



Engraved Dreidel

PROJECT PLANS

Finished Dimensions: 3-1/2"W x 5-1/4"H x 3-1/2"D

Skill Level: Beginner

Materials

Item	Qty
4" x 4" x 8' Untreated Kiln- Dried Douglas Fir Post	1
3/4" x 36" Dowel	1
Sandpaper** : 150g, 220g & 320g	
Drill Bits: 3/4"	
Wood Glue	

* 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



Drill Press



Drill/Driver



5" Random Orbit Sander



Tape Measure



Forstner Bit Set



5" Orbit Sandpaper

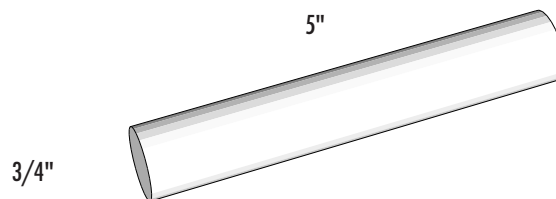
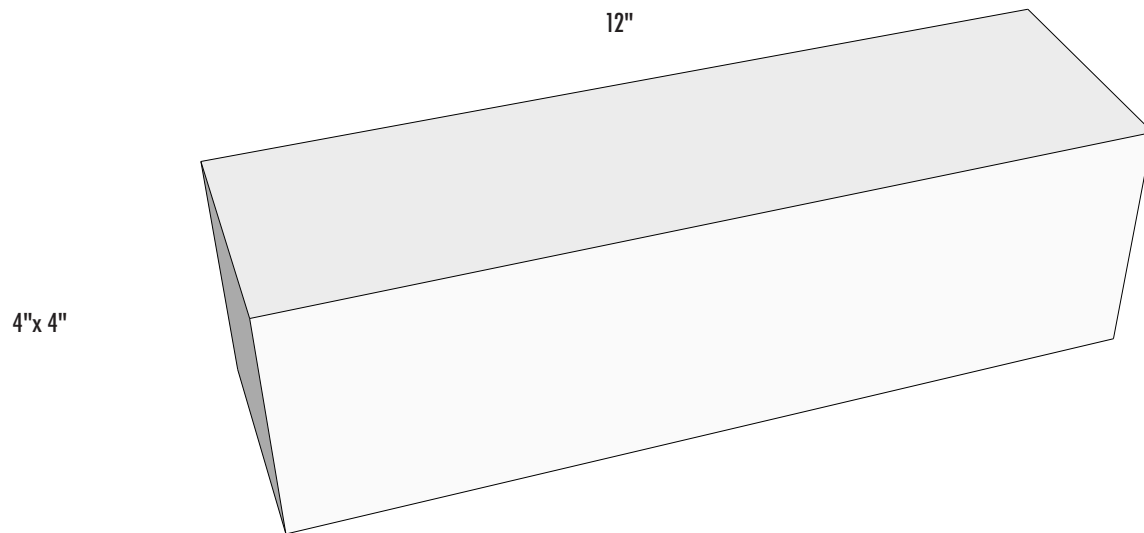
Also Needed: Safety Glasses and Clamps

Lumber Cut List

Board*	Description	Cut to	Qty
4" x 4"	Dreidel Block	12"	1
3/4"	Dowel	5"	1

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

Lumber Cut Layout Guide



Assembly Instructions

Step 1

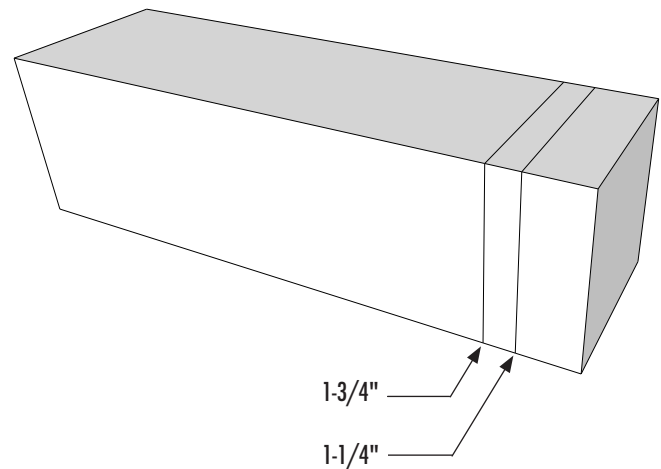


Cut out all material using the Lumber Cut Layout Guide.

