

Year 7 - Scheme of Learning				
Word Rich - Oracy, Vocabulary, Reading, Writing	Character (SMSC & Values)	Careers & Employability	Enrichment & Cultural Capital	Equality, Diversity & Inclusivity
<ul style="list-style-type: none"> <li>❖ Tier 2/3 Vocabulary every lesson - meanings and etymology</li> <li>❖ Use of texts to support reading/research</li> <li>❖ Group presentations - Oracy</li> <li>❖ Use of cold calling oracy in lesson questioning</li> </ul>	<ul style="list-style-type: none"> <li>● SMSC: Sustainability - FSC</li> <li>● Values taught through moral choices when designing products</li> <li>● Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers,</li> </ul>	<ul style="list-style-type: none"> <li>● The role of a Designer</li> <li>● How skills learnt in DT are transferable to other subjects and career paths (Eg Problem Solving)</li> </ul>	<ul style="list-style-type: none"> <li>● Links to historical design movements and prominent designers.</li> <li>● Investigation and use of cultural patterns in design.</li> </ul>	<ul style="list-style-type: none"> <li>● Using research and exploration, such as the study of different cultures, to identify and understand user needs</li> </ul>
Formal Assessments (Title/Date)			Blended Learning	Home Learning
<ul style="list-style-type: none"> <li>❖ Design and evaluation Design Era Clock (30 Marks)</li> <li>❖ Manufacturing of Prototype Model (30 Marks)</li> <li>❖ End of Module Theory Test (30 marks)</li> </ul>			<ul style="list-style-type: none"> <li>● Research</li> <li>● Moodboard</li> </ul>	<ul style="list-style-type: none"> <li>● Research</li> <li>● Moodboard</li> <li>● Timbers</li> <li>● Design and Design development</li> </ul>
Unit of Work	Knowledge and Skills	Curriculum Links and Sequencing	National Curriculum <i>(including KS2)</i>	
<b>Intro to project</b>  <i>Lesson 1-4</i>	<ul style="list-style-type: none"> <li>★ Intro to subject, careers and DT links</li> <li>★ Sustainability - Meaning in terms of design and 6 Rs</li> <li>★ Research of design movements and the work of others (Cultural design, )</li> <li>★ Categories of timber (softwoods, hardwoods, manufactured boards), properties &amp; characteristics of timber, sustainability factors of timber, joining techniques for timber, finishes for timber</li> </ul>	<b>GCSE Link:</b> → 7.2 The sources, origins, physical and working properties of each natural and manufactured timber and their social and ecological footprint → 1.13 Investigate the work of others	<ul style="list-style-type: none"> <li>● Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists</li> <li>● Analyse the work of past and present professionals and others to develop and broaden their understanding</li> </ul>	

## DT Resistant Materials

	<ul style="list-style-type: none"><li>★ Types of timber joints</li></ul>	<b>Wider Curriculum Links:</b> <ul style="list-style-type: none"><li>→ Links with Art, Geography &amp; Science</li><li>→ Cultural SMSC</li></ul> <b>Sequencing Links:</b> <ul style="list-style-type: none"><li>→ 6 Rs across all DT and progresses in depth in Y8/9</li><li>→ Understanding how research influences design</li></ul>	<ul style="list-style-type: none"><li>● Use cultural design to influence and inspire design ideas and development</li></ul>
<b>Responding to a design brief &amp; Specification</b>  <i>Lesson 5</i>	<ul style="list-style-type: none"><li>★ Design brief: Design Era Clock</li><li>★ Responding to a specification - consider constraints, materials and user needs</li><li>★ Developing a mood board based on the specification, brief and previous research</li></ul>	<b>GCSE Link:</b> <ul style="list-style-type: none"><li>→ 2.1 NEA Design and Develop</li></ul> <b>Wider Curriculum Links:</b> <ul style="list-style-type: none"><li>→ Careers: (Product Design)</li></ul> <b>Sequencing Links:</b> <ul style="list-style-type: none"><li>→ Understanding Specification - links to All DT areas and future progression</li></ul>	<ul style="list-style-type: none"><li>● use research and exploration, to identify and understand user needs</li><li>● identify and solve their own design problems and understand how to reformulate problems given to them</li><li>● develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations</li><li>● use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses</li><li>● develop and communicate design ideas</li><li>● using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools</li></ul>
<b>Drawing Skills</b>  <i>Lesson 6-7</i>	<ul style="list-style-type: none"><li>★ Annotated sketches, design justification and development</li><li>★ Exploded drawing</li><li>★ Generating ideas - ideation</li><li>★ Rendering techniques</li></ul>	<b>GCSE Link:</b> <ul style="list-style-type: none"><li>→ 1.17 Communication to present ideas</li><li>→ 7.5.1 Stock forms/types:</li><li>→ 7.3.6 Cultural and ethical factors:</li><li>→ NEA: Design &amp; Develop</li></ul> <b>Wider Curriculum Links:</b> <ul style="list-style-type: none"><li>→ Maths (Scale) Art (use of media)</li><li>→ Career: CAD technician</li></ul> <b>Sequencing Links:</b> <ul style="list-style-type: none"><li>→ Basic design skills - drawing, perspective, CAD modelling to build onto more progressive techniques in Y8/9</li></ul>	
<b>Manufacture</b>  <i>Lesson 8-10</i>	<ul style="list-style-type: none"><li>★ Cutting, shaping and finishing timber</li><li>★ Adhesives selection</li><li>★ <b>Assessment: Design movement cultural pattern influence clock</b></li></ul>		

