

D&T Department

Year 10

Topic: Unit 3: Materials

Learning Journey

Prior learning:

New topics as part of GCSE Design & Technology course. Students will have prior knowledge of topics from previous units and KS3 theory/practical lessons and cross curricular (science, geography and art)

Learning sequence – topic title						Endpoint
Main learning steps	Papers and boards Know the primary sources of materials for producing paper and boards. Be able to identify and characterise several types of paper and board and know their working properties.	Timbers Know the primary sources of materials for producing timbers. Be able to identify and characterise several types of natural and manufactured timbers and know their working properties.	Metals and alloys Know the primary sources of materials for producing metals and alloys. Be able to identify and characterise several types of metals and alloys and know their working properties.	Polymers Know the primary sources of materials for producing polymers. Be able to identify and characterise several types of thermoforming and thermosetting polymers and know their working properties.	Textiles Know the primary sources of materials for producing textiles. Be able to identify and characterise several types of textiles and know their working properties.	

Assessment	HW sheet – Hand in on teams for feedback. Also self check	HW sheet – Hand in on teams for feedback. Also self check	HW sheet – Hand in on teams for feedback. Also self check	HW sheet – Hand in on teams for feedback. Also self check	HW sheet – Hand in on teams for feedback. Also self check	Unit Test
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Where will we use these ideas again:

Resources needed at home – internet access, basic drawing equipment including colouring pencils

Parental support:

- ***Ensure students are regularly checking TEAMS and are on top of their work. If a lesson is missed it is the student's responsibility to catch up on the lesson missed.***
- ***Purchase of Clear Revise PG Online Design and Technology Book***
- ***Visit the Design Museum, British Museum, V&A, Science Museum***

Where will we use these ideas again:

This area will be assessed in both the final exam at the end of KS4 and within the NEA self-study project.

Resources to use at home:

Online resources

- [THE NEW DESIGN AND TECHNOLOGY GCSE \(technologystudent.com\)](http://technologystudent.com)
- [GCSE Design and Technology - AQA - BBC Bitesize](#)

Video Resources:

- [DTtoolbox - YouTube](#)
- [GCSE Design and Technology: Core principles - YouTube](#)