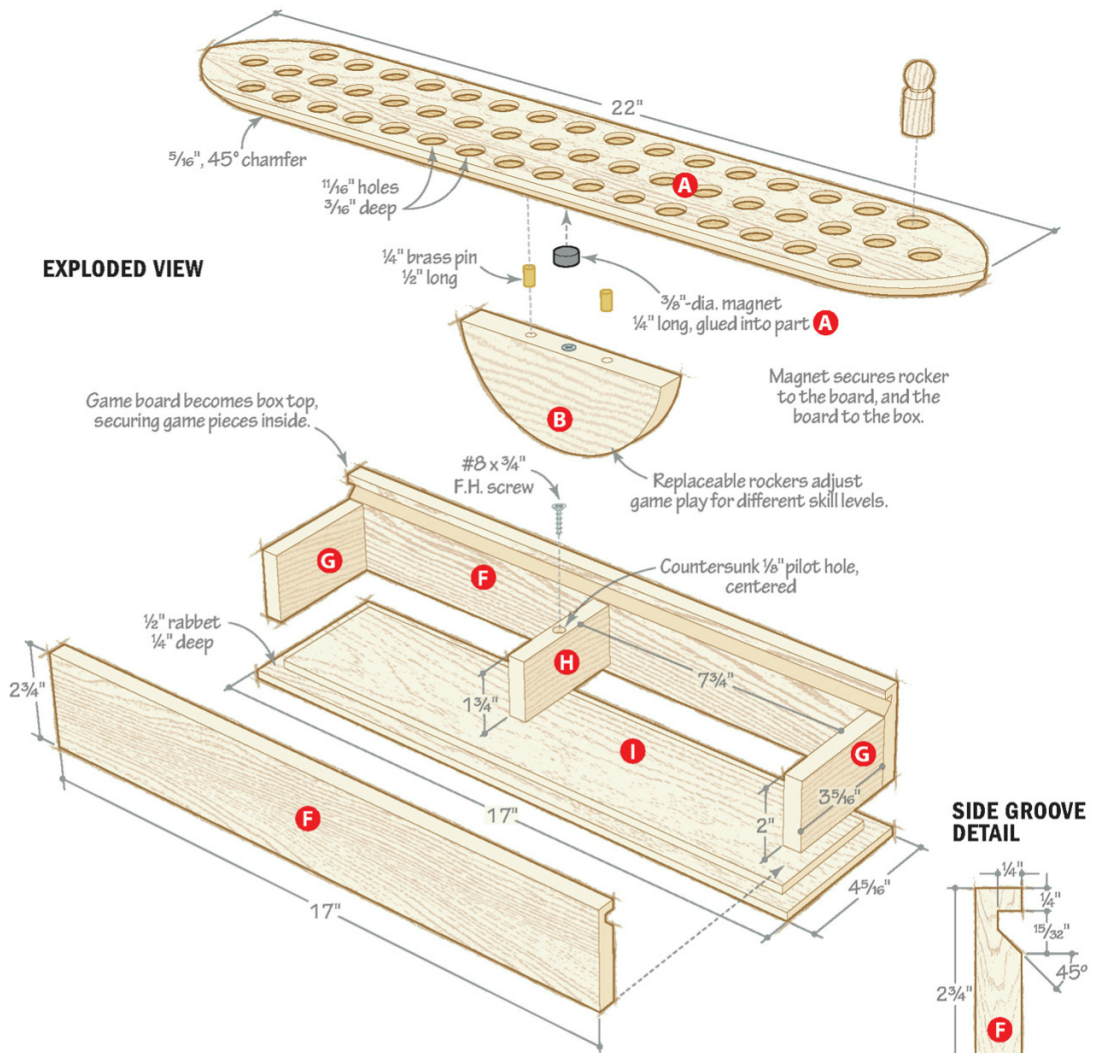


Yacht Rock

Prepare your sea legs for a challenging two-player voyage.