## DT Resistant Materials

<b>Evaluation</b>  <i>Lesson 10</i>	<ul style="list-style-type: none"> <li>★ <b>Assessment: Evaluation and annotation against specification</b></li> <li>★ Peer and self-assessment</li> <li>★ Recap skills and knowledge gained so far.</li> <li>★ Review of design ideas compared to manufacture</li> </ul>	<b>GCSE Link:</b> → NEA: Evaluation <b>Wider Curriculum Links:</b> → English (Structure of an evaluation) <b>Sequencing Links:</b> → Use of spec to evaluate and adapt design proposals	<ul style="list-style-type: none"> <li>• test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups</li> </ul>
<b>Manufacture And Evaluation</b>  <i>Lesson 11-13</i>	<ul style="list-style-type: none"> <li>★ Cutting, shaping and finishing timber</li> <li>★ Health and safety, use of modelling tools</li> <li>★ Properties of timbers/polymers, adhesives</li> <li>★ <b>Assessment: Design movement cultural pattern influence clock</b></li> </ul>	<b>GCSE Link:</b> → NEA: Manufacture <b>Wider Curriculum Links:</b> → Maths (Measurement & Scale) → Career: Model maker <b>Sequencing Links:</b> → Introductory making skills to progress onto Y8/9	<ul style="list-style-type: none"> <li>• select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture</li> </ul>
<b>End of module Test &amp; Reflection</b>  <i>Lesson 14-15</i>	<ul style="list-style-type: none"> <li>★ <b>Assessment: End of module test (Knowledge)</b></li> <li>★ Review and reflection of marks</li> <li>★ Links to careers and other subjects</li> <li>★ Reflect on Learning Journey and DT mapping &amp; progressions</li> <li>★ Reflect on fundamental researching, designing, making and evaluation skills that will be consistently used through their DT Learning Journey.</li> </ul>	<b>GCSE Link:</b> → Core Theory <b>Wider Curriculum Links:</b> → English and Maths <b>Sequencing Links:</b> → Knowledge recall through exam style questions	<ul style="list-style-type: none"> <li>•</li> </ul>

## Year 8 - Scheme of Learning

Word Rich - Oracy, Vocabulary, Reading, Writing	SMSC & Values	Careers & Employability	Enrichment & Cultural Capital	Equality, Diversity & Inclusivity
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## DT Resistant Materials

