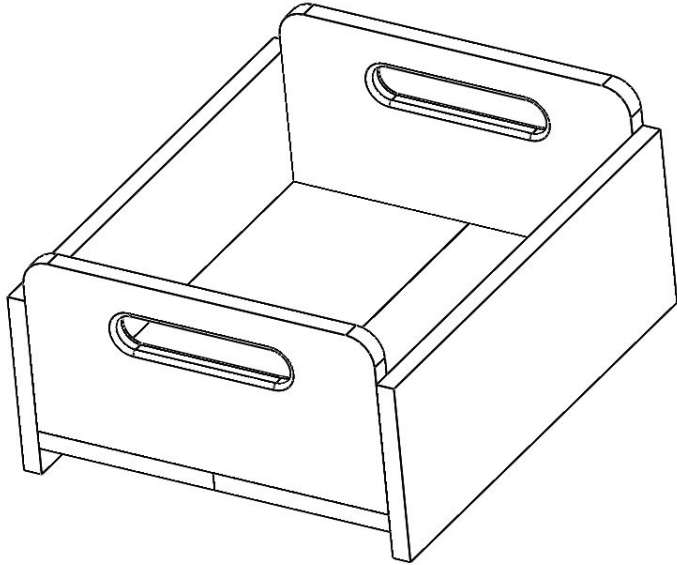




Spark Makerspace Woodshop Class: One Day Certification Crate

This intensive one-day introduction to the woodshop starts with two pieces of rough-cut fir and ends with a light-duty wooden crate for the student to take home. Students will then receive safety instructions, operation guidance, and usage certification for the tools listed below.



Materials Required:

- 2x6x48 board (this will be resawn prior to class into two boards approximately $\frac{3}{4}$ " thick)
- Wood glue

Tools Used:

- Measuring Tape
- Jointer
- Planer
- Table Saw
- Miter (chop) saw
- Drill Press (1" bit)
- Portable jigsaw
- Bandsaw
- Router with $\frac{1}{8}$ " radius roundover
- Portable sander
- Air tools
- Cordless drill

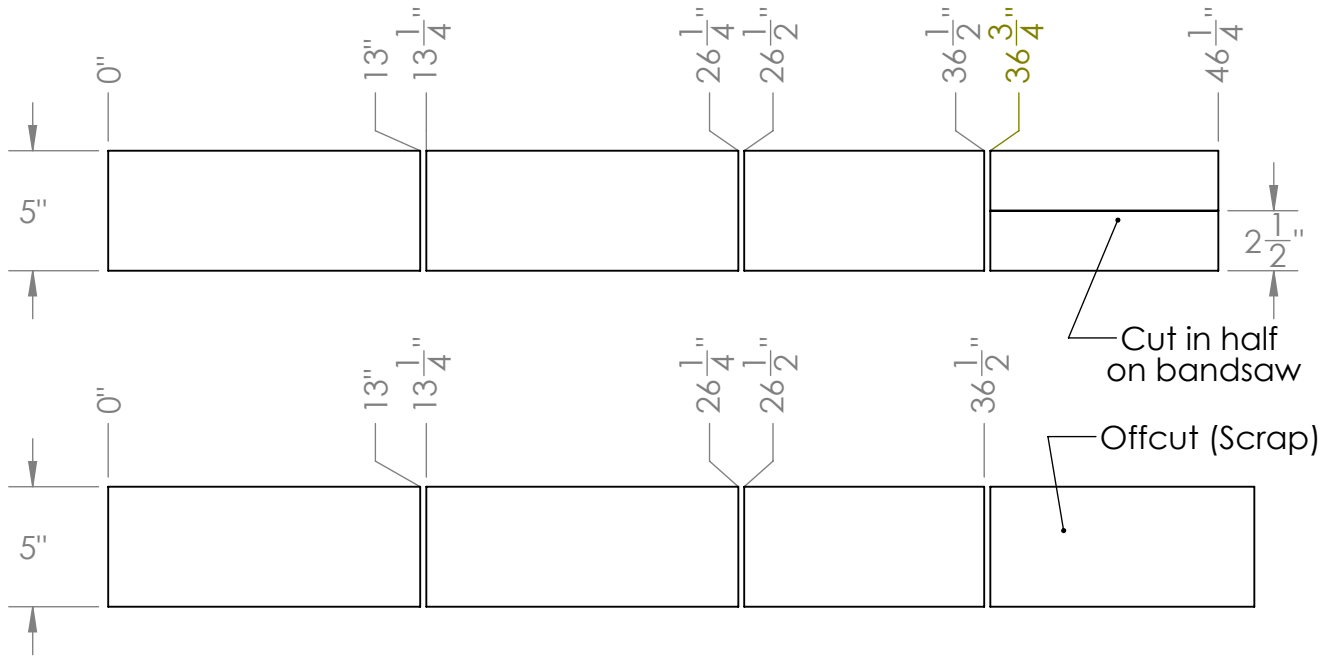
CLASS OUTLINE:

- 1) Access General Orientation
- 2) Jointer
 - a) Create wide flat face
 - b) Create flat, perpendicular edge
- 3) Planer
 - a) Create parallel flat faces
 - b) Reduce stock to correct thickness
- 4) Table saw
 - a) Create parallel edges
 - b) Reduce stock to correct width
- 5) Miter saw
 - a) Layout cuts per drawing
 - b) Cut parts to length
- 6) Drill press
 - a) Create holes for slots
- 7) Bandsaw
 - a) Round over corners
 - b) Split short piece
- 8) Jigsaw
 - a) Connect holes into slots
- 9) Portable Sander
 - a) Smooth edges and faces
- 10) Router
 - a) Round over slots and grip surface of ends
- 11) Pneumatic (air) tools
 - a) Apply glue
 - b) Pin critical connections
- 12) Portable Drill
 - a) Pre-drill nail holes for final assembly

