Cambridge Springs

Tech. Ed.

Wood Manuf.

**Cutting Board Procedures**

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| **Power Tools:** * Table saw
* Jointer
* Planer
* Miter saw
* Belt Sander
* Router
* Drill Press
* Palm sander
 | **Hand Tools:*** Pipe Clamps
* Glue scraper
* Paint brush (Clean and sanitary!)
* Scrap cardboard (to evenly spread glue)
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| **Materials needed:*** Mineral oil (Food Safe!) $12/bottle
* Titebond III wood glue $3.80/4oz bottle
* 4 Button Plugs $2.52/12
* Wood - (food safe!)
	+ Cherry - $4.95/B.F.
	+ Ash - $2.80/B.F.
	+ Walnut - $7.95/B.F.
	+ Maple - $3.40/B.F.
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**The teacher will give a demo on each step for safety purposes!**

1. Preview the wood for colors
2. Create a quick sketch drawing on graph paper of how you want your cutting board to look unless it is going to be all of one wood and not mixed.
3. Complete a Bill of materials to calculate the cost of the Cutting board
	1. Rough dimensions of the cutting board are: 18 x 1-1/4 x 12 inches
	2. Final size will be about 15 x 12 x 1 inch
4. Cut the boards off to 18” long while avoiding knots in the wood or other major imperfections
5. Plane the boards so they are all the same thickness and have minor imperfections removed
6. Jointer and mark the best edges of the board
7. Rip cut the boards to 1-1/4 while keeping the jointered edge against the guide
8. Arrange the boards into desired pattern with 1-1/2 being the board thickness and the faces touching each other
9. Lay the boards flat on the faces and glue the sides. Use a piece of cardboard to ensure even coverage on the board faces. Do not glue the two outside faces of the cutting board. It is easiest if you do NOT wipe the glue!
10. Once all the sides are glued and stuck together, align them as best as possible on the ends and the heights. Then use the pipe clamps to squeeze them together to remove any air bubbles and ensure they are glued tight
11. After the glue is dry, unclamp the boards and use the glue scraper to remove ALL the glue. Glue in a planer is like nails!
12. Plane the sides flat and remove imperfections (1” thickness is an estimate)
13. Cross Cut the ends so they are the same length. (15” is an estimate)
14. Trace the round washer on the corners and sand them to remove the sharp corner
15. Router all the edges with the round over bit
16. Mark the holes for the feet on the least desirable side and drill them out
17. Sand the board all over so the imperfections that can trap bacteria are removed.
18. Install the feet
19. Oil the cutting board all over. Be sure to continue to oil until the boards no longer absorb the oil. This will be a long tedious task, but it is better to absorb oil than bacteria and water!
20. Wrap the board up so it can be taken home after teacher inspection and grading.
21. Turn in your project and the Bill of Materials worksheet for grading