



## **WOODEN STACKER**

### Materials:

Wood - 1" x 8" x 36" solid wood – we used poplar

Paint or stain - we used non-toxic, child safe soy paints

Finish – we used an all-natural beeswax and jojoba oil finish

Dowel rod - 7/8" x 6"

Wood glue

### Tools and equipment:

Saw – hand saw, table saw or miter box

Electric Drill – with 7/8" and 1" drill bits – we used Forstner bits but you can also use standard twist bits

Sandpaper – medium, fine, extra fine – we used an electric sander and sanding sponges

Safety glasses

Face mask

**IMPORTANT: Before beginning, put on your safety glasses. It is recommended to wear a face mask especially when sanding to prevent inhaling sawdust.**

Select high quality wood without knots. It is best to use medium or hardwoods. Soft woods, such as pine, can dent and splinter. In general, the harder the wood, the harder it is to work with. If you are new to woodworking, you can

woods. We used poplar. It is a medium hard wood, reasonably priced and available at most home improvement stores.

**Directions for Cutting and Sanding:**

You will be cutting 7 squares of wood in the following sizes: 6", 5 1/2", 5", 4 1/2", 4", 3 1/2" and 3". Mark each piece and cut them with a saw. If you don't have a table saw or an electric miter box, they can be cut out using a hand saw or a manual miter box. NOTE: The safety guard on the table saw was removed for taking photos. Always use the safety devices that come with your power tools.





Mark the center of each square. To do these place a ruler on the face of each square from one diagonal corner to another. Make a light pencil marker near the center. Now do the same for the other two diagonal corners. Where the two lines intersect is the center. [photos 4 and 5]



photo 4



photo 5

Using a hand held electric drill or a drill press, drill a hole all the way through the squares (EXCEPT for the 6" square) using the 1" drill bit. The 6" square will be drilled differently later. HINT: To stop the wood from splintering on the back, place a scrap piece of wood behind your square. When you drill through the square, continue drilling until you start drilling through the scrap piece of wood. [photo 6 and photo7]



photo 6



photo 7

For the 6" square block, switch to a 7/8" drill bit. (The size of the dowel rod)  
Drill a hole 5/8" deep in the center. Do not go all the way through. [photo 8]



photo 8

If you have an electric sander, you can use it to smooth the sides, top and bottom of your square. You can use the electric sander to soften the edges and corners, but we prefer to do that by hand using sandpaper block sponges. Start with the medium grit sandpaper to remove all the saw marks. Then progress to the fine and extra fine sandpaper to give the wood a satin smooth finish. [photo 9]



photo 9

You will also need to sand the inner hole. You can do these by rolling a piece of sandpaper the size of the hole and sand. We like to use the sponged backed sandpaper for that. [photo 10]



photo 10

When you are done sanding, the edges should feel nice and smooth. Dust off your blocks. They are now ready to finish. [photo 11]



photo 11

For the dowel rod, sand one end rounding the corners slightly. Lightly sand the rod to remove any rough areas. [photo 12]



photo 12

### **Finishing Your Stacker:**

There are three different ways you can finish your stacker. The first is to leave it natural, and just apply a beeswax finish to the wood. You may choose to stain your stacker. You can do this all one color or you can use multiple colors of stain. Again, finish with a beeswax finish when the stain has thoroughly dried. Finally, you can paint your squares. The Little Lady in our lives loves bright colors, so we opted to use bright, rainbow colors. When painting you can use water colors, acrylics, milk paints or soy paints. Just make sure they are non-toxic and child safe. [photo 13]



photo 13

Make sure all the dust has been removed from the wood and paint with desired colors. We used one coat of paint because we wanted to be able to make out the grain lines. [photo 14]