<ul style="list-style-type: none"> <li>❖ Tier 2/3 Vocabulary every lesson - meanings and etymology</li> <li>❖ Use of texts to support reading/research</li> <li>❖ Group presentations - Oracy</li> <li>❖ Use of cold calling oracy in lesson questioning</li> </ul>	<ul style="list-style-type: none"> <li>● SMSC: Sustainability - Polymers and fossil fuels</li> <li>● Values taught through moral choices when designing products</li> <li>● Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers,</li> </ul>	<ul style="list-style-type: none"> <li>● The role of a Designer</li> <li>● How skills learnt in DT are transferable to other subjects and career paths (Eg Problem Solving)</li> </ul>	<ul style="list-style-type: none"> <li>● Links to historical design movements and prominent designers.</li> <li>● Investigation and use of cultural patterns in design.</li> </ul>	<ul style="list-style-type: none"> <li>● Using research and exploration, such as the study of different cultures, to identify and understand user needs</li> </ul>
<b>Formal Assessments (Title/Date)</b>			<b>Blended Learning</b>	<b>Home Learning</b>
<ul style="list-style-type: none"> <li>❖ Design and evaluation Teenage Desk Tidy(30 Marks)</li> <li>❖ Manufacturing of Prototype Model (30 Marks)</li> <li>❖ End of Module Theory Test (30 marks)</li> </ul>			<ul style="list-style-type: none"> <li>● Research</li> <li>● Moodboard</li> <li>● CAD modelling</li> </ul>	<ul style="list-style-type: none"> <li>● Research</li> <li>● Moodboard</li> <li>● Timbers</li> <li>● Design and Design development</li> </ul>
Unit of Work	Knowledge and Skills	Curriculum Links and Sequencing	National Curriculum <i>(including KS2)</i>	
<b>Responding to a design brief &amp; Specification</b>  <i>Lesson 1 to 2</i>	<ul style="list-style-type: none"> <li>★ Design brief: teenage desk tidy</li> <li>★ Responding to a specification - consider constraints, materials and user needs</li> <li>★ Developing a mood board based on the specification, brief and previous research</li> </ul>	<b>GCSE Link:</b> → 2.1 NEA Design and Develop → 1.1.8 Production Techniques <b>Wider Curriculum Links:</b> → Careers: ( Design) <b>Sequencing Links:</b> → Understanding Specification - links to All DT areas and future progression	<ul style="list-style-type: none"> <li>● use research and exploration, to identify and understand user needs</li> <li>● identify and solve their own design problems and understand how to reformulate problems given to them</li> <li>● develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations</li> <li>● use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses develop and communicate design ideas</li> <li>● using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools</li> </ul>	

## DT Resistant Materials

<b>Materials and properties</b>  <i>Lesson 3</i>	<ul style="list-style-type: none"> <li>★ Sustainability - Meaning in terms of design and 6 Rs</li> <li>★ Categories of timber (softwoods, hardwoods, manufactured boards), properties &amp; characteristics of timber, sustainability factors of timber, joining techniques for timber, finishes for timber</li> <li>★ Types of timber joints</li> </ul>	<b>GCSE Link:</b> → 1:12 The categorisation of the types, properties and structure of natural and manufactured timbers → 7.2.5 The physical characteristics of each timber: <b>Wider Curriculum Links:</b> → Links with Art, Geography & Science → Cultural SMSC <b>Sequencing Links:</b> → 6 Rs across all DT and progresses in depth in Y8/9 → Understanding how research influences design	<ul style="list-style-type: none"> <li>• Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists</li> <li>• Analyse the work of past and present professionals and others to develop and broaden their understanding</li> <li>• Use cultural design to influence and inspire design ideas and development</li> </ul>
<b>Drawing Skills</b> <i>Lesson 4-5</i>	<ul style="list-style-type: none"> <li>★ Annotated sketches, design justification and development</li> <li>★ Isometric drawing</li> <li>★ Generating ideas - ideation</li> <li>★ Rendering techniques</li> </ul>	<b>GCSE Link:</b> → 1.17 Communication to present ideas → 7.3.6 Cultural and ethical factors: → NEA: Design & Develop <b>Wider Curriculum Links:</b> → Maths (Scale) Art (use of media) → Career: Product Design, CAD Technician <b>Sequencing Links:</b> → Basic design skills - drawing, perspective, CAD modelling to build onto more progressive techniques in Y8/9	<ul style="list-style-type: none"> <li>• use research and exploration, to identify and understand user needs</li> <li>• identify and solve their own design problems and understand how to reformulate problems given to them</li> <li>• develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations</li> <li>• use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses develop and communicate design ideas</li> <li>• using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools</li> </ul>
<b>Manufacture</b>  <i>Lesson 6-10</i>	<ul style="list-style-type: none"> <li>★ Accuracy of cutting comb/finger joint.</li> <li>★ Finishing of timber</li> <li>★ <b>Assessment: Manufacture of comb/finger joint box</b></li> </ul>	<b>GCSE Link:</b> → NEA: Evaluation <b>Wider Curriculum Links:</b> → English (Structure of an evaluation) <b>Sequencing Links:</b>	<ul style="list-style-type: none"> <li>• test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups</li> </ul>
<b>Evaluation</b>  <i>Lesson 10</i>	<ul style="list-style-type: none"> <li>★ <b>Assessment: Evaluation and annotation against specification</b></li> <li>★ Peer and self-assessment</li> <li>★ Recap skills and knowledge gained so far.</li> </ul>	<b>GCSE Link:</b> → NEA: Evaluation <b>Wider Curriculum Links:</b> → English (Structure of an evaluation) <b>Sequencing Links:</b>	<ul style="list-style-type: none"> <li>• test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups</li> </ul>

