

HART™



Puppet Theater

PROJECT PLAN

Finished Dimensions: 37-1/2"W x 43-1/4"H x 24"D

Skill Level: Beginner

Materials

Item	Qty
1" x 12" x 8' Board*	1
1" x 10" x 3' Board*	1
1" x 8" x 8' Board*	2
1" x 3" x 8' Board*	1
#8 1-1/2" Coarse, Phillips Bugle Head Wood Screws	
#8 1-1/4" Coarse, Phillips Bugle Head Wood Screws	
Sand Paper**: 150g, 220g & 320g	
Drill Bits: 3/32"	
6" x 8" Wood Corbels (Click here to Purchase)	2

* Board Dimensions are "nominal". Actual dimensions are smaller due to lumber industry standards. Cuts are actual length.

** Starting grit will depend on board surface condition, a rough surface will require starting with a coarse grit first.

Grit is measured in the coarseness of the particles on the sandpaper. The lower the grit number, the coarser the paper. Heavy sanding would require 60 to 80 grit, medium sanding would require 120 to 220 grit, and finish sanding would require 320 to 400 grit. Super fine sanding would be 600 grit and higher.

A select/premium board or plywood comes with a smoother surface finish. It is clear or has very few tight knots, and it will have straight and sharp edges. This grade of wood pairs well with other boards or panels better and requires less time to sand and finish.

Tools Used



Miter Saw

or



Circular Saw



Drill/Driver



Jig Saw



Orbital Sander



20V 1.5Ah Battery



20V 4.0Ah Battery



Charger



Tape Measure



Drill Bits



Safety Glasses

Also Needed:
Drawing Compass
Clamps

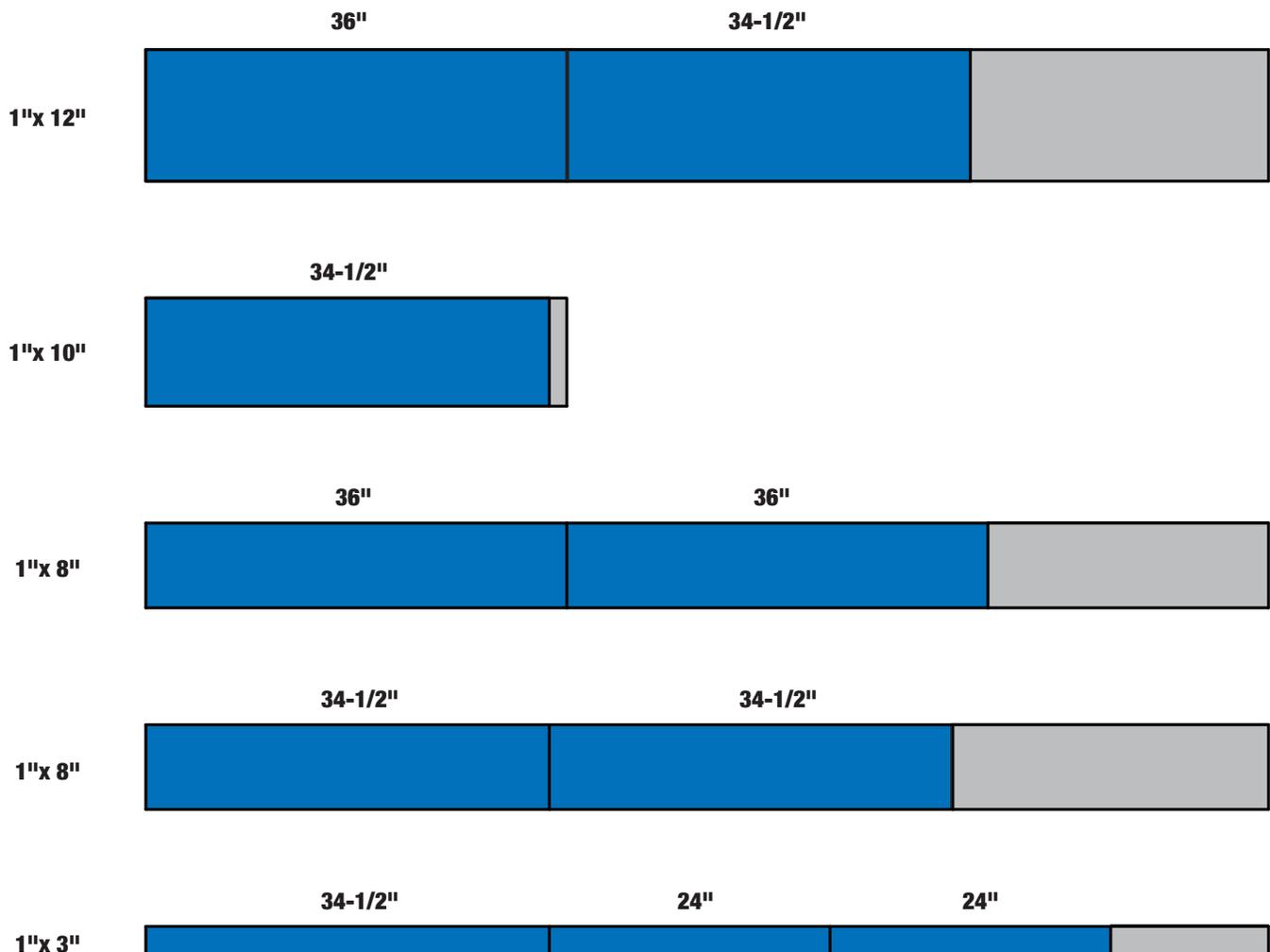
Battery Tip: A 4.0 Ah battery is recommended to be paired with high amp draw tools for maximum efficiency.