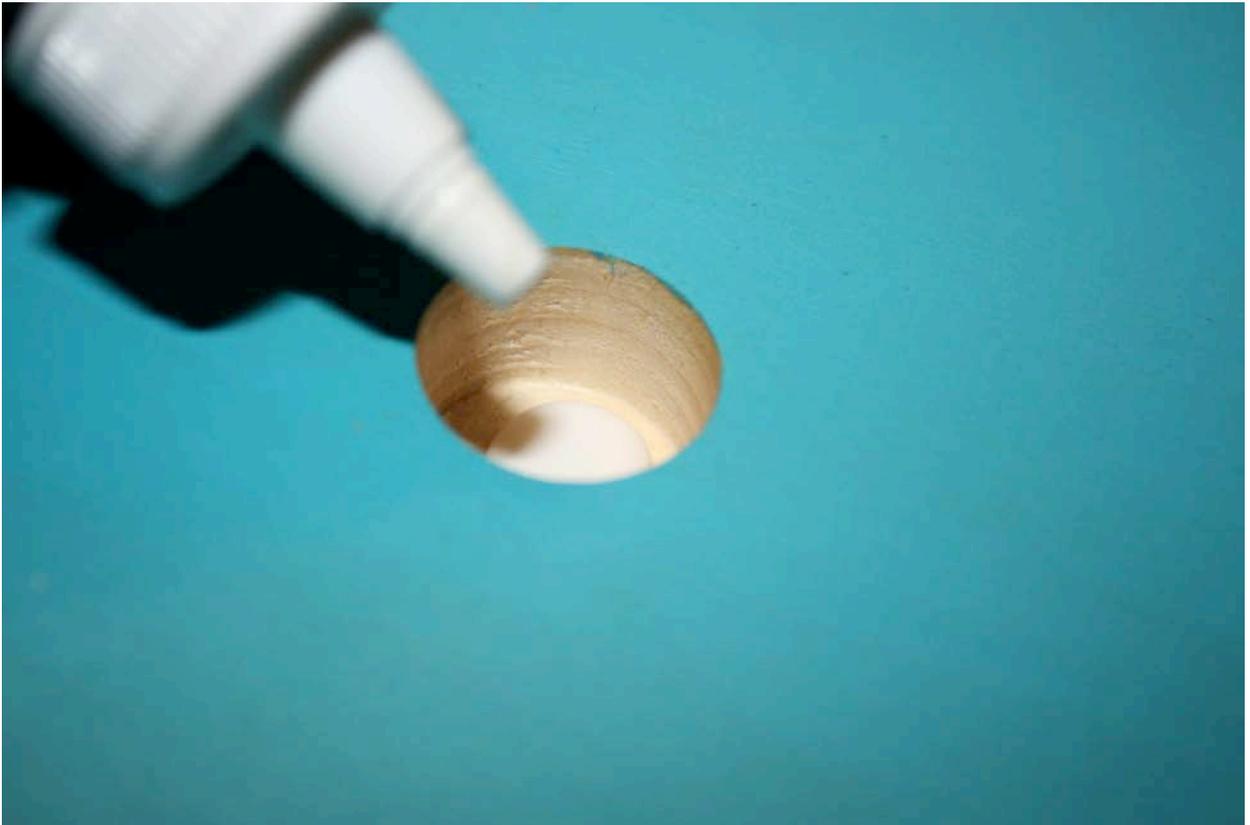
photo 14

Leave the dowel rod unpainted. Seal the dowel rod with the beeswax. Do not seal the bottom part that will be glued in the base hole. [photo 15]



photo 15

Place glue in the hole, and using your finger, rub it on the inside edges.  
[photo 16]



Place the dowel rod in the hole and allow the glue to dry. [photo 17]