Step 2



On (1) end of the 12" block, mark lines on all (4) sides at 1-1/4" and another line at 1-3/4".

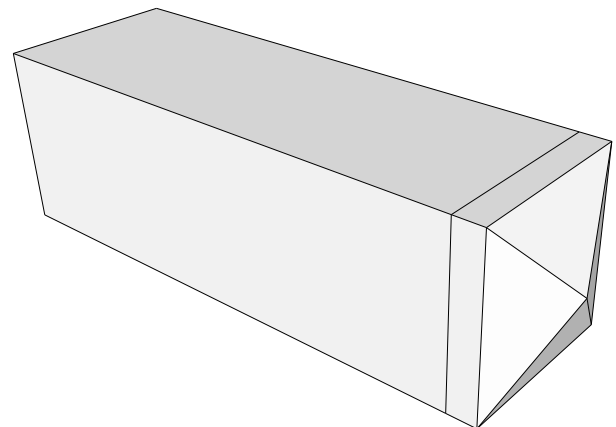
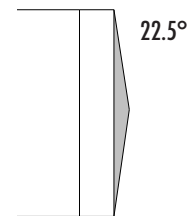


Step 3



Set the miter saw at 22.5°

Cut along the 1-1/4" line on all (4) sides.

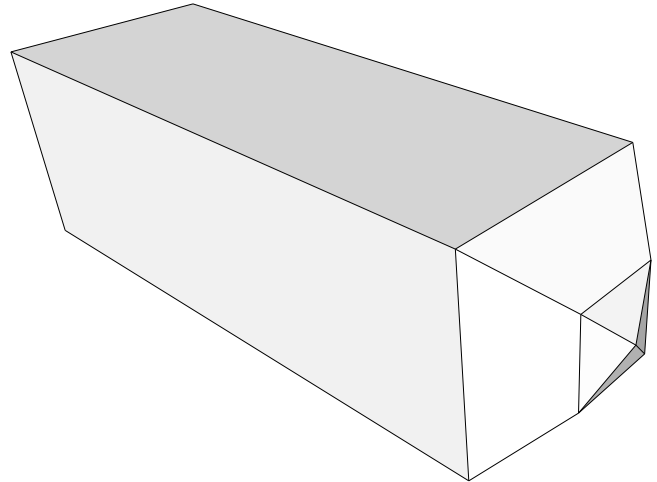
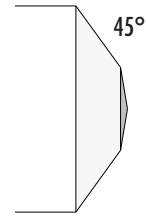


Step 4



Set the miter saw at 45° .

Cut along the $1\text{-}3/4\text{'}$ line on all (4) sides.

