

# Design Technology Long Term Plan Year 7 2019-20



## Temperance Term

W/C	2nd September	9th September	16th September	23rd September	30th September	7th October	14th October	21st October							
Topic	<b>1. Induction to D&amp;T:</b>	<b>2. Baseline test</b>	<b>3. Baseline test</b>	<b>4. Baseline test INTERVENTION</b>	<b>5. Baseline test INTERVENTION</b>	<b>6. Trinket Box: Analysing the Context</b>	<b>7. Trinket Box: Specification and modelling</b>	<b>8. Trinket Box: Specification and modelling</b>							
	Safety Using DT1/DT2 Design books	Introduction to the design process Analysing skills Design skills Communication skills	Modelling skills Evaluation	Individual to student based upon teacher feedback		Explanation of the design process Analysing the context Exploring possibilities Preparing for modelling ideas	Creating a Brief and Specification Basic designs Modelling an idea Introduction to woodworking tools	Completing the model base Introduction to the sander Testing ideas							
Challenge	Safety rules (PEE) Introduction page	Detailed analysis 3 designs	High quality model Evaluation (PEE)	One section improved by one 'level'		Analysis is of PEE style Range of analysis techniques used	Specification is 'what' and 'why' Model has accuracy	Base or the hole is not square Testing uses the spec'							
Assessment	Safety test	Teacher assessment		Student assessment Teacher VF		Student assessment		Teacher assessment							
W/C	<b>HALF TERM</b>														
Topic									<b>4th November</b>	<b>11th November</b>	<b>18th November</b>	<b>25th November</b>	<b>2nd December</b>	<b>9th December</b>	<b>CHRISTMAS</b>
									<b>9. Trinket Box: Bauhaus lid design</b>	<b>10. Trinket Box: Evaluating the model</b>	<b>11. Trinket Box: Investigating woods</b>	<b>12. Trinket Box: Planning the making</b>	<b>13. Trinket Box: Making the pine middle</b>	<b>14. Trinket Box: Making the pine middle</b>	
									Gather research of Bauhaus Design the lid Make the model lid Research hinges... Intro to glue gun	Adding opening device Painting the lid Evaluating the model Suggest improvements	Learn characteristics of 3 woods Create a manufacturers specification	Mind-map the stages of making Create a detailed making plan	Wood keywords introduced Using the making plan Cutting the pine to shape for the box middle	Making pine planks Using the making plan Cutting the pine to shape for the box middle	
Challenge									Research informs ideas Lid reflects Bauhaus clearly	Lid opens well Painting is even and effective	Characteristics inform the specification	Plan includes stages, instructions and tools	Wood keywords are notated Hole will be cut	Pine manufacture notes are detailed Hole will be cut	
Assessment	Student assessment	Teacher VF	Student assessment	Student assessment	Teacher VF										

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## Justice Term

<b>W/C</b>	6 <sup>th</sup> January	13 <sup>th</sup> January	20 <sup>th</sup> January	27 <sup>th</sup> January	3 <sup>rd</sup> February	10 <sup>th</sup> February	<b>HALF TERM</b>
Topic	<b>15. Trinket Box: Attaching the plywood base</b>	<b>16. Trinket Box: Adding a finish to pine</b>	<b>17. Trinket Box: Making the MDF lid</b>	<b>18. Trinket Box: Painting the MDF lid</b>	<b>19. Trinket Box: Testing and evaluating the box</b>	<b>20. Trinket Box: Making improvements</b>	
	Make plywood Completing the pine middle Revisit the band facer Attaching the plywood base	Make MDF Adding a finish: sanding and oiling Revisit the band facer Attaching the MDF base	Measure lid Cut lid Attach lid	Prepare lid for painting Paint lid	Develop test used for the model trinket box Test box Evaluate box Develop box design	Identify what can improved Make improvements Record changes in evaluation	
Challenge	Plywood manufacture notes are detailed Base has been glued on	MDF manufacture notes are detailed Base has been glued on	Lid is accurately measured and cut Hinge or pivot used	Evidence of precise painting	Product test focusses closely on specification Evaluation informs future design	MDF manufacture notes are detailed Base has been glued on	
Assessment	Teacher VF				Student assessment Teacher VF	Teacher written feedback	
<b>W/C</b>	24 <sup>th</sup> February	2 <sup>nd</sup> March	9 <sup>th</sup> March	16 <sup>th</sup> March	23 <sup>rd</sup> March	30 <sup>th</sup> March	<b>EASTER</b>
Topic	<b>21. Awesome Ornaments: Analysing the Context</b>	<b>22. Awesome Ornaments: Creating a Brief</b>	<b>23. Awesome Ornaments: Developing a Design 1</b>	<b>24. Awesome Ornaments: Developing a Design 2</b>	<b>25. Awesome Ornaments: Research Metals</b>	<b>26. Awesome Ornaments: Research Metal Joining</b>	
	Exploring an independent design process Analysing the context Exploring possibilities Model a sundial	Gather research on garden ornaments Creating a Brief and Specification Basic designs	Analyse material sizes Model one ornament idea Photograph and annotate idea Test and evaluate idea ready for development	Develop model or make 2 <sup>nd</sup> model Photograph and annotate idea Test and evaluate idea ready for development	Understand how to test 3 metals Carousal testing of Copper, Aluminium and Steel Record characteristics Create manufacturers specification	Understand how to join metals Carousal of soldering, pop-riveting and set screws Record methods Develop manufacturers specification	
Challenge	Analysis is of PEE style Range of analysis techniques used	Specification is 'what' and 'why' Research uses a range of analysis techniques	Model has accuracy Annotation is PEE including diagrams	Analysis is of PEE style Range of analysis techniques used	Knowledge is of PEE style All boxes filled in	Knowledge is of PEE style All boxes filled in	
Assessment	Student assessment		Teacher assessment	Student assessment			

