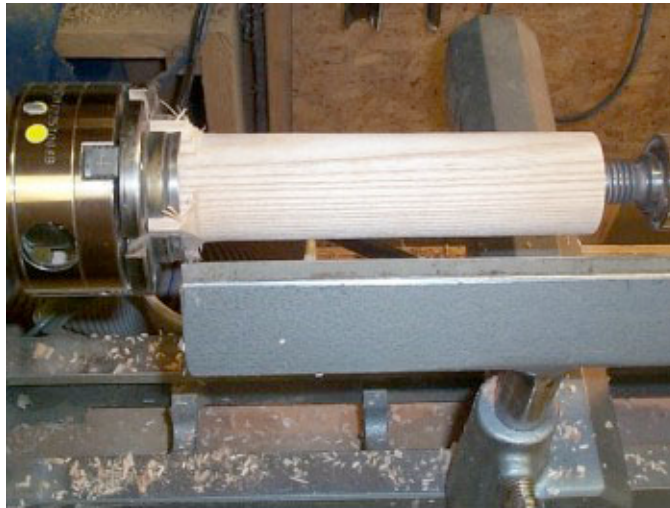


## Ball & Cup Toy

1. Cut a blank to 2"-3" square by 7"-8" long.
2. Mount in your chuck and rough to round. If necessary, use your parting tool to put a shoulder on the blank to prevent it from going off center.



3. Reduce the ball segment to  $\frac{3}{16}$ " to  $\frac{1}{2}$ " less than the blank diameter. Then use a caliper or ruler to measure off the ball diameter and add an additional  $\frac{1}{2}$ " working space. Part down past the ball diameter, then shape the ball, leaving the tailstock in place as long as possible.



4. Use the tail center to set a drill hole, then drill through the ball, followed by a short recess hole for the string.

5. Finish and part off the ball.

6. Clean up the face of the remaining blank, drill out the center to a depth of about 1/2" greater than the diameter of the ball. Hollow out the cup using the ball to test for fit. Sand and finish the inside of the cup now, if you are using a friction finish, while you still have plenty of support. For production work, you can use a fostner bit instead of hollowing out the cup.



7. Reduce the bulk of the blank waste and shape the outside of the cup.

8. Final reduce the handle waste and finish shape the handle portion. You can add to the design with v-cuts and burns lines, inlay, chatter work, or other elements if you choose. The handle can also be embellished with beads, coves, or other turned/textured options.



9. Final sand and apply finish if using friction finish.

10. Part off and drill string hole in the base of the cup from the outside, then drill a recess hole for the string knot from the inside of the cup. Tie a double knot in the string and pull through the cup into the recess and apply a drop of cy glue. Pull the loose end of the string through the ball, tie off a double knot and set the knot in the recess with a drop of cy glue.



11. Note: drill sizes for the sting hole are up to you and the materials you use. String length is up to you, I start with 20", then reduce to about 12"-15" when tying the final knots for the ball.

12. Test your completed toy.

**\*\*\* This project is for children 6 and older! \*\*\***

\* Picture Credit: Bob Hamilton @ woodturningonline.com