Lumber Cut List

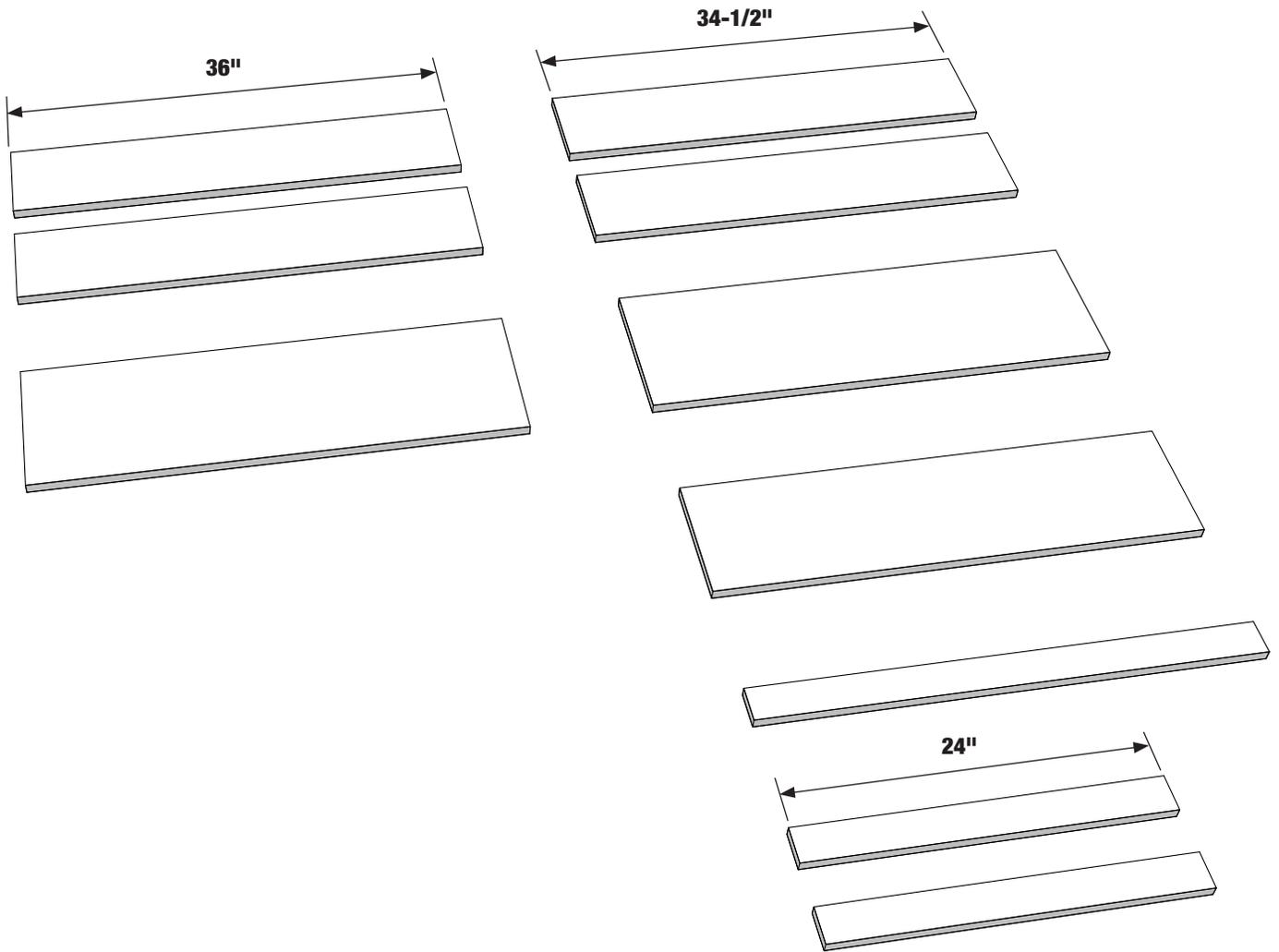
Board*	Description	Cut to	Qty
1" x 12"	Proscenium	36"	1
1" x 12"	Forestage	34-1/2"	1
1" x 10"	Apron	34-1/2"	1
1" x 8"	Sides	36"	2
1" x 8"	Top & Bottom	34-1/2"	2
1" x 3"	Proscenium Support	34-1/2"	1
1" x 3"	Feet	24"	2

* Board dimensions are "nominal." Actual dimensions are smaller due to lumber industry standards. Cuts are actual length.

Lumber & Sheet Layout Guide



