



KS3 ASSESSMENT

Design & Technology Resistant
Materials Metal

	Acquiring	Developing	Secure	Mastered
	Is beginning to acquire the necessary knowledge for the topic(s)	Is developing the knowledge necessary to understand the topic	Understands the topic and is able to make links using the knowledge	Fully understands the topic and is able to confidently link knowledge.
<p>Tier 1 Metalwork Sculpture project.</p> <p>This project rotates on a 10-week carousel throughout year 7 & 8.</p>	<p>DESIGN:</p> <ul style="list-style-type: none"> - Basic research of existing metals and limited explanation of uses. - An attempt to identify the needs of user. - Limited working drawing with limited measurements - Basic approaches to generate ideas. - Limited developed ideas lacking in annotation, sketches and basic plans. <p>MAKE:</p> <ul style="list-style-type: none"> - Basic use of specialist Metalwork tools, techniques, processes, equipment and machinery. - Limited use of a range of Metalwork materials and components, not taking into account their properties. 	<p>DESIGN:</p> <ul style="list-style-type: none"> - Adequate research and exploration of existing metals and some of explanation of uses - - Adequate identification of the needs and wants of user. - Sufficient working drawing with some measurements. - Adequate approaches to generate ideas and avoid stereotypical responses. - Adequate developed ideas using annotated sketches and plans. 	<p>DESIGN:</p> <ul style="list-style-type: none"> - Good research and exploration of existing metals and explanation of uses. - Good identification of the needs and wants of user. - Detailed working drawing with most measurements. - A variety of approaches to generate good ideas and avoid stereotypical responses. - Effective developed ideas using annotated sketches and plans. 	<p>DESIGN:</p> <ul style="list-style-type: none"> - Exceptional research and exploration of existing Metals and explanation of uses. - Thoroughly identified the needs and wants of user. - Detailed & Accurate working drawing with all measurements. - A variety of approaches to generate innovative ideas and avoid stereotypical responses. - Imaginative developed ideas using annotated sketches and detailed plans.

	<p>EVALUATE:</p> <ul style="list-style-type: none"> - Basic analysis of the work of past and present professionals and others. - Limited investigation of new and emerging Metalwork technologies. - Basic testing, evaluation and refinement of ideas and products against a specification, taking into account the views of intended users. - Little understanding of developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists. <p>TECHNICAL KNOWLEDGE:</p> <ul style="list-style-type: none"> - A basic understanding of the properties of Metalwork materials, components & equipment. - Little or no consideration for the impact designers, manufacturers and consumers have on the environment. 	<p>MAKE:</p> <ul style="list-style-type: none"> - Adequate use of specialist Metalwork tools, techniques, processes, equipment and machinery. - Adequate use of a range of Metalwork materials and components, taking into account their properties. <p>EVALUATE:</p> <ul style="list-style-type: none"> - Adequate analysis of the work of past and present professionals and others. - Adequate investigation of new and emerging Metalwork technologies. - Adequate testing, evaluation and refinement of ideas and products against a specification, taking into account the views of intended users. - Adequate understanding of developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists. 	<p>MAKE:</p> <ul style="list-style-type: none"> - Good use of specialist Metalwork tools, techniques, processes, equipment and machinery. - Good use of a wide range of Metalwork materials and components, taking into account their properties. <p>EVALUATE:</p> <ul style="list-style-type: none"> - Good analysis of the work of past and present professionals and others. - Good investigation of new and emerging Metalwork technologies. - Detailed testing, evaluation and refinement of ideas and products against a specification, taking into account the views of intended users. 	<p>MAKE:</p> <ul style="list-style-type: none"> - Exceptional use of specialist Metalwork tools, techniques, processes, equipment and machinery precisely. - Used a wide range of complex Metalwork materials and components, taking into account their properties. <p>EVALUATE:</p> <ul style="list-style-type: none"> - Extensive analysis of the work of past and present professionals and others. - Excellent investigation of new and emerging Metalwork technologies. - Comprehensive testing, evaluation and refinement of ideas and products against a specification, taking into account the views of intended users.
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	Acquiring	Developing	Secure	Mastered
	Is beginning to acquire the necessary knowledge for the topic(s)	Is developing the knowledge necessary to understand the topic	Understands the topic and is able to make links using the knowledge	Fully understands the topic and is able to confidently link knowledge.
Term 1a Contextual Challenge Pewter Casting Project This project covers 3 half terms.	DESIGN: - Some research and investigation of existing Metalwork products around the house. - Basic use of the CAD software - A brief outline of the scales of production. - Limited design approaches to generate ideas. - Limited description of sustainability.	DESIGN: - Adequate research and investigation of existing Metalwork products around the house. - Adequate use of the CAD software - Sufficient description of the scales of production. - A variety of design approaches to generate adequate ideas. - Adequate description of sustainability.	DESIGN: - Good research and investigation of existing Metalwork products around the house. - Good use of the CAD software. - Good description of the scales of production. - A variety of design approaches to generate creative ideas and avoid stereotypical responses. - Good description of sustainability.	DESIGN: - Exceptional research and investigation of existing Metalwork products around the house. - Thoroughly understands the tools and functions of the CAD software. - Detailed description of the scales of production, with relevant examples. - A variety of design approaches to generate innovative ideas and avoid stereotypical responses. - Detailed description of sustainability.