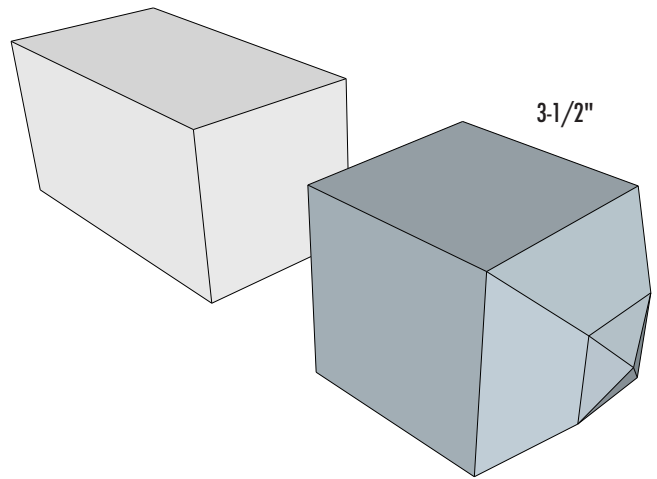


Step 5



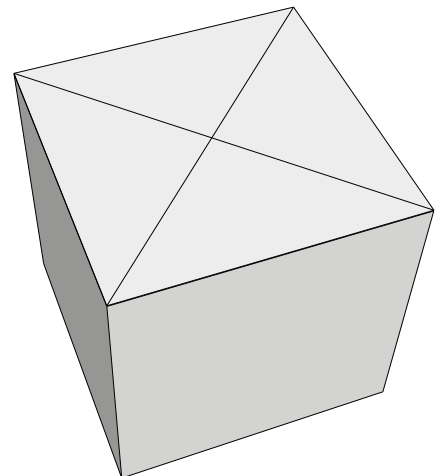
Measure $3\text{-}1/2\text{'}$ from the edge of the 45° angle and mark.

Set the miter saw at 0° and cut.



Step 6

On the top side, draw lines from opposite corners. The intersection point is center of the block.

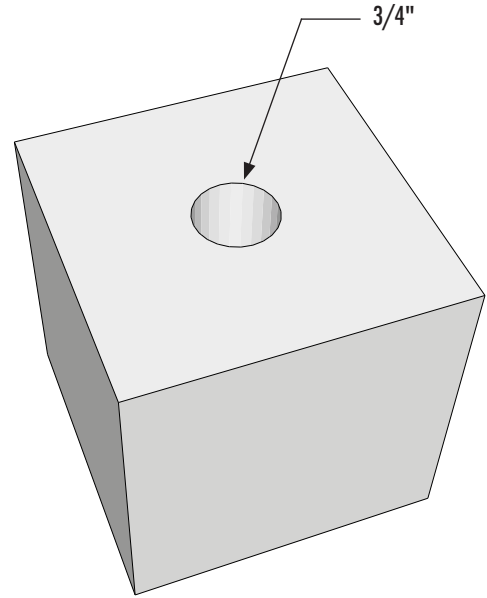


Step 7



Using a 3/4" forstner bit in the drill press, drill a hole that is 1-1/2" deep at the intersection point.

In order to guarantee a 1-1/2" deep hole, measure 1-1/2" from the cutting edge of the forstner bit and wrap masking tape around the bit. When the tape meets the wood, stop drilling.

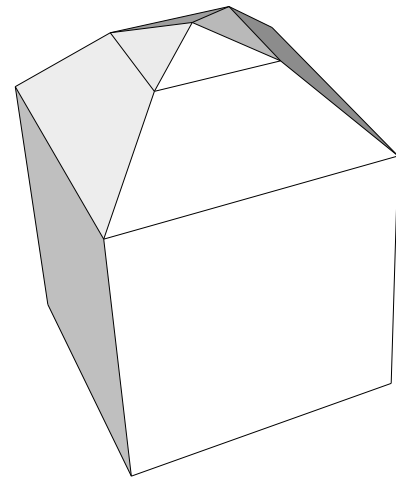


Step 8



Sand to your desire.

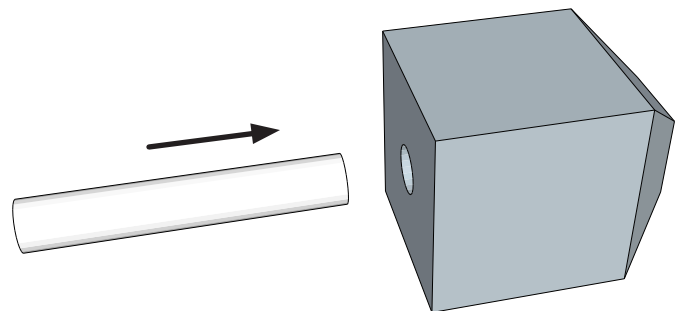
See Page 7 for sanding instructions.