## DT Resistant Materials

	<ul style="list-style-type: none"> <li>★ Review of design ideas compared to manufacture</li> </ul>	<ul style="list-style-type: none"> <li>→ Use of spec to evaluate and adapt design proposals</li> </ul>	
<b>Manufacture And Evaluation</b>  <i>Lesson 11-13</i>	<ul style="list-style-type: none"> <li>★ Applying timber fishes</li> <li>★ Accuracy of finger joint</li> <li>★ How their research has influenced their design work</li> <li>★ <b>Assessment: Final model of Desk Tidy</b></li> </ul>	<b>GCSE Link:</b> <ul style="list-style-type: none"> <li>→ NEA: Manufacture</li> </ul> <b>Wider Curriculum Links:</b> <ul style="list-style-type: none"> <li>→ Maths (Measurement &amp; Scale)</li> <li>→ Career: Model maker</li> </ul> <b>Sequencing Links:</b> <ul style="list-style-type: none"> <li>→ Introductory making skills to progress onto Y8/9</li> </ul>	<ul style="list-style-type: none"> <li>• select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture</li> </ul>
<b>End of module Test &amp; Reflection</b>  <i>Lesson 14-15</i>	<ul style="list-style-type: none"> <li>★ <b>Assessment: End of module test (Knowledge)</b></li> <li>★ Review and reflection of marks</li> <li>★ Links to careers and other subjects</li> <li>★ Reflect on Learning Journey and DT mapping &amp; progressions</li> <li>★ Reflect on fundamental researching, designing, making and evaluation skills that will be consistently used through their DT Learning Journey.</li> </ul>	<b>GCSE Link:</b> <ul style="list-style-type: none"> <li>→ Core Theory</li> </ul> <b>Wider Curriculum Links:</b> <ul style="list-style-type: none"> <li>→ English and Maths</li> </ul> <b>Sequencing Links:</b> <ul style="list-style-type: none"> <li>→ Knowledge recall through exam style questions</li> </ul>	

### Year 9 - Scheme of Learning

Word Rich - Oracy, Vocabulary, Reading, Writing	SMSC & Values	Careers & Employability	Enrichment & Cultural Capital	Equality, Diversity & Inclusivity
<ul style="list-style-type: none"> <li>❖ Tier 2/3 Vocabulary every lesson - meanings and etymology</li> <li>❖ Use of texts to support reading/research</li> </ul>	<ul style="list-style-type: none"> <li>• SMSC: Sustainability</li> <li>• Values taught through moral choices when designing products</li> </ul>	<ul style="list-style-type: none"> <li>• The role of a Designer</li> <li>• How skills learnt in DT are transferable to other subjects and</li> </ul>	<ul style="list-style-type: none"> <li>• Looking at the work of others included in GCSE content.</li> </ul>	<ul style="list-style-type: none"> <li>• Using research and exploration, such as the study of different cultures, to identify and understand user needs</li> </ul>

