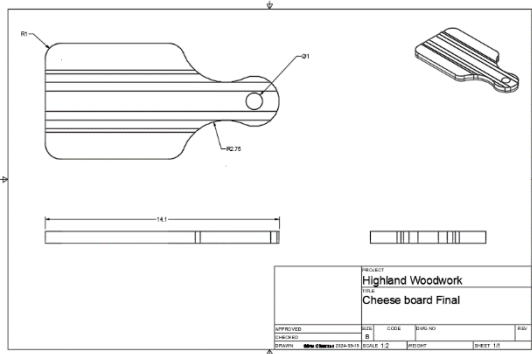
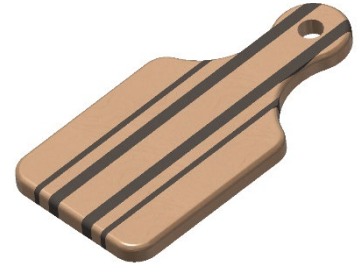




Student Designed Laminated Project

Name: _____

- Design your laminated project in Fusion. Follow the video tutorials on how to draw it in 3D and produce a 2D working drawing that you will use. You **MUST** have a minimum of 4 pieces of wood.
- Complete a Bill of Materials as shown by your teacher.
- Have both your drawing and the Bill of Materials approved by the teacher by having it initialled. **DO NOT** lose the drawing as it becomes part of your mark later and is used for measuring.



Project Bill Of Materials and Cost Sheet										
ROUGH SIZE CALCULATIONS ADDED ARE: THICKNESS 1" OR 2" WIDTH +1/2" LENGTH +1"										
DATE	BOOK	PROJECT	TITLE	SCALE	MR. CLASSIFY	DATE				
Part	Name of Part	Finished Size	Material	Rough Thickness	Rough Size Calculations	Quantity	Unit Price	Total Price	Cost	
1	Number Required	Thickness	Width	Length	Notes (Material from Boardroom)	Notes (1" or 2")	Quantity	Unit Price	Total Price	Cost
A	7	Outside	0.75	7.5	1" Cherry	1	0.54	\$4.00	\$3.17	
B	1	Inside	0.75	8	1" Black Walnut	1	0.14	\$10.00	\$1.35	
Fraction/Decimal Equivalents:							HANDMADE SPECIAL MATERIALS:			
1/8 = .125							Total Cost			
1/4 = .25							PAID			
3/8 = .375							CHECKED AND APPROVED BY:			
1/2 = .5										

- Add the **FINISHED & ROUGH SIZES** of each piece of wood in the Table below (Minimum 4 pieces)

ROUGH SIZE OF EACH PIECE OF WOOD MUST BE AS FOLLOWS;

Thickness: must be close to 1 inch
 Width: oversize by 1/4" to 1/2 inch
 Length: oversize by 1/2" to 1 inches

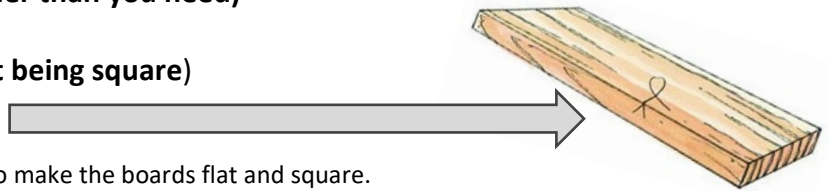
Item	Qty	Name	Material	FINISHED SIZE (thick x width x length)	ROUGH SIZE (thick x width x length)

- Go to the short ends bin **FIRST** and select your wood if possible. Only after you **CANNOT** find a piece of wood in the short ends bin and you have **ASKED** the teacher, can you take from the main wood pile.
- Layout the size of wood you require on the wood you have chosen and have the teacher check it. **ONLY** after the teacher has checked it do you proceed.
- Using the Mitre Saw, cut to **ROUGH LENGTH** the pieces you need. Rough Length is: _____
REMEMBER – it is 1/2" to 1" longer than your final length.

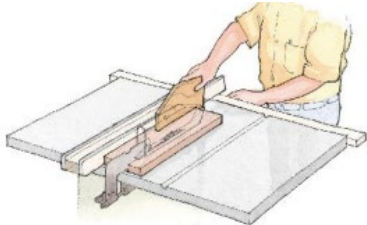
8. If necessary, go to the table saw and rip any extra wood and return it to the short ends bin.
(Do this if the board is more than 1" wider than you need)

9. On all pieces, use the jointer (**check for it being square**)

- Joint a **FACE SIDE** (and mark it)
- Joint a **FACE EDGE** (and mark it)
- Go over the wood as few times as possible to make the boards flat and square.



10. Rip ALL pieces on the Table Saw to final width(s).



Item	Final width of pieces

11. Dry clamp the pieces together (Look at the diagram below for gluing correctly)

- Clamp **ALL face sides** on the same side and as even as possible.
- If there are any gaps between the pieces, go back to the jointer.
- have it checked by the teacher.



12. Glue the project together (Use damp paper towel to remove excess glue)

- If it will contact water, use the waterproof glue!

13. After it has dried (next class), if any glue remains use a scrapper or chisel to remove it.

- clamp the project to bench.
- If using a chisel, push it **AWAY FROM YOU** with your hands behind the blade!!

14. Plane to thickness (If it is NOT FLAT, see the instructor)

- put the **face side down first** and plane the opposite side smooth.
- flip the board over and plane the face side smooth.
- try and keep the board as thick as possible.

15. Using the **Crosscut Table saw** or **Mitre saw**, cut one end square and mark it. Final Length is: _____
 Then, cut to final length.

16. Re-create the shape of your cutting board by cutting it out one of the following ways;

- go back to your computer and proceed to setup the CNC router to cut the shape out.
- use the Band Saw to cut the corners round then Belt Sand

17. Do any other operations such as drilling holes or routing the edges.

18. Sand your project starting with 80. Continue with 120, 180 and 220 grits. Don't forget the end grain!

19. Apply a finish.

- 2 coats of mineral oil if the project is to be used as a cutting board (1 per day)
- 3 coats of water-based stain with a brush (1 coat per day). Sand with 400 in between coats.

20. Complete an evaluation sheet and submit for marking (include you Drawing & Bill of Materials).