Step 9

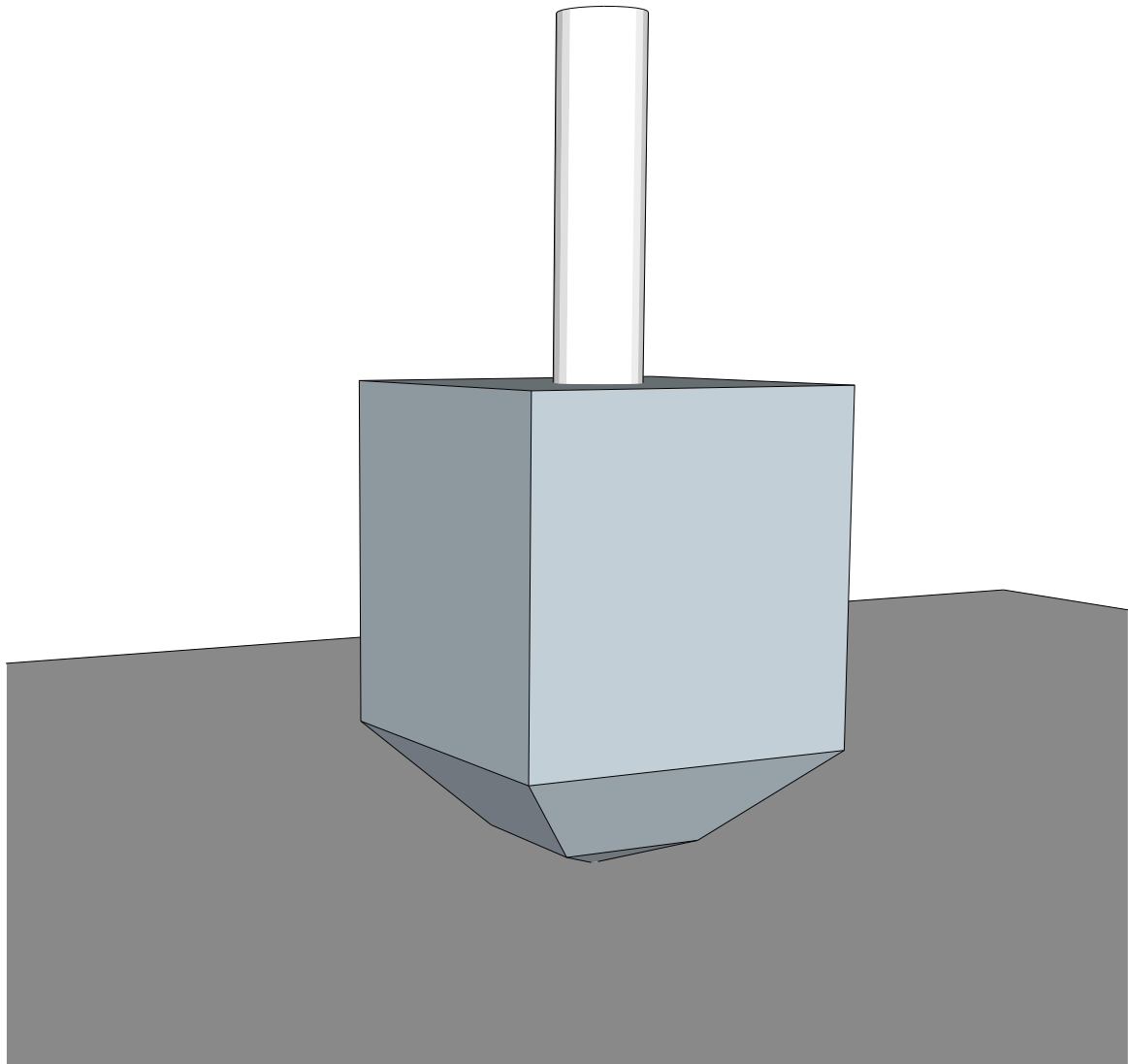
Apply glue to hole.

Insert the 3/4" dowel until it reaches the bottom of the hole.



Step 10

Project complete!



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 scratches & imperfections. Followed by using 120-220 grit to smooth.

Finish Sanding – Use 320-400 grit sandpaper

Super fine sanding – Use 600+ grit sandpaper