



Subject	Year	Term
Design and Technology	10	2
Topic		
Technical Principles and Materials		
Content (Intent)		
Prior Learning (Topic) Year 10 Section 1 and 2		
Section 3 – New and emerging technologies cover, technological applications, environmental and cultural issues, production techniques and design evaluation are described in detail. Students will complete a problem-solving practical task to design slot together furniture.		
Section 4 – Energy, Systems and devices covers, Energy generation from finite and non-finite sources, developments in modern and smart materials, and their properties, composite materials and technical textiles and finally electronic systems and mechanical devices.		
Section 5 – Materials covers, papers and boards, woods, metals, plastics and textiles		
Future Learning (Topic) Section 6 and NEA		
What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)	
Section 3 and 4 Students will develop the basic CAD/CAM skills in order to manufacturing a flat pack/slot together piece of furniture. Students will prepare for their exam for their exam by studying a range of technical principles.	At the end of each Section is a formative assessment based on the knowledge learnt. Practical work will be assessed against the NEA assessment criteria.	
Section 5 Students will develop the basic wood and metal skills in order to manufacturing an enamelled tea light holder. Students will prepare for their exam for their exam by studying in depth a range of materials.		
How can parents help at home?		
You can support your child by discussing the use of sustainable energy with them and by checking they complete their homework. You can also support by discussing the unit tests with them and monitoring how much revision they are doing for the tests.		
Helpful further reading/discussion (including Reading and Vocabulary Lists)		
Reading My revision notes ISBN-10: 1510432329 GCSE Pod Cast www.technologystudent.com	Vocabulary Lists Automated Innovation Crowd Funding Finite Fairtrade Crowd funding Inclusive design Market Pull Enterprise	Renewable energy Ecological footprint Product Life Cycle Carbon miles Technology Push Lean Manufacturing Planned Obsolesces Disposal Maintenance Co-operative