Lumber & Sheet Cut Layout Guide



Assembly Instructions

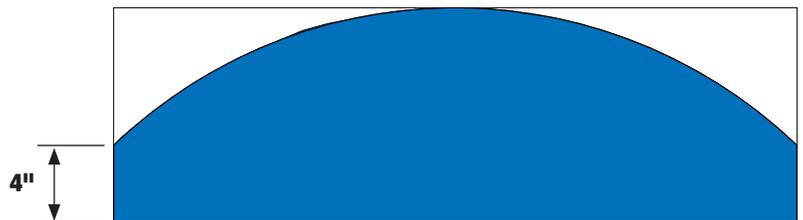
Step 1

Cut out all material using the Lumber & Sheet Cut Layout Guide.



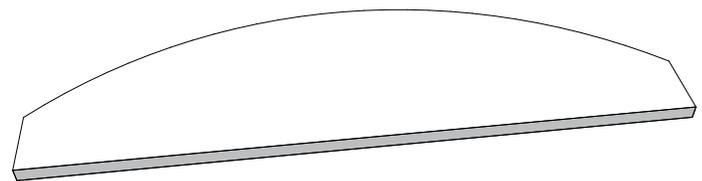
Step 2

To cut the arch for the proscenium (the part of the theater stage in front of the curtain), take the 1" x 12" x 36" board and measure 4" up on both sides. Draw an arc with a 26" radius.