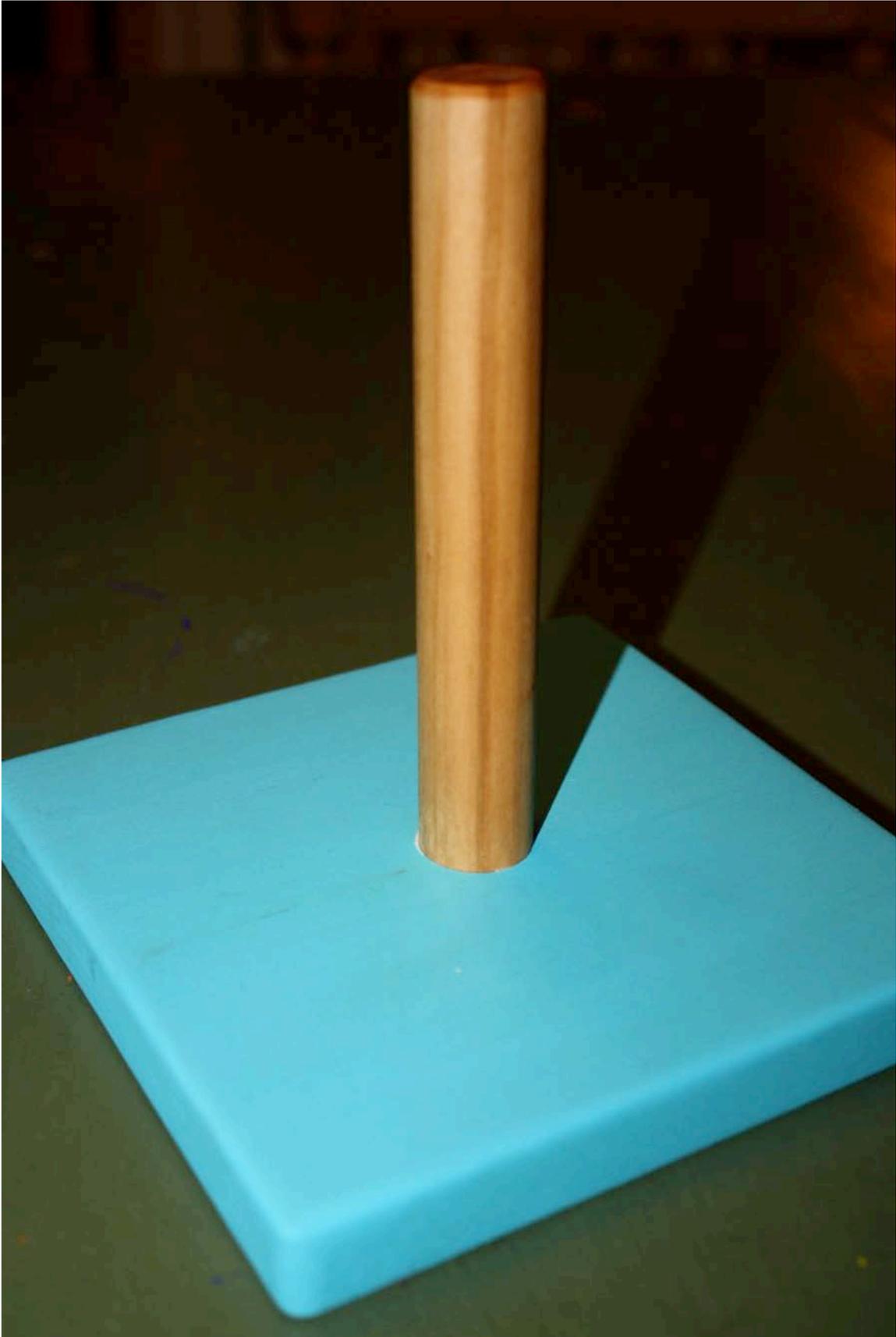


photo 17

When the paint on the squares has thoroughly dried, rub in the beeswax. If you regularly seal your wood with a beeswax finish, your wood for last a long time. [photo 18]



photo 18

Done! Of course your stacker can be used to stack the squares, but the squares can be used as blocks or any other way a wee one deems fit. Enjoy!



