

Short Term Planning

Design Technology, Year 10, GCSE DT

Summary of what we are trying to achieve

- Students should know and understand the categorisation of the types and properties of papers, boards, metals, alloys, polymers, timbers and textiles
- Students should investigate, analyse and evaluate the work of past and present designers and companies to inform their own designing.

<u>Lesson Number</u>	<u>Learning Objective and Outcomes</u>	<u>Lesson Activities</u>	<u>Differentiation</u>	<u>Assessment</u>	<u>Homework</u>
	<i>What are students learning, what do they need to be able to say or do</i>	<i>Ensure planning focuses on: Pre assessments, looking for proof, demystifying the destination, engaging hook, variety, pace, regular questioning and feedback</i>	<i>Community, Assistance, Task, Extension, Resources</i>	<i>What will be marked and assessed, feedback opportunities, marking and feedback method</i>	<i>Ensure all homework is set on showmyhomework Homework should consolidate, prepare or extend</i>
1. Papers and boards	<u>In this lesson students will learn:</u> <ul style="list-style-type: none"> • the primary sources of materials for producing papers and boards • the characteristics of different papers and boards • to explain and understand physical and working properties and how they affect the performance of papers and boards 	<u>Question on the board:</u> Slide One – Students are considering the different uses for papers and boards <u>Starter task:</u> Introduce LOS Discuss starter, GSM and how paper is made <u>Main:</u> As per slides 8,9,10 – discovering different papers and boards and also exam question <u>Review/Consolidation:</u> As per slide 14 questioning on different papers and boards	<u>To support students:</u> <ul style="list-style-type: none"> • Information cards on each paper and board • Template table <u>To stretch and challenge:</u> <ul style="list-style-type: none"> • Some challenging scenarios and students have to justify which paper or board would be suitable 	<u>Assessment in the lesson:</u> Teacher questioning and observation. Exam question <u>Feedback in the lesson:</u> Verbal teacher feedback <u>Marked work:</u> N/A homework questions get marked	<i>Homework questions are set over the course of the Half Term</i>
2.	<u>In this lesson students will learn:</u>	<u>Question on the board:</u> Slide one – why has one rusted and the other hasn't?	<u>To support students:</u>	<u>Assessment in the lesson:</u>	<i>Homework questions are set</i>

Metals and Polymers	<ul style="list-style-type: none"> the primary sources of materials for producing metals and polymers the characteristics of different metals and polymers to explain and understand physical and working properties and how they affect the performance of metals and polymers 	<p><u>Starter task:</u> Introduce LOS Discuss starter question and discuss origins of metal</p> <p><u>Main:</u> Complete spider diagram task on metals Polymers activity – discuss origin and what a thermoplastic and thermosetting is, complete table, and write down characteristics and example product for each type of plastic Complete exam question</p> <p><u>Review/Consolidation:</u> As per slide 12 questioning on different metals and polymers.</p>	<ul style="list-style-type: none"> WAGOLL on spider diagram Metals cards to help <p><u>To stretch and challenge:</u></p> <ul style="list-style-type: none"> Some challenging scenarios and students have to justify which metal or polymer would be suitable 	<p>Teacher questioning and observation. Exam question</p> <p><u>Feedback in the lesson:</u> Verbal teacher feedback</p> <p><u>Marked work:</u> N/A homework questions get marked</p>	<i>over the course of the Half Term</i>
3. Textiles	<p><u>In this lesson students will learn:</u></p> <ul style="list-style-type: none"> about natural and synthetic fibres about blended and mixed fibres about woven, non-woven and knitted textiles 	<p><u>Question on the board:</u> Slide one – what might each of these be made of?</p> <p><u>Starter task:</u> Introduce LOS Discussion and questioning around synthetic and natural materials</p> <p><u>Main:</u> If possible bring in real examples of materials on the slide. Students make notes on the different synthetic and natural materials Discussion and questioning around the pros and cons of materials such as poly cotton 2 slides on woven and knitted – students need to know difference, strength, shapes, uses, weft and warp</p> <p><u>Review/Consolidation:</u> Questioning on choice of materials</p>	<p><u>To support students:</u></p> <ul style="list-style-type: none"> Handouts <p><u>To stretch and challenge:</u></p> <ul style="list-style-type: none"> Some challenging scenarios and students have to justify which textile would be suitable 	<p><u>Assessment in the lesson:</u> Teacher questioning and observation. Exam question</p> <p><u>Feedback in the lesson:</u> Verbal teacher feedback</p> <p><u>Marked work:</u> N/A homework questions get marked</p>	<i>Homework questions are set over the course of the Half Term</i>
4. Woods and timbers	<p><u>In this lesson students will learn:</u></p> <ul style="list-style-type: none"> the primary sources of materials for producing timbers 	<p><u>Question on the board:</u> Students to name as many timbers as they can as per task on slide</p> <p><u>Starter task:</u> Introduce LOS</p>	<p><u>To support students:</u></p> <ul style="list-style-type: none"> Handouts <p><u>To stretch and challenge:</u></p>	<p><u>Assessment in the lesson:</u> Teacher questioning and</p>	<i>Homework questions are set over the course of the Half Term</i>