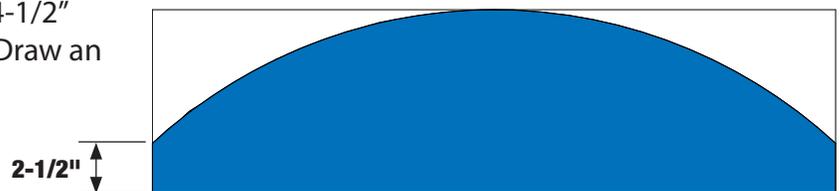
Use a Jigsaw to cut along the arc.

H Tip - An easy way to create the arc is by using a string and a pencil. Create a small loop on one end of the string and place it around the end of the pencil. Hold the other end at the desired length and draw the arc while keeping the string taut.

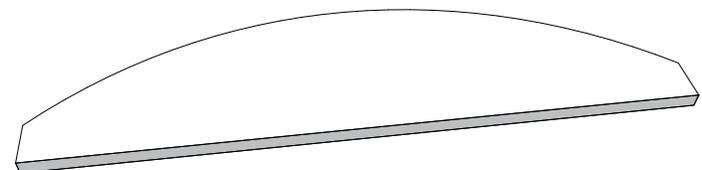


Step 3

To cut the apron (the part of the stage that extends past the proscenium), take the 1" x 10" x 34-1/2" board and measure up 2-1/2" on the side. Draw an arc with a 25-1/4" radius.



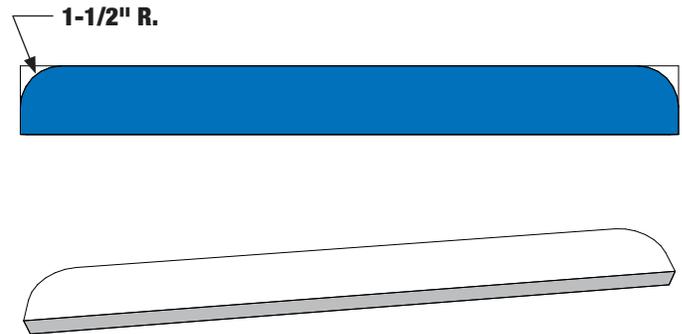
Use a Jigsaw to cut along the arc.



Step 4

Use a drawing compass to mark a 1-1/2" arc on both ends of the (2) 24" feet.

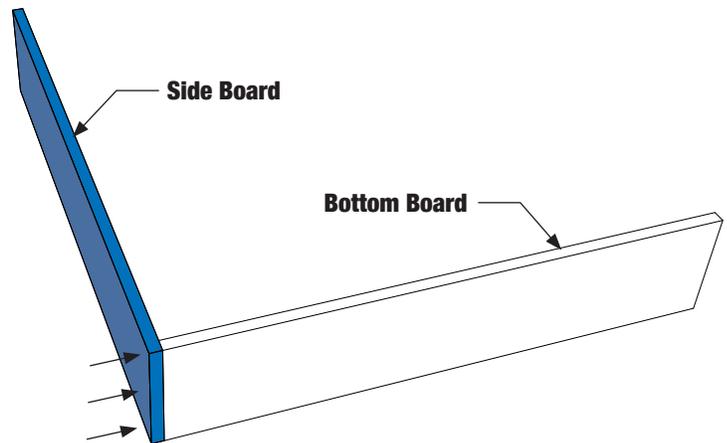
Use the Jigsaw to cut along the marked radius as shown in the diagram.



