and	Knowledge
	society, material properties.	materials, H&S, evaluating skills, impact on society, material	
	NC – Design, Make, Evaluate, Technical Knowledge	properties.	
		NC – Design, Make, Evaluate, Technical Knowledge	
Autumn	Squeezy Torch	D&M - Flat pack animal	D&M - Cardboard 3D Letter
Term 2	Basic electronic circuit, understanding of basic electrical components,	Materials – Manufactured Boards	3D Modelling, problem solving, making design
	planning, evaluating.	Research, problem solving, making design decisions,	decisions, select and use appropriate tools and
	NC – Make, Evaluate, Technical Knowledge	functional products, select and use appropriate tools and	materials, H&S, evaluating skills, material
	Materials – Acrylic	materials, H&S, evaluating skills, impact on society, material	properties, Sustainability, environmental impact,
	D&M – Key-ring	properties.	6 R's
	User needs, design skills including annotation, select and use tools and	NC – Design, Make, Evaluate, Technical Knowledge	NC – Design, Make, Evaluate, Technical
	equipment, H&S, planning, evaluation, properties of materials,		Knowledge
	functional product		
	NC – Design, Make, Evaluate, Technical Knowledge		
Spring Term	Materials – Acrylic	D&M – Flat pack animal	D&M - Cardboard 3D Letter
1	D&M – Key-ring	Materials – Manufactured Boards	3D Modelling, problem solving, making design
	User needs, design skills including annotation, select and use tools and	Research, problem solving, making design decisions,	decisions, select and use appropriate tools &
	equipment, H&S, planning, evaluation, properties of materials,	functional products, select and use appropriate tools and	materials, H&S, evaluating skills, material
	functional product	materials, H&S, evaluating skills, impact on society, material	properties, Sustainability, environmental impact,
	NC – Design, Make, Evaluate, Technical Knowledge	properties.	NC – Design, Make, Evaluate, Technical
		NC – Design, Make, Evaluate, Technical Knowledge	Knowledge
Spring	Materials – Acrylic	Use of CAD and 3D Printing	Use of CAD and 3D Printing
Term 2	D&M – Key-ring	Designing using CAD, use of CAD as a design tool, refine	Designing using CAD, use of CAD as a design tool,
	User needs, design skills including annotation, select and use tools and	ideas, new and emerging technologies,	refine ideas, new and emerging technologies,
	equipment, H&S, planning, evaluation, properties of materials,	NC – Design, Make, Evaluate, Technical Knowledge	NC – Design, Make, Evaluate, Technical
	functional product		Knowledge
	NC – Design, Make, Evaluate, Technical Knowledge		
Summer	Use of CAD	Use of CAD and 3D Printing	Use of CAD and 3D Printing
Term1	D&M – Keyring	Designing using CAD, use of CAD as a design tool, refine	Designing using CAD, use of CAD as a design tool,
	Introduction to Techsoft as part of C.A.D.	ideas, new and emerging technologies,	refine ideas, new and emerging technologies,
	Designing using CAD, use of CAD as a design tool, refine ideas	NC – Design, Make, Evaluate, Technical Knowledge	NC – Design, Make, Evaluate, Technical
	NC – Design, Make, Evaluate, Technical Knowledge		Knowledge
Summer	Use of CAD	Biomimicry, smart and modern materials	Sustainability & Recycling
Term 2	D&M – Keyring	Ergonomics, new and emerging technologies, environmental	Environmental impact, properties of materials
	Introduction to Techsoft as part of C.A.D.	impact, properties of materials	
	Designing using CAD, use of CAD as a design tool, refine ideas	NC – Design, Make, Evaluate, Technical Knowledge	
	NC – Design, Make, Evaluate, Technical Knowledge		
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