

A Closer Look

Wood Science

YANR-8c

ALABAMA COOPERATIVE EXTENSION SYSTEM / ALABAMA A&M AND AUBURN UNIVERSITIES, ALABAMA 36849-5612

4-H Woodworking Exhibit Plan

CD Rack

Materials Needed

One 6' piece of 1" x 8" (pine or spruce) board
 Number 4 nails
 Sandpaper (80 grit and 210 grit)
 Stain and Varnish

Tools Needed

Pencil Square Handsaw Hammer
 Compass Ruler Coping saw
 Small paintbrush

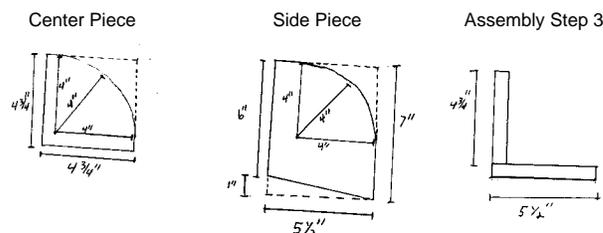
How to Make a CD Rack

1. Cut the 1" x 8" board into two pieces that are 10 $\frac{3}{4}$ " long. Next, rip one of these pieces 4 $\frac{3}{4}$ " wide and the other 5 $\frac{1}{2}$ " wide.
2. Cut two boards 7" long and rip them to 5 $\frac{1}{2}$ " wide. These will be the side pieces.
3. Using one of the two boards from Step 2, mark a point on the side of the board 1" up from the bottom of the board. Draw a line from this point across the board to the corner that is on the same end of the board. Use a handsaw to cut this wedge out. This will be the bottom end of the CD rack. Next, make the 4" curve in the top of the board. Measure and mark a point from longest side of the board down 4" and over 4". This will be the reference point for the compass. Use a compass to draw a 4" curve from the top of the board across to the side of the board. Use a coping saw to cut this curve.
4. Repeat Step 3 on the other 7" board. These boards will be the sides of the CD rack.

5. Cut a new piece 4 $\frac{3}{4}$ " long and rip it 4 $\frac{3}{4}$ " wide. Next, make a 4" curve in this piece. Measure and mark a point from one corner of the board down 4" and over 4". This will be the reference point for the compass. Use a compass to draw a 4" curve from the top of the board across to the side of the board. Use a coping saw to cut this curve. This will be the center piece.

Assembly

1. Sand all surfaces with 80 grit sandpaper and then smooth surfaces with 210 grit sandpaper.
2. Stain and varnish the pieces.
3. Use number 4 nails to nail 5 $\frac{1}{2}$ " wide board on the 4 $\frac{3}{4}$ " board as shown in the diagram.
4. Nail the 4 $\frac{3}{4}$ " wide and 4 $\frac{3}{4}$ " long with the 4" curve in the center of the two 10 $\frac{3}{4}$ " long pieces that were nailed in step 3.
5. Nail the sides onto the rack. Make sure the back and top of the rack is flush with the sides before nailing.



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