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TAKE RAW STOCK TO 5" WIDTH, 1/2" THICK, 48" LONG THEN MARK FOR FOLLOWING CUTS:



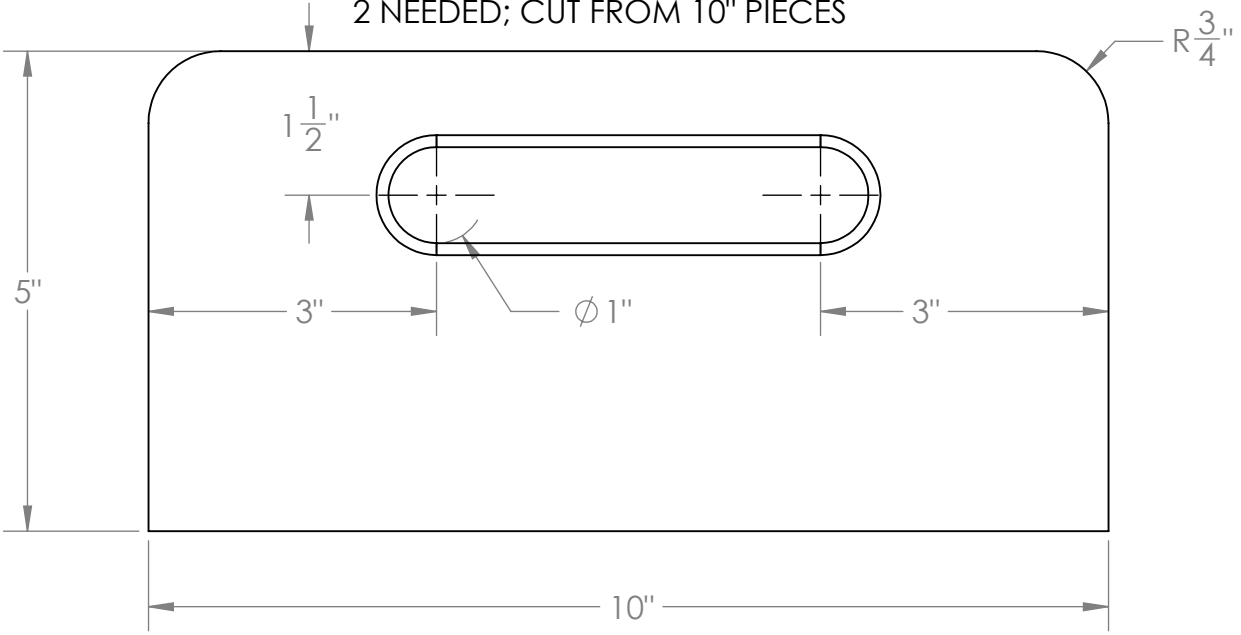
B

B

A

A

ENDS
2 NEEDED; CUT FROM 10" PIECES



SPARK MAKERSPACE

One Day Cert Crate
Piece Measurements

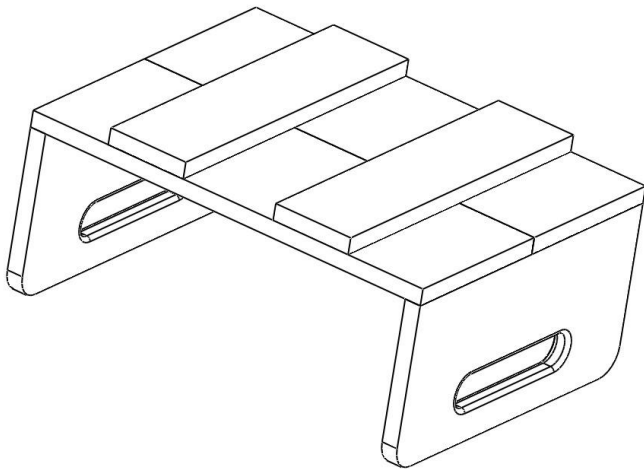
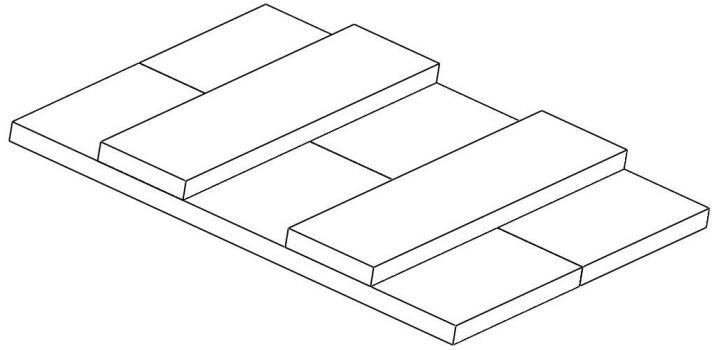
SIZE A	DWG. NO. Crate Parts	REV.
SCALE:1:12	WEIGHT:	SHEET 1 OF 1

2

1

Assembly

Bottom: Use the two narrow 10-inch boards to join two 13-inch boards. Use 3/4-inch pin nails, and glue all joints.



Ends: Use 1-1/4 inch pin nails and glue to assemble the ends onto the bottom. This is usually easiest with the crate upside down.

Sides: Flip the crate right-side-up, and place the narrow bottom supports on top of the offcut piece. Use glue and 1-1/4 inch pin nails to install the sides. The sides should extend approximately 1/2 inch lower than the bottom supports.

Hammer wire nails into all joints for reinforcement.

