



Spark Makerspace Woodshop Class: Kentucky Stick Chair

Students will cut and drill parts to create a folding chair, commonly called a Kentucky Stick Chair. The chair, made out of cedar, is ideal for sitting on a porch or at the beach on a summer day. Students will spend the day laying out, cutting, and drilling more than 40 parts to make the complete chair.

Materials Required:

- (6) Cedar strips, 1-1/16 x 1-1/2 x 96 inch
- (1) 1/4-20 all-thread, 10 feet long, cut into quarters
- (16) 1/4-20 hex nuts
- (8) 1/4 washers

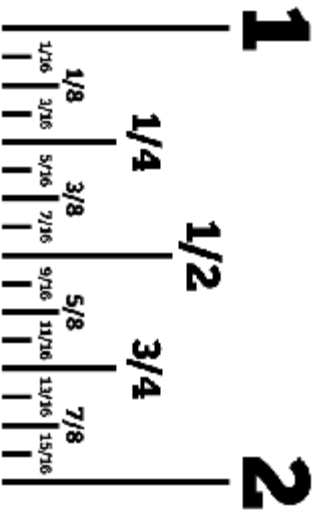
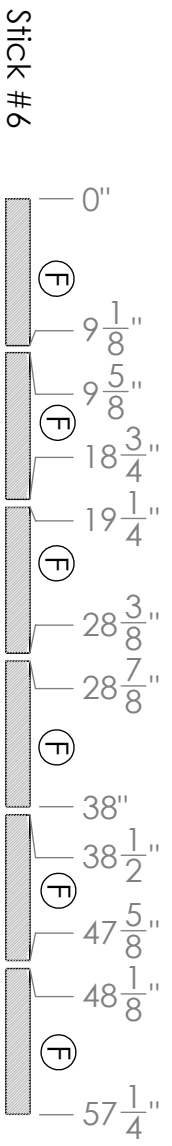
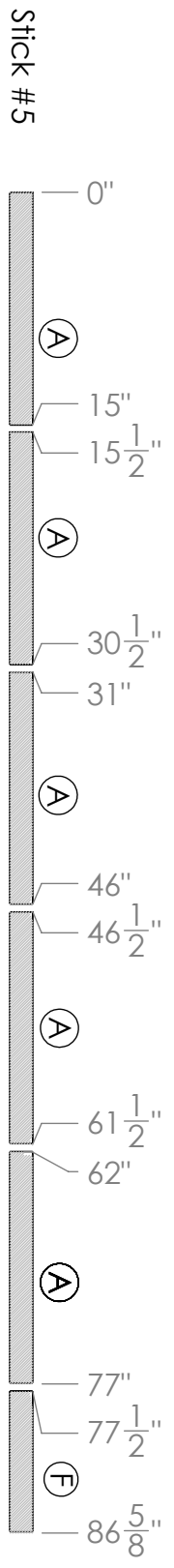
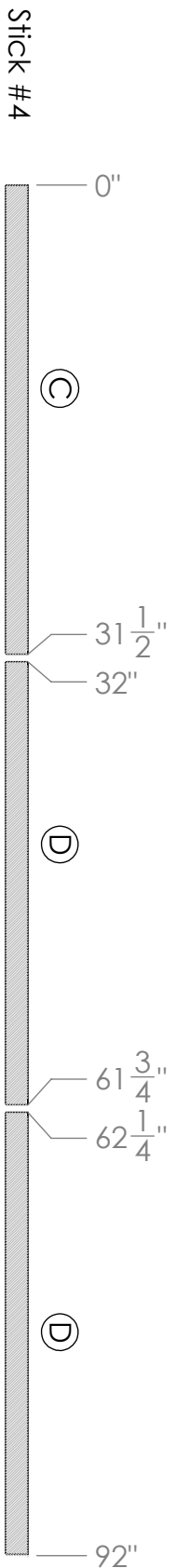
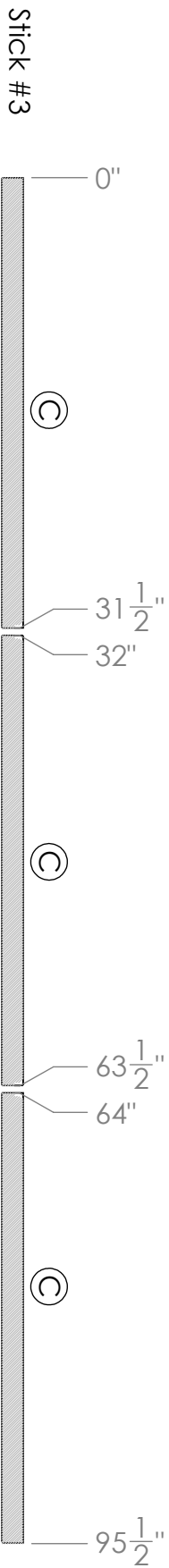
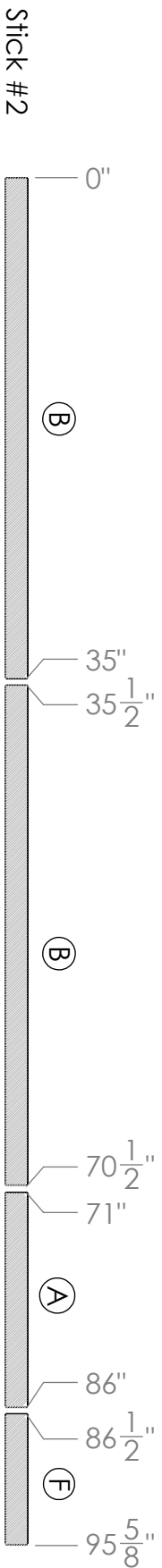
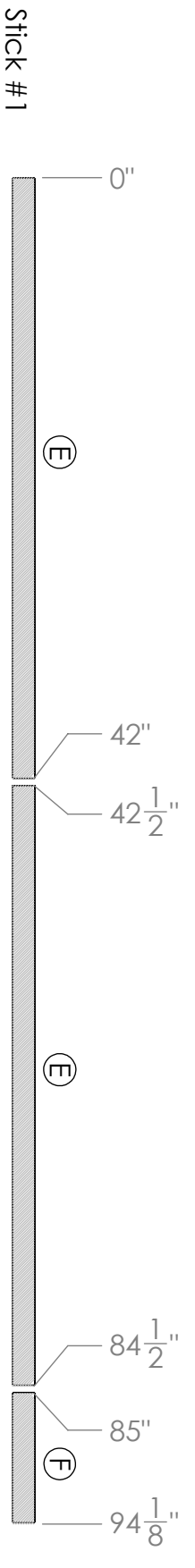
Tools Used:

