

Subject	Year	Term	Lesson	Topics	Subject Learning Checklist	H/W
Design & Technology	Year 9	Term 1 One lesson a fortnight	1	Introduction to the subject. Highlight the importance of DT in careers. H&S in the workshop tasks	About the projects, what D&T is, in school and careers. Show the workshop, identify machinery and H&S issues	
			2	Baseline Assessment (Design ideas for project can be start on once assessment has been completed)	Students are tested to determine what ability they are current showing.	Images for design ideas
			3	Novelty Door Wedge project. Introduce and highlight the marking criteria. Design ideas to be completed and a final design to be decided on.	Students are to understand how grades are awarded throughout this project. They also learn how to sketch out ideas using graphical techniques.	Final Design
			4	Issue students the material and begin the marking out process on the pine wood. They are to also draw their final design on the piece of MDF	Students learn how to measure and mark out on materials and how to begin cutting and shaping material Students learn how to use certain machine and tools safely and correctly.	
			5	Students continue with the cutting and shaping of the materials. Introduce and demo the use of coping & scroll saws, mortise machine and disc sander.	Students learn how to use certain machine and tools safely and correctly.	Definition of key words – set one
			6	Continuation of practical tasks. Introduce painting element of the project.	Students learn how to paint sensibly and how to tidy up afterwards while students continue using certain machine and tools safely and correctly.	
			7	Students should be completing the majority of the practical tasks. Ensure components are smooth well and painting is completed	Students learn how to paint sensibly and how to tidy up afterwards while students continue using certain machine and tools safely and correctly.	Definition of key words – set two
			8	Evaluation of the practical outcome. Production plan explained and undertaken.	Students discover the importance of reflecting on their work. Also, a chance to complete any outstanding work before submitting booklets for marking	

			Term 2	9	Introduction to the project: Mechanical toy. Highlight the marking criteria and marking policy. Introduce movement and motion. Show video on CAMs and introduce CAMs task.	Students are taught the 4 different motions and consider where these are found. Students are also introduced to CAMs and how different shapes can result in a different movement.	Mechanisms worksheet.
				10	Design Situation and brief explained and task. Task analysis of the project. Design ideas criteria explained and issued	Students learn how to respond to a design situation and create a brief. This is followed up by undertaking a Task Analysis to help consider the factors involved in the project. Students can begin designing their ideas for the m.toy.	Final Design
				11	Design ideas to be completed and final design to be considered	Students should complete their design ideas, with annotation. Final design to be undertaken.	
				12	Final design completed. The purpose of modelling and prototyping	Students learn the importance of modelling and produce a prototype of their intended outcome once their final design has been completed	Coping Saw worksheet
				13	Health and Safety factors and rules discuss. Material issued and students begin cutting out.	Students are to remember the safety rules when working in the workshop. Teacher demonstrates how to cut wooden components safely, using a vice and coping saw.	
			Term 3	14	Continue practical tasks.	Reminder of H&S issues. Demo filing and smoothing (sandpaper) wooden components.	Pillar Drill worksheet
				15	Continue practical tasks. Introduce Pillar drill.	Reminder of H&S issues. Demo using pillar drill for moving parts.	
				16	Complete any cutting, shaping tasks. Introduce painting element. Gluing of spacers on back piece	Instruct students how to sensibly paint their wooden components. Demo gluing of spacers on the back piece.	Woods research
				17	Last lesson for any practical tasks. Extension: Plastic handle to be attached to the string	Demo shaping plastic handle using strip heater and forming.	
				18	Evaluation of the project. Production plan exercise.	Students are to evaluate their work. Also they are to explain the steps undertaken in the production plan.	Revise for test
				19	Test on mechanisms. Extension: Advert poster	Students are to display their knowledge of mechanisms and the skills they have learnt over the year.	