## DT Resistant Materials

<ul style="list-style-type: none"> <li>❖ Group presentations - Oracy</li> <li>❖ Use of cold calling oracy in lesson questioning</li> </ul>	<ul style="list-style-type: none"> <li>• Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers</li> </ul>	career paths (Eg Problem Solving)		
Formal Assessments (Title/Date)			Blended Learning	Home Learning
<ul style="list-style-type: none"> <li>❖ Investigation, design and evaluation Biomimicry lamps (30 Marks)</li> <li>❖ Manufacturing of Prototype Model (30 Marks)</li> <li>❖ End of Module Theory Test (30 marks)</li> </ul>			<ul style="list-style-type: none"> <li>• Research</li> <li>• Moodboard</li> <li>• CAD</li> </ul>	<ul style="list-style-type: none"> <li>• Research</li> <li>• Moodboard</li> <li>• Timbers and Polymers</li> <li>• Design and Design development</li> </ul>
Unit of Work	Knowledge and Skills	Curriculum Links and Sequencing		National Curriculum <i>(including KS2)</i>
<b>Intro to project</b> <i>Lesson 1</i>	<ul style="list-style-type: none"> <li>★ Intro to subject, careers and DT links</li> <li>★ Sustainability - Meaning in terms of design and 6 Rs</li> <li>★ Research into prototyping and the benefit</li> <li>★ Iterative design process</li> <li>★ Categories of timber (softwoods, hardwoods, manufactured boards), properties &amp; characteristics of timber, sustainability factors of timber, joining techniques for timber, finishes for timber</li> <li>★ Types of timber joints</li> </ul>	<b>GCSE Link:</b> → 1.1 Investigation of needs and research <b>Wider Curriculum Links:</b> → Links with Art, Geography & Science → Cultural SMSC <b>Sequencing Links:</b> → 6 Rs across all DT now embedded → Understanding how research influences design		<ul style="list-style-type: none"> <li>• Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists</li> <li>• Analyse the work of past and present professionals and others to develop and broaden their understanding</li> <li>• Use biomimicry design to influence and inspire design ideas and development</li> </ul>
<b>Responding to a design brief &amp; Specification</b> <i>Lesson 2-4</i>	<ul style="list-style-type: none"> <li>★ Design brief: Biomimicry Lamp</li> <li>★ Responding to a specification - consider constraints, materials and user needs</li> <li>★ Developing a mood board based on the specification, brief and previous research</li> </ul>	<b>GCSE Link:</b> → 2.1 NEA Design and Develop → 7.6.2 Scales of production → 1:12 The categorisation of the types, properties and structure of natural and manufactured timbers → 7.2.5 The physical characteristics of each timber: <b>Wider Curriculum Links:</b> → Careers: (Architecture & Design)		<ul style="list-style-type: none"> <li>• use research and exploration, to identify and understand user needs</li> <li>• identify and solve their own design problems and understand how to reformulate problems given to them</li> <li>• develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations</li> <li>• use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas</li> </ul>

## DT Resistant Materials

		<b>Sequencing Links:</b> → Understanding Specification - links to All DT areas and future progression	and avoid stereotypical responses develop and communicate design ideas <ul style="list-style-type: none"> <li>using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools</li> <li>select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture</li> <li>select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties</li> </ul>
<b>Drawing Skills</b> <i>Lesson 5-6</i>	★ Annotated sketches, design justification and development ★ Exploded drawing ★ Generating ideas - ideation ★ Rendering techniques	<b>GCSE Link:</b> → 1.17 Communication to present ideas → 7.8.1 Surface finishes and treatments: → NEA: Design & Develop <b>Wider Curriculum Links:</b> → Maths (Scale) Art (use of media) → Career: CAD technician, product design <b>Sequencing Links:</b> → Basic design skills - drawing, perspective, CAD modelling to build onto more progressive techniques in Y8/9	
<b>Manufacture</b> <i>Lesson 7-10</i>	★ Iterative design ★ Apply theme to design outcome ★ Accuracy of corner halving joint ★ <b>Assessment: Final model of Lamp</b>		
<b>Evaluation</b> <i>Lesson 10</i>	★ <b>Assessment: Evaluation and annotation against specification</b> ★ Peer and self-assessment ★ Recap skills and knowledge gained so far. ★ Review of design ideas compared to manufacture	<b>GCSE Link:</b> → NEA: Evaluation <b>Wider Curriculum Links:</b> → English (Structure of an evaluation) <b>Sequencing Links:</b> → Use of spec to evaluate and adapt design proposals	<ul style="list-style-type: none"> <li>test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups</li> </ul>
<b>Manufacture And Evaluation</b> <i>Lesson 11-13</i>	★ Finishing of timber ★ Health and safety, use of modelling tools ★ <b>Assessment: Final model of lamp</b>	<b>GCSE Link:</b> → NEA: Manufacture <b>Wider Curriculum Links:</b> → Maths (Measurement & Scale) → Career: Model maker <b>Sequencing Links:</b> → Introductory making skills to progress onto Y8/9	<ul style="list-style-type: none"> <li>select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture</li> </ul>
<b>End of module Test &amp;</b>	★ <b>Assessment: End of module test (Knowledge)</b> ★ Review and reflection of marks	<b>GCSE Link:</b> → Core Theory <b>Wider Curriculum Links:</b>	



## DT Resistant Materials

<b>Reflection</b>  <i>Lesson 14-15</i>	<ul style="list-style-type: none"><li>★ Links to careers and other subjects</li><li>★ Reflect on Learning Journey and DT mapping &amp; progressions</li><li>★ Reflect on fundamental researching, designing, making and evaluation skills that will be consistently used through their DT Learning Journey.</li></ul>	<ul style="list-style-type: none"><li>→ English and Maths</li></ul> <b>Sequencing Links:</b> <ul style="list-style-type: none"><li>→ Knowledge recall through exam style questions</li></ul>	
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