



Product Design - CURRICULUM PLAN subject

YEAR	TRINITY 2	MICHAELMAS 1	MICHAELMAS 2	LENT 1	LENT 2	TRINITY 1
8	Pupils rotate in a 9 week rotation between the following areas. Art, FPN, Textiles and DT over the course of Year 8. Groups have one double and a single lesson each week, pupils will be taught across two rooms (workshop and computer room). <u>Upcycling Lamp</u> <u>Week 1 –</u> <ul style="list-style-type: none"> Review of learning so far – What can they remember from Year 7? What are we doing to our environment? What damages our world? Introduction to the design project (Christian Values) 6 R's product analysis Introduction to Bauhaus Task analysis; pupils investigate user needs for a lamp in order to identify and solve their own problem (Why do we need a lamp? Where this lamp could be used?) Design Specification to be written for their own user needs and wants. HL – Mood board based on the a specific designers - Josef Albers, Wassily Kandinsky, Marcel Breuer and Paul Klee <div style="display: flex; justify-content: space-between;"> Workshop T7 </div>					
	<u>Group A</u> <u>Week 2 -</u> <ul style="list-style-type: none"> Recap on Health & Safety in the workshop What is a working drawing? Why is a working drawing important? (Gatsby) Begin building of the lamp. How to mark off measurements correctly. Use of hand tools and portable drills (Tool passport) Introduction to design of the lamp wrap (Review of DIRT from Year 7) Introduction to Production Log HL – Complete x2 design ideas	<u>Group B</u> <u>Week 2 –</u> <ul style="list-style-type: none"> What is CAD & CAM? How is it used in industry? (Gatsby) Introduction to Techsoft Design Name exercise on Techsoft Design (AfL on Techsoft Design) Introduction to design of the lamp wrap (Review of DIRT from Year 7) How to gain access to Techsoft Design at home HL – Complete x2 design ideas				
<u>Group B</u> <u>Week 3 -</u> <ul style="list-style-type: none"> Recap on Health & safety in the workshop What is a working drawing? Why is a working drawing important? Begin building of the lamp. How to mark off measurements correctly? Use of hand tools and portable drills (Tool passport) Introduction to Production Log How to develop your final wrap design? (AFL peer assessment) HL – Complete Final Idea for wrap	<u>Group A</u> <u>Week 3 -</u> <ul style="list-style-type: none"> What is CAD/CAM? How is it used in Industry? (Gatsby) Introduction to of Techsoft Design Name exercise on Techsoft Design (AFL on Techsoft Design) How to gain access to Techsoft Design at home How to develop your final wrap design? (AFL peer assessment) HL – Complete Final Idea for wrap					
<u>Group A</u> <u>Week 4 –</u> <ul style="list-style-type: none"> Continue to build lamp Introduction to different types of components used (bolts / nuts / washers / wingnuts) Use of hand tools and portable drills (Tool passport) 	<u>Group B</u> <u>Week 4 –</u> <ul style="list-style-type: none"> Techsoft Design – exercises use of boundary fill & use of patterns, how to develop textures Development of CAD/CAM knowledge and understanding. Complete final idea design on Techsoft Design. 					



<ul style="list-style-type: none"> Review & Reflect - Production Log <p>HL – Quiz on Health & safety (forms online)</p>	<ul style="list-style-type: none"> Review & reflect on CADCAM (AfL exercise) What can you remember about electronics? (Quiz) <p>HL – Complete Final Design wrap on Techsoft Design at home.</p>
<p><u>Group B</u> <u>Week 5 –</u></p> <ul style="list-style-type: none"> Continue to build lamp Introduction to different types of components used (bolts / nuts / washers / wingnuts) Use of hand tools and portable drills (Tool passport) Review & Reflect - Production Log <p>HL – Quiz on Health & safety (forms online)</p>	<p><u>Group A</u> <u>Week 5 –</u></p> <ul style="list-style-type: none"> Techsoft Design – exercises use of boundary fill & use of patterns, how to develop textures Development of CADCAM knowledge and understanding. Complete final idea design on Techsoft Design. Review & reflect on CADCAM (AfL exercise) What can you remember about electronics? (Quiz) <p>HL – Complete Final Design wrap on Techsoft Design at home.</p>
<p><u>Group A</u> <u>Week 6 –</u></p> <ul style="list-style-type: none"> Introduction to electronics – H&S (Single lesson) Begin to build circuit for lamp. (Tool passport) Continue to make lamp Review & Reflect - Production Log <p>HL - Fact file on basic electronics</p>	<p><u>Group B</u> <u>Week 6 –</u></p> <ul style="list-style-type: none"> Introduction to Onshape Development of Onshape skills – building the lamp on onshape. <p>HL - Simple machines & levers - What is the propose of a simple machine?</p>
<p><u>Group B</u> <u>Week 7 –</u></p> <ul style="list-style-type: none"> Introduction to electronics – H&S (Single lesson) Begin to build circuit for lamp. (Tool passport) <u>Challenge</u> – putting a switch into the lamp Continue to make lamp Review & Reflect - Production Log <p>HL - Fact file on basic electronics</p>	<p><u>Group A</u> <u>Week 7 –</u></p> <ul style="list-style-type: none"> Introduction to Onshape Development of Onshape skills – building the lamp on onshape. <p>HL - Simple machines & levers - What is the propose of a simple machine?</p>
<p><u>Group A</u> <u>Week 8 –</u></p> <ul style="list-style-type: none"> Review of learning – set targets for next project (DIRT) Finishing touches to lamp Photographs of final products Compete a 6R's evaluation on their product Complete Evaluation process on Final products. 	<p><u>Group B</u> <u>Week 8 –</u></p> <ul style="list-style-type: none"> Review of learning – set targets for next project (DIRT) Finishing touches to lamp Photographs of final products Compete a 6R's evaluation on their product Complete Evaluation process on Final products.