Step 5

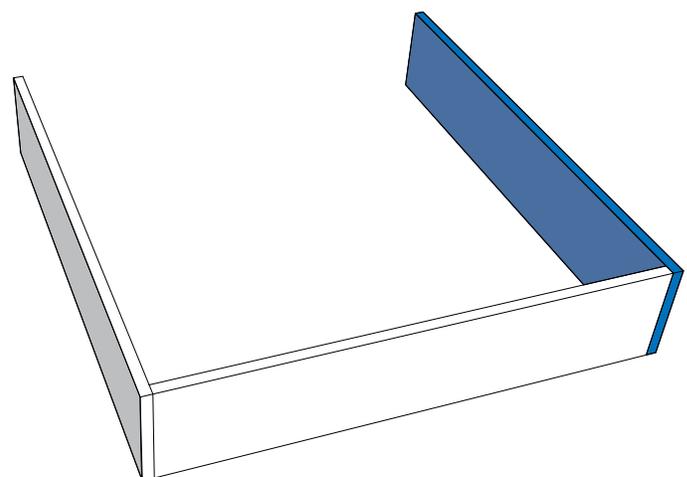
Attach (1) of the 36" side boards to (1) of the 34-1/2" bottom boards using (3) #8 1-1/2" wood screws. All of the theater frame boards will be attached using this method.

H Tip - To prevent the boards from splitting, pre-drill a 1/8" hole where wood screws will be placed.



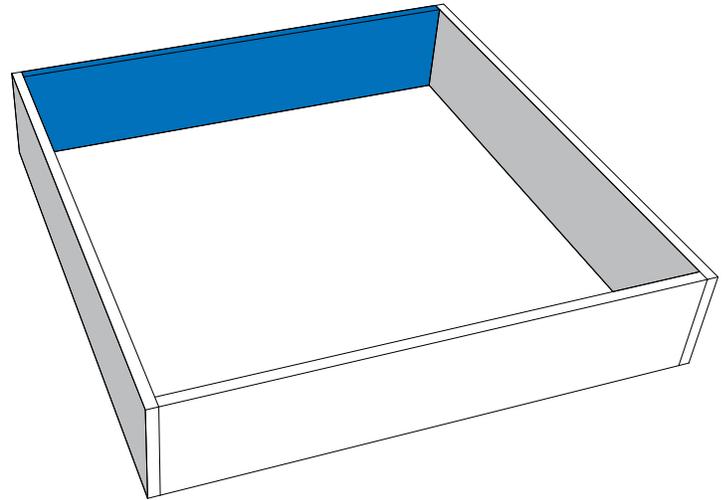
Step 6

Attach the opposite 36" sideboard to the 34-1/2" bottom board.



Step 7

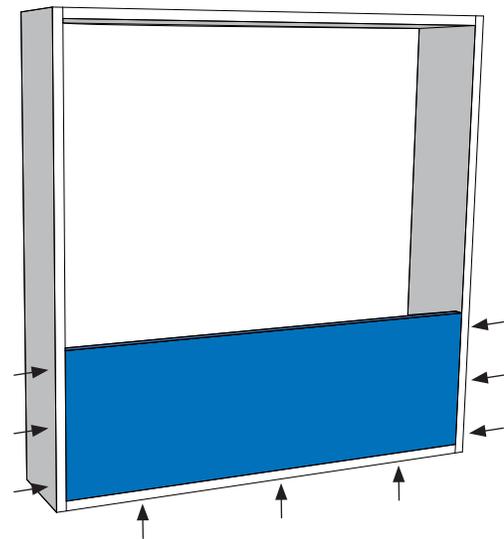
Attach the remaining 34-1/2" top board to the theater frame.



Step 8

Insert the 1" x 12" x 34-1/2" forestage into the sides and bottom. Align the front edges with the forestage so they are even.

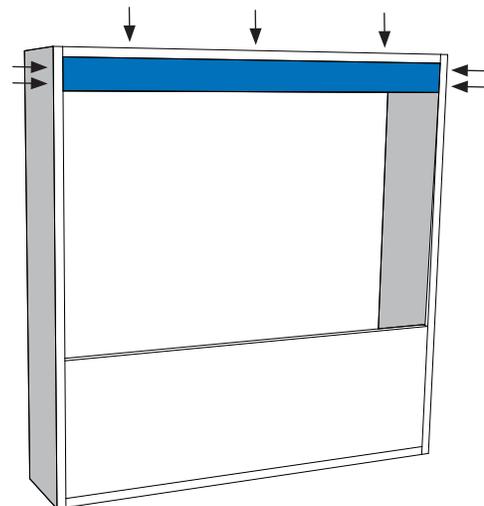
Attach using wood screws.