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## Courage Term

W/C	20 <sup>th</sup> April	27 <sup>th</sup> April	4 <sup>th</sup> May	11 <sup>th</sup> May	18 <sup>th</sup> May	<b>HALF TERM</b>
Topic	<b>27. Awesome Ornaments: Working Drawing</b>	<b>28. Awesome Ornaments: Plan the Making</b>	<b>29. Awesome Ornaments: Prepare Materials</b>	<b>30. Awesome Ornaments: Marking Out Materials</b>	<b>31. Awesome Ornaments: Cutting Materials</b>	
	Video introduction demonstrating Isometric and Orthographic projection Explore ortho and iso Explain what working drawings are Create ornament working drawing	Review working drawings Introduce dimensioning Explain dimensioning ortho/iso house Explore dimensioning working drawings Plan how to make the ornament	Metalwork keyword list issued and analysed Explain annealing copper and aluminium Explain cutting metals from stock Student prepare their materials for manufacture	Metalwork keywords revisited and notes expanded Video of making aluminium Explain metalwork marking tools Mark out metal	Metalwork keywords revisited and notes expanded Video of making steel Explain metalwork cutting tools Cut out metal parts for ornament	
Challenge	Correct orthographic house Correct isometric house	Correct use of 10 dimensions Plan has instructions, tools and insight	Material blanks are made Standard components are sourced	Ornament parts are marked out accurately Detailed aluminium production flow map	Ornament parts are cut out precisely Detailed steel production flow map	
Assessment	Teacher VF			Teacher VF Student assessment		
<b>W/C</b>	<b>1st June</b>	<b>8<sup>th</sup> June</b>	<b>15<sup>th</sup> June</b>	<b>22nd June</b>	<b>29<sup>th</sup> June</b>	
Topic	<b>32. Awesome Ornaments: Shaping Materials</b>	<b>33. Awesome Ornaments: Forming Materials</b>	<b>34. Awesome Ornaments: Joining Materials</b>	<b>35. Awesome Ornaments: Adding a Finish</b>	<b>36. Awesome Ornaments: Testing and Evaluating</b>	<b>37. Awesome Ornaments: Making Improvements</b>
	Metalwork keywords test and self-marking Video of shaping copper Explain metalwork shaping tools Shape metal parts for ornament Photograph making	Metalwork keywords re-test and self-marking Demonstration of the metal bending machine Bend and form metal components Photograph making	Revisit metal joining techniques Drilling metal safely Assemble ornaments Photograph making	Explanation of metal finishing: wet/dry and Brasso Add a finish to ornaments Complete ornaments	Plan test using the specification Peer test ornaments Evaluate ornament Develop an improved ornament idea	Make improvements to the ornament
Challenge	Ornament parts are shaped precisely 80%+ for keyword test	Detailed notes for sheet bender 80% for keyword re-test	Analysis is of PEE style Range of analysis techniques used	High standard of finish to all components	Test closely focuses upon the specification Evaluation uses a range of annotation techniques	Product is potentially commercially viable
Assessment	KS3 Internal Exams		Student assessment		Teacher formal feedback	