

# The Toy Puzzles and Kitchen Helpers

**Six great projects that are as quick and easy to make as they are to sell at craft fairs and flea markets**

## The Toy Puzzles

Through the generations, puzzles have always been popular with children, being one of the few toys the kids can take apart without fear of breaking them (not that most kids are concerned about breakage, even though us parents certainly are). The three puzzles presented here, have two added attractions: First, they're easy to build and second, they're thick enough to stand up on their own once your child has pieced them together.

1. Glue up the pieces of stock you'll need from 1-1/2" or thicker lumber:

- Tortoise: 11-1/2" x 6"
- Hare: 10" x 11-1/4"
- Partridge in a Pear Tree: 8-3/4" x 11-1/2"

**NOTE:** When making the partridge, consider using wood of a color that contrasts with the remainder of the tree. For example, a walnut partridge in a poplar tree – A poplar partridge in a cherry tree, etc.

2. Duplicate the patterns shown here by enlarging them on a photocopy machine or by using the gridded paper method. Each square in the drawings shown here are 1".

3. Affix the drawings to your workpieces. Artist's rubber cement works best for this. "Butter" the back side of your drawing and the top side of your wood with rubber cement and allow it to dry for about 5 minutes before attaching the drawing to the stock.

4. Using your Bandsaw or Scroll Saw, cut the outer profiles of the puzzles first.

5. Next, use a thin Bandsaw or Scroll Saw Blade to cut out the separate puzzle pieces.

6. Peel off the paper patterns and use your Abrasive Cleaning Stick to remove any rubber cement residue from your wooden pieces.

## Some puzzle-making tips:

- Use the thinnest blade possible when cutting out the interlocking piece shapes to ensure a tight fit.
- Since you'll be working with thick woods, feed the wood slowly through the cuts to avoid burning. However, remember that feeding too slowly could widen your kerfs and cause a sloppy fit of the pieces. Make some test cuts on thick wood to get "the feel" of everything before cutting out your actual, pieces.
- Use fine grit papers and sand everything just enough (by hand) to remove splinters and slight imperfections. Excessive sanding will spoil the fit of interlocking pieces.
- Designing your own puzzles is simple. Just make the exterior shapes match your child's favorite animals or objects, but be sure to use enough reverse curves or "heads-and-necks" to be sure your pieces interlock properly without pulling apart.
- When finishing children's puzzles, use a non-toxic finish such as Salad Bowl Finish or Preserve Oil Finish to protect your children from harm. **NEVER** use lead-based or toxic paints or finishes for toys or projects that come into contact with food products.

## The Kitchen Helpers

Here are three great Kitchen Helpers...each of which can literally be built in minutes.

### The Ceramic Tile Trivet

1. Start by finding some decorative ceramic tiles that you like. They're typically available in 4", 6", 8" and 12" squares.
2. Next, locate some moldings that you like to "frame" your tile. If you can't find a molding shape that meets your fancy, create your own using your Shopsmith Molding Package, Shaping Package or Pro Fence System Router Table with appropriate cutters or bits. Miter the corners.
3. Cut the plywood base to hold your tile. Be sure to make your base large enough to accommodate the tile and the edge molding you have decided to use. The edge moldings can either be cut to a height that matches the thickness of your tile – or you can add a wooden spacer under the tile to bring it up to a matching height. Another alternative is to leave the molding higher than the tile edges to form a lip that will prevent objects from sliding off the trivet.
4. Apply a sealing finish to the plywood base and molding pieces. **NOTE: Do not** apply a finish to the mitered molding edges of the frame prior to assembly.
5. Glue and/or nail three sides of your molding frame to the plywood base.
6. Apply a **thin bead** of silicone adhesive around the edges of your tile...and several spots of tile adhesive or panel adhesive to its back side and place the tile into position in your frame. Slide the fourth frame member into position and glue and/or nail it.
7. Attach four rubber feet to the bottom of the plywood base.

### The Casserole "Fisher"

Here's an easy-to-make project that will help the user avoid finger burns when moving an oven rack in-and-out. Just place the fish's "mouth" over the front edge of the rack to push it in...or hook its gill cover over the edge to pull the rack out.

1. Use a photocopier or the grid method to duplicate the pattern shown here.
2. Attach the pattern to a 14-1/2" x 3" piece of stock. The stock could be anywhere from 1/4" to 3/4" thick, as you prefer.
3. If you're going to be making more than one, attach a stack of workpieces together using double-stick tape in preparation for "pad sawing".
4. Saw out the outer shape using your Bandsaw or Scroll Saw. Separate the fishes.
5. Create the "eyes" by drilling a shallow 3/16" countersink or hole near the front of the head. Use the same 3/16" bit to drill a through-hole near the tail for hanging the puller.
6. The scales are formed with a mallet and 1" wood chisel.
7. Sand the outer edges with a Strip Sander or Drum Sander.
8. Apply contrasting stain to the eye and scales, then apply the clear, protective finish of your choice.

## **The Finger Saver**

Here's a handy set of wooden tongs that will protect fingers when removing hot toast, bagels, pop-ups or waffles from the toaster.

- 1.** Start with a suitable hardwood such as maple, cherry, walnut or oak.
- 2.** Cut your stock into 3/4" x 7/8" x 6-1/4" pieces.
- 3.** Drill a 5/8" hole in the center of the 7/8" wide side of your stock, 1-1/4" down from the top.
- 4.** Remove the excess stock using your Bandsaw or Scroll Saw.
- 5.** Use a small, 1/2" diameter Drum Sander to smooth the inside edges and bevel the tong tips slightly.
- 6.** Apply a non-toxic finish such as Salad Bowl Finish or Preserve Oil Finish.