Step 9

Insert the 34-1/2" proscenium support into the top of the frame and align it to the front edge.

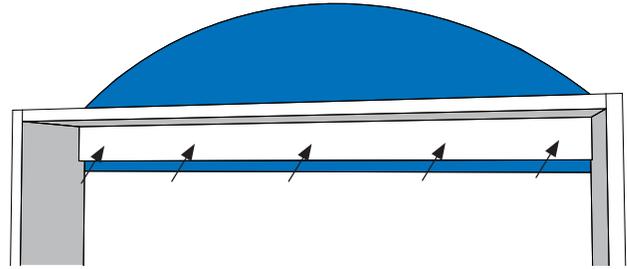
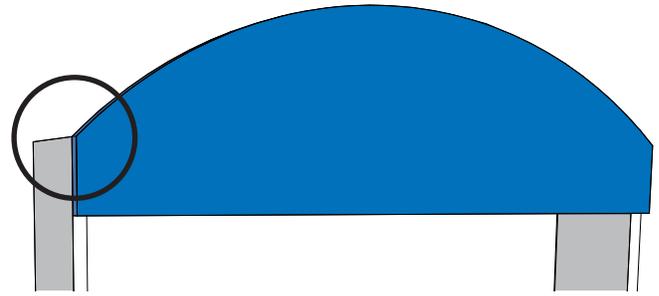
Attach with wood screws.



Step 10

Position the proscenium to the top of the theater frame by aligning the base of the arc to the top corner of the frame.

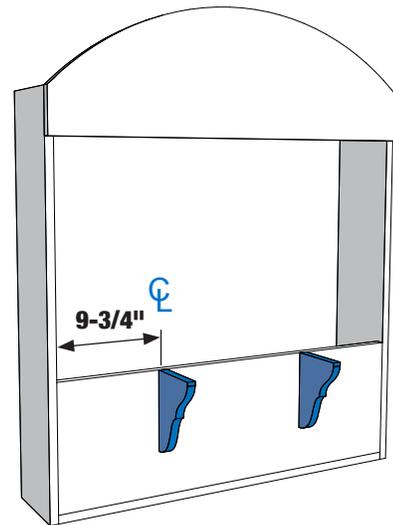
Attach the proscenium by fastening it from the backside with (5) #8-1/4" wood screws.



Step 11

Mark a line 9-3/4" from the each inside edge of the theater frame on the forestage.

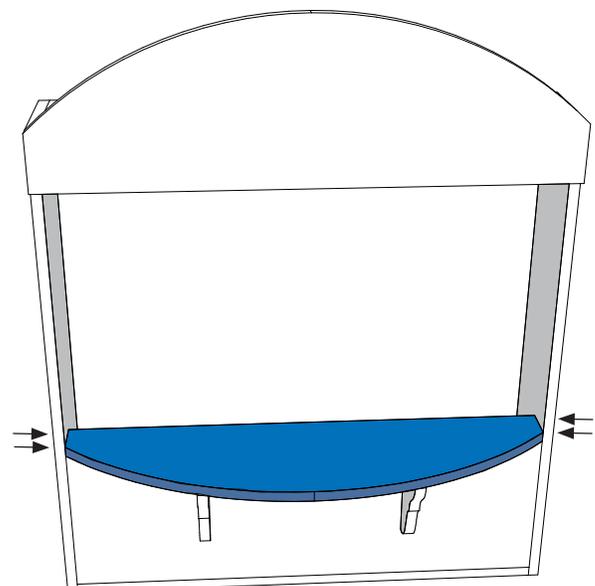
Align the center of the corbels to the line and attach them to the forestage. Make sure they are even with the top edges.



