Date:	20/5/24	Subject:	FURNISHINGS	Topic:	LED LAMP BASE
Year Level:	9	Lesson/s	P1	Room:	W01

Curriculum descriptor: Analyse and make judgements on how characteristics and properties of materials, systems, components, tools and equipment can be combined to create designed solutions (AC9TDE10K06)	**Materials/Resources:** Sample Bases, Shape Diagram. Hand tools.
Learning goal/s: identifying appropriate tools, equipment, techniques and safety procedures for each process and evaluating production processes for accuracy, quality, safety and efficiency.	**Success Criteria:** Students mark, cut drill and start gluing their base.

Project/ Lesson Name:	LED LAMP	Lesson Duration:	70 mins

Time (mins)	Headings/ Teaching strategy		Content	Resources and ICT	Adjustments for needs of diverse learners
0.25	1. Orientation	**SET EXPECTATIONS**	Continue cutting LED Lamp base.		
0.5		**LESSON OUTLINE**	This lesson: Cut LED Lamp base and prep for assembling.		
0.25		**CHECK FOR UNDERSTANDING**	Recap expectations and lesson outline.		

8	2. Body	**WHAT DOES SUCCESS LOOK LIKE?**
		
		TODAYS QUESTION:
		Describe the steps you would need to take to ensure tight, precise joints that require little or no adhesive or fasteners.
			EXPECTATIONS:
			- Continue to cut joints.
			- Mark out and drill base.
			- Start Assembly.
			
			RECAP:
			- OnGuard for soldering iron needs to be completed. (**Confirm students have access).**
			- Acrylic file can be uploaded in Teams assignment. (**Thankyou Kathy, Tayha, Emily & Cooper**) (**Confirm Students understand image creation process**)
			- Ensure these are on students laptops.
			  ○ Adobe Illustrator.
			  ○ Teams.
			  ○ Email.
			  ○ *If you have trouble – go to IT in the library and sort it out.*
			- Marking out hole for switch.
			- Taping and gluing timbers together.
			-
			
			DEMO:
			
			Set up:
			- *Mitre saws.*
			- *Drill press.*
			- *Sample joints and bases.*
				Laptop, Assessment workbook. Sample Joints.	Ensure all students can see and hear demonstration.
					
					Dimensioned drawings on the whiteboard.
					
					Models, Plans and templates made available.
					
					Assist DJ & Today's question on whiteboard.

1	3. Ending	**RECAP. LINK NEXT LESSON.** **QUOTE OF THE DAY.**	Recap expectations VS complete. Next lesson - finish **THE GREATEST PRISON PEOPLE LIVE IN, IS THE FEAR OF WHAT OTHER PEOPLE THINK.**		

High Order questions:

- What factors did you consider when selecting the specific polygon shape for your lamp base? Explain your design choices.
- How does the number of sides in your chosen polygon impact the difficulty of creating precise mitred, dovetail, or pin joints?
- If you needed to adjust the dimensions of your base to accommodate different acrylic sheet sizes, what geometric calculations would you need to perform?
- Imagine you wanted to incorporate an additional material, like metal or glass, into your lamp design. How might you need to modify the joinery techniques for the base?
- From a structural standpoint, which joinery method (mitres, dovetails, or pins) do you think will produce the strongest and most durable base? Support your reasoning.
- If you needed to mass-produce these lamp bases, what manufacturing considerations would you need to account for regarding materials, joinery, and assembly?
- How might you test the load-bearing capabilities of the different joinery options before final assembly to ensure the lamp base can support the weighted acrylic top?
- Describe the steps you would need to take to ensure tight, precise joints that require little or no adhesive or fasteners.
- If you wanted to create a curved or compound angle base, how would you need to adjust your layout and cutting procedures?
- From a design perspective, how do the joinery options impact the aesthetic look and feel of the finished lamp base?

Reflection/ Supervisors Comments: