



Creations

Woodshop

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Woodshop Salt & Pepper Shaker

Ages: 12-15 & 16-28

ESTIMATED LENGTH: 6 HOURS (SPLIT INTO 2 CLASSES)

Needed Materials:

- Variety of hard wood - You will need 3 - 10" x 5/8 x 2" boards (Cherry, Black Walnut, Maple)
- Stopper(plastic or cork)
- Planer (if available)
- Table Saw
- Mitre Saw (if available)
- Titebond III Ultimate Wood Glue (waterproof and food-safe) 2 Small Clamps, & Scraper-for removing excess glue)
- Graph Paper and Pencil
- Ruler
- Drill Press with vise. 1" and 3/4" Forstner bits and 3/32" drill bit. (Different size bits can be used depending on size of shaker made and available size of stoppers.)
- Sander and/or Loose Sandpaper (80-240 grit)
- Food Grade Oil for Finishing (walnut oil, coconut oil, olive oil or mineral oil) Wax and Protectant Applicator Pads (for applying oil)

SALT & PEPPER SHAKER DAY 1

INTRO AND CLASS SUMMARY:

- Gather Students And Begin In Prayer.
- Read And Discuss Quotes: moral parable - Be so salty that others will want to be like you.

SCRIPTURES:

Matthew 5:13

Ye are the salt of the earth.

QUOTE:

56-0930A Hear Ye Him

And now, if the other fellow draws the line, you just live right along his line, and he

will be so... You be the salt, God will make him thirsty, if you'll be the salt. You are the salt of the earth. And salt, if it contacts, saves. And salt creates a thirst. And people will thirst when they see you living the life that you should live as a son and daughter of God.

Class Summary:

This class teaches measurement and layout design, along with basic gluing and clamping methods. Also teaches basic mitre saw, table saw, drill press, and sanding techniques.

- Go over basic safety rules.
- Show sample shakers that instructors have made to help give ideas.
- Let students design their own design using pencils and graph paper.

BUILDING THE SALT AND PEPPER SHAKERS

1. Choose a board from one of the woods you want to use. (Cherry, Black Walnut, Maple)
2. Plane board until it is smooth on both sides) * (approximately 1/2" to 5/8" depending how wide you want the shaker. 3 boards glued together would be 1 1/2" to 1 7/8" thick)
3. Use Table Saw to cut board into 1 1/2" to 1 7/8" strips.*
4. Use miter saw to cut strips to 12" lengths (shortest length recommended being run thru planer.)*
5. If wanting multicolored shakers you can trade others some of your extra pieces for desired kind of wood you want to use with your shaker. You can also go in partners with someone and agree on color choices and make them different to differentiate between salt and pepper. Once you cut your shakers out of your 12" glued boards, you would trade 1 of your shakers for your partners. Example: walnut/maple/walnut and maple/walnut/maple. The walnut on the outside could be the pepper, and the maple on the outside could be the salt.
6. Layout 3 - 12" pieces.
7. Move to the glue table and apply glue to touching sides.
8. Clamp together, check that the boards are level on the clamps and that each board is oriented correctly.
9. Tighten clamps. Do not over tighten and force out too much glue. Check for

signs of a dry joint where there is not enough glue. If there is not enough glue in the joint, the joint will fail and your shakers will split. (You should see glue coming from each joint. Remember to check the back side also.)

10. Use scraper to remove excess glue.

11. Sign name on project, and let glue dry until next class.

*12 to 15 year old class will require more instructor assistance, especially with power tools.

SALT AND PEPPER SHAKERS DAY 2

INTRO AND CLASS SUMMARY

- Gather Students And Begin In Prayer.
- Reiterate quote, scripture and moral parable.
- Go over the steps involved in completing shakers, starting where you left off in previous class.

BUILDING THE SALT AND PEPPER SHAKERS:

1. Remove glued boards from clamps
2. Remove excess glue with a scraper to protect damage to the planer, and/or to speed up sanding process.
3. Sand or run the glued sides through the planer until both sides are smooth.
4. Measure and cut 2 shakers out of 12" pieces. (4 1/2" or shorter is preferred so that normal length drill bit can be used.)
5. Layout the pattern from the graph paper to the shakers. Instructors should encourage the student to make any changes needed to improve the design. Try to keep designs fairly simple; the more complex designs couldn't finish in the allotted time.
6. Cut shaker shape using layout. This may involve using miter saw, jigsaw, or drill to get the wanted shape. (See slide- show pics for examples)
7. Find middle of stopper end and top. (Can do this by drawing 2 lines diagonally from one corner to other. Where they intersect will be the middle.)
8. Use drill press to drill a 1/4" countersink hole using a 1" forstner bit.
9. Use drill press to drill smaller hole in countersink hole using a 3/4 forstner bit

approximately 3/8" shorter than entire length. (Set depth gauge on drill press.

10. Mark holes on other side of shaker. (Remember they must be within the 3/4" circle from center - use punch to keep drill bit in place.)

11. Drill holes using 3/32 drill bit. (Remember, the more holes you have, the more salt will come out.)

12. Sand all edges and both surfaces until smooth, starting with 80 grit paper for rough shaping and moving up to 240 grit for the final finish. Do not skip steps, because the course grits can leave scratches that are difficult to remove with really fine sandpaper. If you notice a defect that is difficult to remove, drop back down to a courser grit and then work your way back up.

13. After the project has been inspected and approved by the instructor you may apply the finish. The proper finish for shakers is a food grade oil finish (coconut oil, walnut oil, olive oil, or mineral oil are good options) do not use a vegetable oil as it will turn rancid. The oil should be applied liberally (multiple coats) so it will really soak in and protect the wood from moisture.

14. Fill shakers and insert proper size cork or plastic stopper in bottom.

15. Instruct students in care of shakers. Normal use will remove the protective coating of oil, which should be reapplied regularly. If the shakers are heavily used and becomes scarred, it is simple to re- sand the surface and then reapply oil.

*12 to 15 year old class will require more instructor assistance, especially with power tools.

HELPFUL TIP: If you put a few grains of rice in the salt shaker, it will keep moisture from causing the holes to plug up.