Yr11 DT Learning Intentions – Term 5

	Lesson 1	Lesson 2	Lesson 3
Week 1	**Materials and their working properties** Students should know and understand the main categories and types of papers and boards including: • bleed proof • cartridge paper • grid • layout paper • tracing paper	**Communicating design ideas** Develop, communicate, record and justify design ideas using a range of appropriate techniques such as: • freehand sketching, isometric and perspective • 2D and 3D drawings • system and schematic diagrams • annotated drawings that explain detailed development or the conceptual stages of designing	**Non-Exam Assessment - NEA** **Design and develop prototypes in response to client wants and needs**. The prototype should : • satisfy the requirements of the brief • respond to client wants and needs • demonstrate innovation
Important events	HW – Complete the worksheet provided – https://www.technologystudent.com/despro2/pen2.html		

Week 2	**Materials and their working properties** Students should know and understand the main categories and types of papers and boards including: • corrugated card • duplex board • foil lined board • foam core board • ink jet card • solid white board.	**Communicating design ideas** To develop, communicate, record and justify design ideas using a range of appropriate techniques such as: • working drawings: 3rd angle orthographic, using conventions, dimensions and drawn to scale • audio and visual recordings in support of aspects of designing: eg interviews with client or users • mathematical modelling • computer based tools • modelling: working directly with materials and components	**Non-Exam Assessment - NEA** **Design and develop prototypes in response to client wants and needs**. The prototype should : • satisfy the requirements of the brief • respond to client wants and needs • demonstrate innovation
Important events	HW - Complete the worksheet provided https://www.technologystudent.com/designpro/twopers1.htm		

Week 3	**Materials and their working properties** Students should know and understand the main categories and types of natural and manufactured timbers including: • ash • beech • mahogany • oak • balsa	**Communicating design ideas** Develop, communicate, record and justify design ideas using a range of appropriate techniques such as: • working drawings: 3rd angle orthographic, using conventions, dimensions and drawn to scale • audio and visual recordings in support of aspects of designing: eg interviews with client or users • mathematical modelling • computer based tools • modelling: working directly with materials and components	**Non-Exam Assessment - NEA** **Design and develop prototypes in response to client wants and needs**. The prototype should : • satisfy the requirements of the brief • respond to client wants and needs • demonstrate innovation
Important events	HW - Complete the worksheet provided https://www.technologystudent.com/designpro/natwd1.htm		

Week 4	**Materials and their working properties** Students should know and understand the main categories and types of natural and manufactured timbers including: • larch • pine • spruce	**Communicating design ideas** Develop, communicate, record and justify design ideas using a range of appropriate techniques such as: • freehand sketching, isometric and perspective • 2D and 3D drawings • system and schematic diagrams • annotated drawings that explain detailed development or the conceptual stages of designing	**Non-Exam Assessment - NEA** Students should know and understand how to evaluate prototypes and be able to: • reflect critically, responding to feedback when evaluating their own prototypes • suggest modifications to improve them through inception and manufacture • assess if prototypes are fit for purpose.
Important events	HW – Complete the worksheet provided https://www.technologystudent.com/joints/timber3.html		
Week 5	**Materials and their working properties** Students should know and understand the main categories and types of natural and manufactured timbers including: • medium density fibreboard (MDF) • plywood • chipboard.	**Design strategies** Students should understand how different strategies can be applied, including: • **collaboration** • **user centred design** • systems approach • iterative design	**Non-Exam Assessment – NEA** Students should know and understand how to evaluate prototypes and be able to: • reflect critically, responding to feedback when evaluating their own prototypes

			• suggest modifications to improve them through inception and manufacture • assess if prototypes are fit for purpose.
Important events	HW – Complete the worksheet provided https://www.technologystudent.com/designpro/mboard1.htm		
Week 6	**Materials and their working properties** Students should know and understand the main categories and types of metals and alloys including: • low carbon steel • cast Iron • high carbon/tool steel	**Design strategies - continued** Students should understand how different strategies can be applied, including: • collaboration • user centred design • **systems approach** • **iterative design** • avoiding design fixation.	**Non-Exam Assessment – NEA** Students should know and understand how to evaluate prototypes and be able to: • reflect critically, responding to feedback when evaluating their own prototypes • suggest modifications to improve them through inception and manufacture • assess if prototypes are fit for purpose.

Important events	HW – Complete the worksheet provided https://www.technologystudent.com/joints/iron1.html		
Week 7	Students should know and understand the main categories and types of metals and alloys including: • aluminium • copper • tin • zinc	**Design strategies - continued** Students should understand how different strategies can be applied, including: • collaboration • user centred design • systems approach • iterative design • **avoiding design fixation.**	**Non-Exam Assessment – NEA** Students should know and understand how to evaluate prototypes and be able to: • reflect critically, responding to feedback when evaluating their own prototypes • suggest modifications to improve them through inception and manufacture • assess if prototypes are fit for purpose.
Important events	HW – Complete the worksheet provided https://www.technologystudent.com/despro_3/aluminium1.html		