- Measuring Tape
- Router with 1/8" radius roundover
- Chop saw
- Drill press with 5/16" bit
- 7/16" wrenches
- Hack saw or bolt cutter
- File or angle grinder

Project Outline:

1. Route long edges of cedar strips
2. Measure and mark strips as shown on Stick Cut List sheet
3. Cut all strips
4. Mark hole locations as shown on Hole Locations sheet
5. Route cut ends of strips
6. Drill holes (may be done before routing ends)
7. Align boards as shown on Seat / Back sheet
8. Insert all-thread at locations 1 and 2.
9. Insert all-thread at location 3.
10. Keeping assembly loose, add washers and nuts to end of all-thread.
11. With the seat assembly laying flat on the table or floor, move the back assembly onto the top.
12. Interlace the free ends of the F sticks with the back assembly, and insert all-thread at location 4.
13. Gradually tighten nuts in all locations until the chair matches the demonstration chair.
14. Add a second nut to all locations
15. Use wrenches to lock nuts against each other.
16. Remove excess all-thread and file ends smooth.

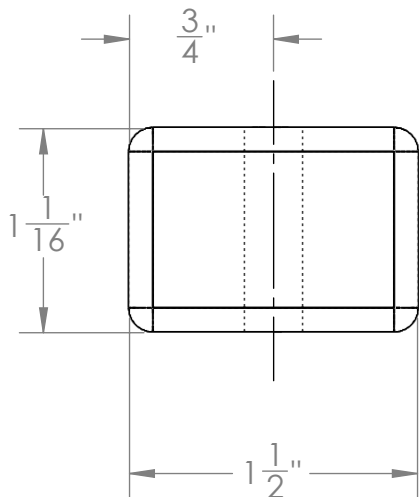
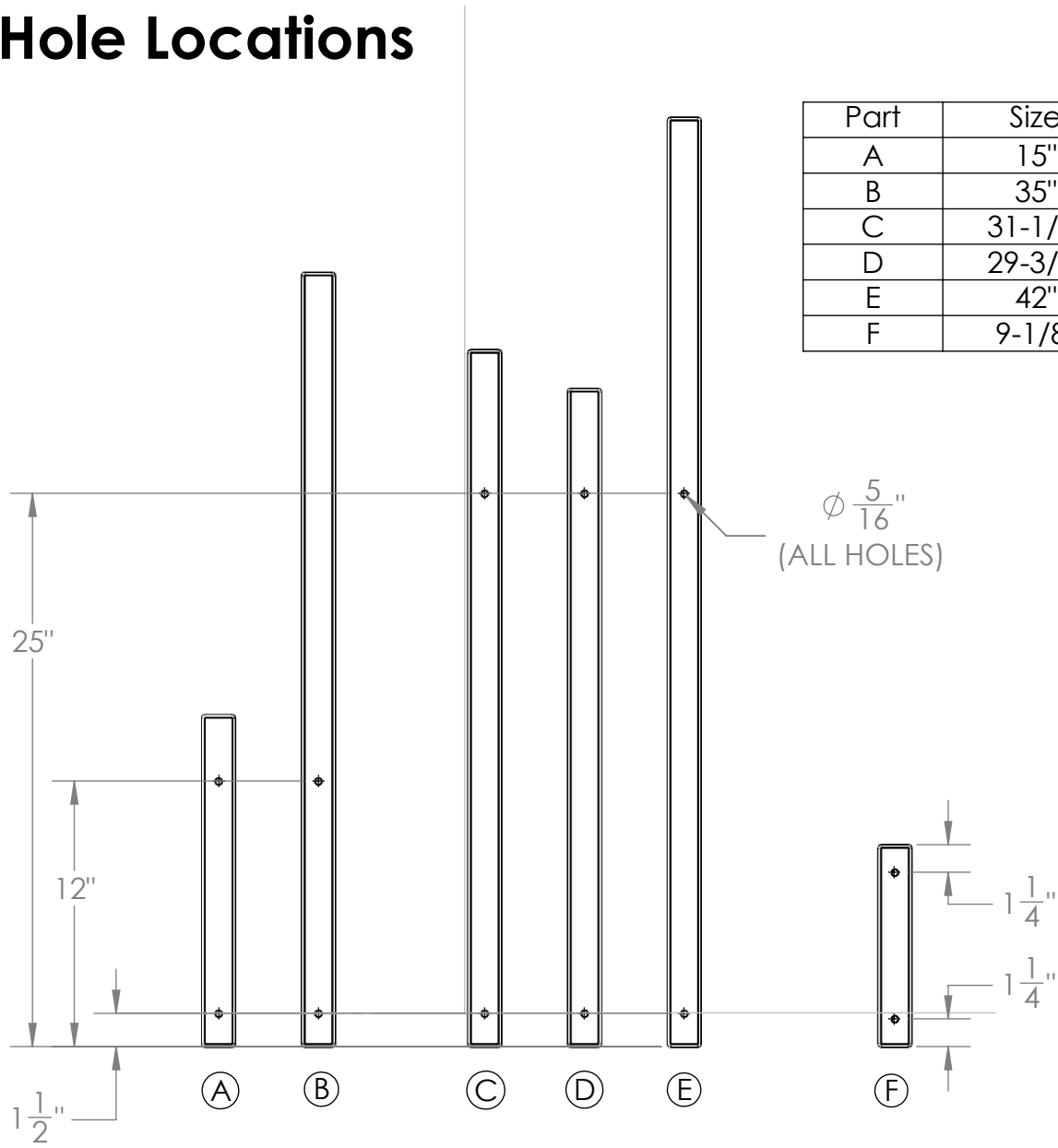
***Finishing:** Cedar can be left outdoors with no additional finishing, though it will turn grey over several years. To maintain the existing color, products intended for cedar decking may be applied. A dab of paint on the ends of the threaded parts will reduce rust formation.*



Stick Cut List

Hole Locations

Part	Size	Qty
A	15"	6
B	35"	2
C	31-1/2"	4
D	29-3/4"	2
E	42"	2
F	9-1/8"	9



5/16-inch holes drilled in the center of the larger face of each piece

