

# Curriculum Overview

Subject: DT  
Year Group: 10



Students are working in line with the AQA GCSE Design Technology specification. Developing core technical principles to demonstrate a breadth of technical knowledge and understanding. Specialist technical principles to assess a more in depth knowledge of technical principles. Designing and making principles. Students will be working towards developing their practical skills in all areas, extending on prior knowledge in polymers, timbers, textiles, papers and boards and metals. Students will focus on two key areas in more depth; timbers, papers and boards.

This is taught through a mix of theory and practical sessions following the SOW.

TERM 1	TERM 2	TERM 3
<b>KNOWLEDGE/SKILLS</b> Timbers, origins, working with timbers, making a frame using wood joints, commercial manufacturing. Papers and boards, natural and manufactured timbers, metals and alloys, polymers, textiles, casting a keyring. Industry and enterprise, sustainability and the environment, people culture and society, production techniques and systems, informing design decisions, batch production project.	<b>KNOWLEDGE/SKILLS</b> Energy storage, energy generation, modern materials, smart materials, composite materials and technical textiles, systems approach to designing, electronic systems processing, mechanical devices, making a child's toy, forces and stresses on materials and objects, improving functionality, ecological and social footprint.	<b>KNOWLEDGE/SKILLS</b> Box making skills and marquetry, the 6 Rs, scales of production, selection of materials and components, tolerances and allowances, material management and marking out, specialist tools and, equipment, techniques and processes, surface treatments and finishes, NEA task.
<b>KEY ASSESSMENTS</b>  Half term 1: Unit 5B Assessment  Half term 2: Unit 3 Assessment	<b>KEY ASSESSMENTS</b>  Half term 1: Unit 1 Assessment  Half term 2: Unit 2 Assessment	<b>KEY ASSESSMENTS</b>  Half term 1: Unit 4 Assessment  Half term 2: Unit 7 Assessment. Mock exam

Extended reading suggestions and external resources:

<https://www.theguardian.com/environment/2016/jun/25/illegal-logging-amazon-timber-tougher-laws-british-products>  
<https://www.theguardian.com/world/2015/sep/17/illegal-timber-myanmar-china-forests>  
<https://www.youtube.com/watch?v=luygMuoFnXs>  
<https://www.youtube.com/watch?v=NvbgwdTGoyo>  
<https://www.youtube.com/watch?v=7pNWI1dcbg4>  
[https://www.youtube.com/watch?v=SLUcVh\\_4wIM](https://www.youtube.com/watch?v=SLUcVh_4wIM)  
<https://www.youtube.com/watch?v=UGnDzE9mfUc>  
<https://www.youtube.com/watch?v=eF5LVBW1vl8>

<https://www.youtube.com/watch?v=P9KPJIA5yds>

<https://www.youtube.com/watch?v=3RUE367Sb9A>

<https://www.youtube.com/watch?v=CBmsOvbGh-Y>

<https://www.youtube.com/watch?v=fcBXtwGexNc>

<https://www.bbc.co.uk/news/science-environment-39217985>

[https://www.youtube.com/watch?v=l8nMKH3y\\_1I](https://www.youtube.com/watch?v=l8nMKH3y_1I)

<https://www.youtube.com/watch?v=ALWwK7Vz4gY>

<https://www.bbc.co.uk/news/business-38472652>

<https://www.theguardian.com/world/2016/sep/19/waste-not-want-not-sweden-tax-breaks-repairs>

<https://www.bbc.co.uk/news/science-environment-37902773>

<https://www.bbc.co.uk/news/business-38263177>

<https://www.youtube.com/watch?v=ftj23FRS2LI>

<https://www.youtube.com/watch?v=BOo8gxp3K3w>

<https://www.youtube.com/watch?v=BqkekY5t7KY>

<https://footprint.wwf.org.uk/#/>

<https://www.youtube.com/watch?v=BtBLXII2FNE>

[https://www.rapidonline.com/pdf/87-2330S\\_v2.PDF](https://www.rapidonline.com/pdf/87-2330S_v2.PDF)

<https://www.youtube.com/watch?v=mz6i1RXNgjs>