Step 12

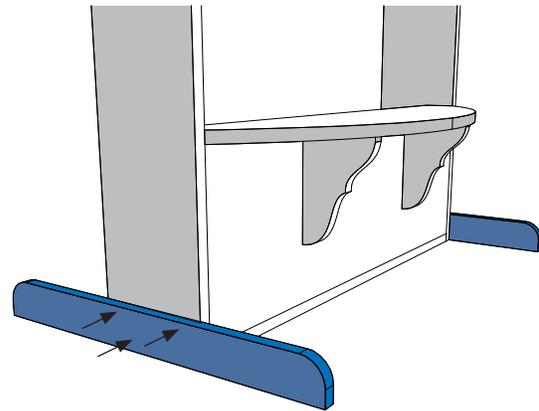
Insert the apron on top of the forestage and corbels. Move the apron back and make sure the arc aligns with the front edge of the theater.

Attach using the #8 1-1/2" wood screws on the sides.



Step 13

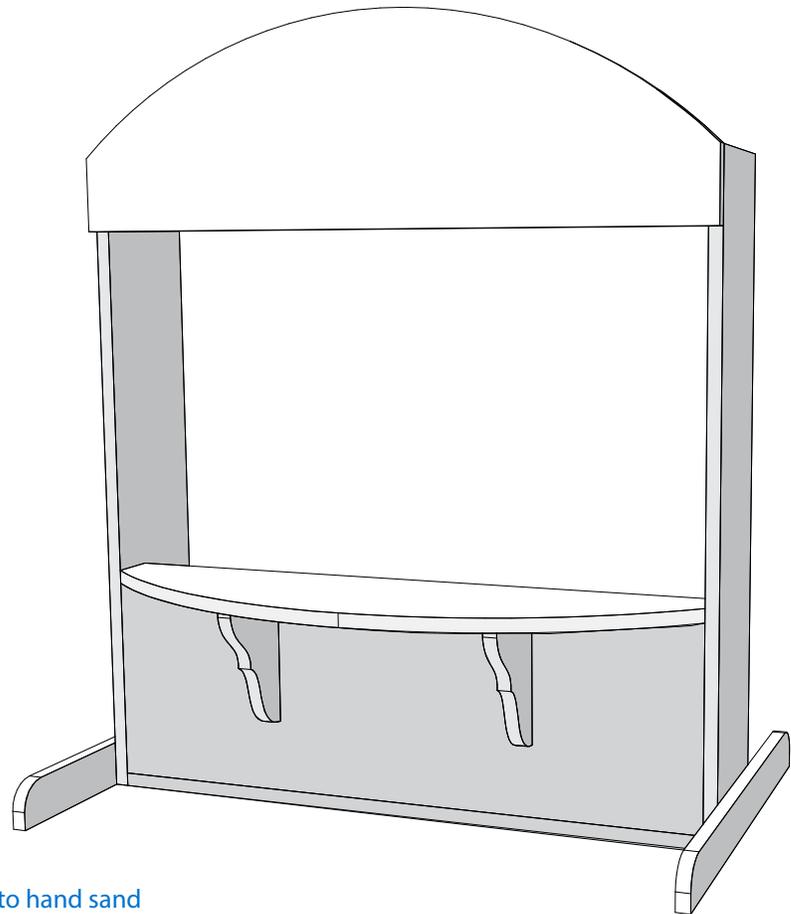
Add the feet to the base of the theater. Make sure to leave equal distance on the front and back. Attach the feet using #8 1-1/4" wood screws.



Step 14

Sand and finish to your desire.

The Puppet Theater is complete and ready for Act 1!



H Rougher finish – Use 60-80 grit sandpaper to hand sand with the grain of the wood.

Smoother finish – Use 60-80 grit sandpaper to remove w & imperfections.

Followed by using 120-220 grit to smooth.

Finish Sanding – Use 320-400 grit sandpaper

Super fine sanding – Use 600+ grit sandpaper