<p>Term 1b ...project continued.</p> <p>Metal Work Project - Workshop Time</p> <p>This project covers 3 half terms.</p>	<p>MAKE:</p> <ul style="list-style-type: none"> - Basic use of specialist Metalwork tools, techniques, processes, equipment and machinery in hand casting. - Limited quality control checks carried throughout manufacturing. - Used few Metalwork techniques. - An overall basic quality and finish of products. 	<p>MAKE:</p> <ul style="list-style-type: none"> - Adequate use of specialist Metalwork tools, techniques, processes, equipment and machinery in hand casting. - Sufficient quality control checks carried throughout manufacturing. - Used an adequate range of Metalwork techniques, taking into account their functional and aesthetic properties. - An overall adequate quality and finish of products. 	<p>MAKE:</p> <ul style="list-style-type: none"> - Good use of specialist Metalwork tools, techniques, processes, equipment and machinery in hand casting. - Good quality control checks carried throughout manufacturing. - Used a good range of Metalwork techniques, taking into account their functional and aesthetic properties. - An overall good quality and finish of products. 	<p>MAKE:</p> <ul style="list-style-type: none"> - Exceptional use of specialist Metalwork tools, techniques, processes, equipment and machinery precisely & skilfully. Exceptional/confident hand casting. - Extensive quality control checks carried throughout manufacturing. - Used a wide range of complex Metalwork techniques, taking into account their functional and aesthetic properties. - An overall exceptional quality and finish of products.
<p>Term 2a ...Sustained project continued.</p> <p>Manufacturing Production Plan</p>	<p>TECHNICAL KNOWLEDGE:</p> <ul style="list-style-type: none"> - Lacks understanding of the properties of Metalwork materials and components. - Little or no consideration for the impact designers, manufacturers and consumers have on the environment. 	<p>TECHNICAL KNOWLEDGE:</p> <ul style="list-style-type: none"> - An adequate understanding of the properties of Metalwork materials and components. - An adequate consideration for the impact designers, manufacturers and consumers have on the environment. 	<p>TECHNICAL KNOWLEDGE:</p> <ul style="list-style-type: none"> - A good understanding of the properties of Metalwork materials and components. - A good consideration for the impact designers, manufacturers and consumers have on the environment. 	<p>TECHNICAL KNOWLEDGE:</p> <ul style="list-style-type: none"> - A comprehensive understanding of the properties of Metalwork materials and components. - An exceptional consideration for the impact designers, manufacturers and consumers have on the environment.

<p>This project covers 3 half terms.</p>	<ul style="list-style-type: none"> - Limited understanding of how metals are extracted from their ores and are turned into useful metal forms. -Brief understanding of the steps taken to manufacture a cast pewter item, leading to a limited production plan. -Little understanding of different scales of production, looking at mass, batch and one-off production. <p>EVALUATE:</p> <ul style="list-style-type: none"> - Limited analysis of the effectiveness of the finished product and its quality. - Basic investigation of new and emerging Metalwork technologies. - Basic or no understanding of developments in design and technology. 	<ul style="list-style-type: none"> - Adequate understanding of how fibres are processed in industry to construct fabrics. Looking at woven, non woven and knitted Metalwork. -Sufficient understanding of the steps taken to manufacture a cast pewter item, leading to an adequate production plan -Adequate understanding of different scales of production, looking at mass, batch and one-off production. <p>EVALUATE:</p> <ul style="list-style-type: none"> - Adequate analysis of effectiveness of the finished product and its quality. - Sufficient investigation of new and emerging Metalwork technologies. - Adequate understanding of developments in design and technology. 	<ul style="list-style-type: none"> - Good understanding of how fibres are processed in industry to construct fabrics. Looking at woven, non woven and knitted Metalwork. -Good understanding of the steps taken to manufacture a cast pewter item, leading to a detailed production plan. -Good understanding of different scales of production, looking at mass, batch and one-off production. <p>EVALUATE:</p> <ul style="list-style-type: none"> - Good analysis of the effectiveness of the finished product and its quality. - Good investigation of new and emerging Metalwork technologies. -- Good understanding of developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers. 	<ul style="list-style-type: none"> - Exceptional understanding of how fibres are processed in industry to construct fabrics. Looking at woven, non woven and knitted Metalwork. -Excellent understanding of the steps taken to manufacture a cast pewter item, leading to a highly detailed production plan. -Exceptional understanding of different scales of production, looking at mass, batch and one-off production. <p>EVALUATE:</p> <ul style="list-style-type: none"> - Extensive analysis of the effectiveness of the finished product and its quality. - Excellent investigation of new and emerging Metalwork technologies. -- Exceptional understanding of developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists.
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