	<ul style="list-style-type: none"> •the characteristics of different timbers •to explain and understand physical and working properties and how they affect the performance of timbers 	<p>Discussion and questioning around question that was on the board</p> <p><u>Main:</u> Explain difference between hard wood and softwood Students write down difference between hard wood and softwood – success criteria on next slide Teacher uses slides to explain different types of wood Various questions on slides from past exam papers for students to attempt</p> <p><u>Review/Consolidation:</u> Questioning on choice of materials</p>	<ul style="list-style-type: none"> • Some challenging scenarios and students have to justify which timber would be suitable 	<p>observation. Exam question <u>Feedback in the lesson:</u> Verbal teacher feedback <u>Marked work:</u> N/A homework questions get marked</p>	
5. The work of others 1	<p><u>In this lesson students will learn:</u></p> <ul style="list-style-type: none"> • To Investigate and collect information on the work of others • To Analyse, evaluate and draw conclusions from the work of others • Use the work of others to inform your own designing 	<p><u>Question on the board:</u> Slide One – What’s the inspiration?</p> <p><u>Starter task:</u> Go through question on board and introduce LOS and how work influences designs.</p> <p><u>Main:</u> Task as per slide 7 – mood board for two designers. Draw conclusions and then design and annotate jewellery box in one style.</p> <p><u>Review/Consolidation:</u> Students share and justify conclusion and design work</p>	<p><u>To support students:</u></p> <ul style="list-style-type: none"> • Pre-prepared resources about different designers • Questions to prompt students to draw conclusions <p><u>To stretch and challenge:</u></p> <ul style="list-style-type: none"> • Annotation and justifications of conclusions and design decisions • Quality of drawings and design work 	<p><u>Assessment in the lesson:</u> Teacher questioning and observation <u>Feedback in the lesson:</u> Verbal teacher feedback <u>Marked work:</u> N/A homework questions get marked</p>	<p><i>Homework questions are set over the course of the Half Term</i></p>
6. The work of others 2	<p><u>In this lesson students will learn:</u></p> <ul style="list-style-type: none"> • To Investigate and collect information on the work of others 	<p><u>Question on the board:</u> Slide One – Who is this</p> <p><u>Starter task:</u> Open up discussion about James Dyson and what he did, creates etc.. Introduce LO’s</p>	<p><u>To support students:</u></p> <ul style="list-style-type: none"> • Pre-prepared examples and questions for students to use 	<p><u>Assessment in the lesson:</u> Teacher questioning and observation</p>	<p><i>Homework questions are set over the course of the Half Term</i></p>

	<ul style="list-style-type: none"> To Understand the aims of the business To Understand their product portfolio 	<u>Main:</u> Task as per slide 5 – research and write about two companies and their products <u>Review/Consolidation:</u> Students share findings and justify and critical of products	<ul style="list-style-type: none"> Product Analysis help sheet and examples <u>To stretch and challenge:</u> <ul style="list-style-type: none"> Critique and justifications in annotations 	<u>Feedback in the lesson:</u> Verbal teacher feedback <u>Marked work:</u> N/A homework questions get marked	
7.	<i>End of Half Term Test</i>				
8.	<i>DIRT time to go through test, students to complete corrections, a DIRT task, review and set targets for next HT and complete any Actions in their exercise books</i>				