► Download the rules of play.
woodmagazine.com/yachtrock

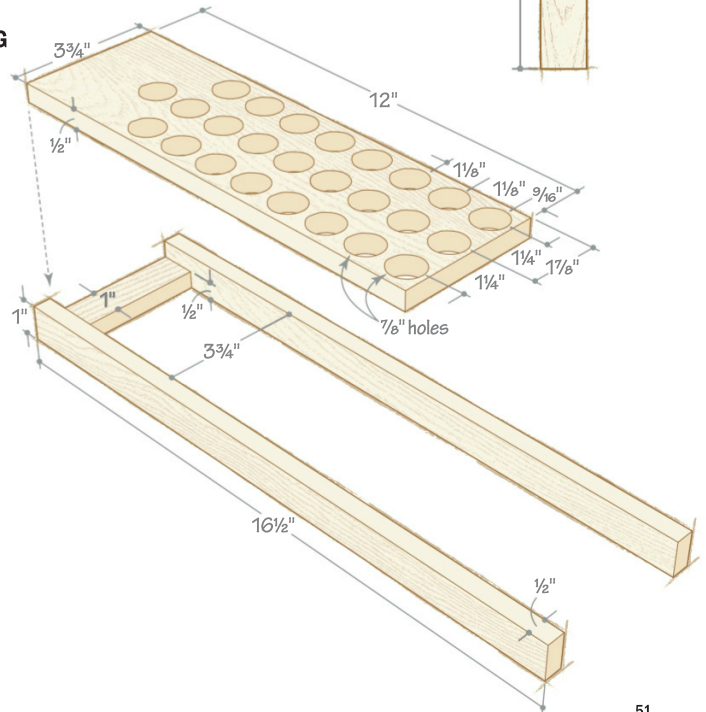


DIMENSIONS:
22" W x 4 5/16" D x 3" H

Approximate materials cost:
\$55

Including lumber, game pieces, and hardware

1 HOLE-ROUTING JIG



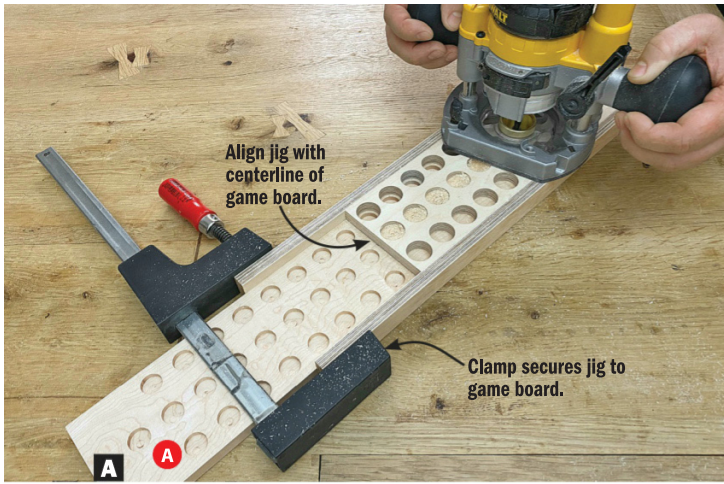
This tabletop balance game promises fun for all ages as players try to keep on an even keel, moving passengers safely from the deck to their cabin. Interchangeable rockers of differing sizes vary game play—large rockers provide more stability, and smaller ones demand more finesse.

Built-in storage makes the game easy to stow away or take on the go, and we've assembled some of the supplies that you will need into one convenient kit [Source].

All a board!

1 Cut the game board (A) to size [Materials List]. Build the hole-routing jig using 1/2" material of your choice [Drawing 1]. Clamp



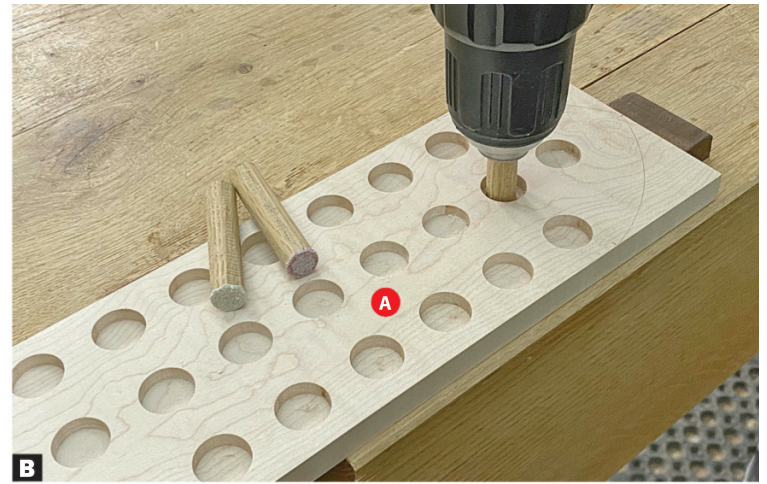


Align jig with centerline of game board.

Clamp secures jig to game board.

A

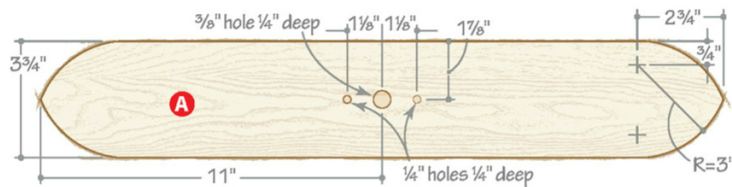
Mount a $\frac{7}{16}$ " guide bushing in your plunge-router base and cut the pockets using a $\frac{1}{4}$ " spiral downcut bit. Make one pass to remove the bulk of material, then vacuum out the sawdust and make a second pass to the final $\frac{3}{16}$ " depth.



B

Glue 150-, 180-, and 220-grit sandpaper to the ends of three dowels. Chuck each dowel in a drill in turn and sand the bottoms of the pockets.

2 GAME BOARD (Bottom face)



the jig to the game board and rout the people pockets [Photo A, Exploded View].

2 Sand the bottoms of the pockets to remove any router marks [Photo B].

3 Bandsaw the game board to shape [Drawing 2], sand the edges and faces smooth, and then rout a chamfer around the bottom edges of the game board [Exploded View].

4 On the underside of the game board, drill a hole for the magnet, then the holes for the locator pins [Drawing 2]. Glue the magnet in place with a dab of CA glue.

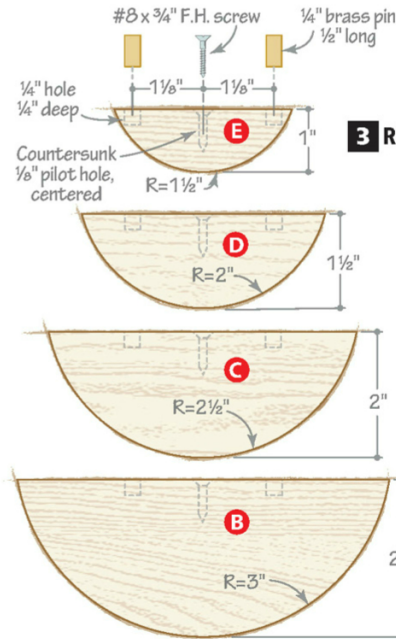
Steady the ship

1 Cut to size a blank for each rocker (B-E), and lay out the radius on each workpiece [Materials List, Drawing 3]. Drill the holes in the top edges of all four rockers. Drive a screw in each center hole and glue in the brass locator pins, cut from $\frac{1}{4}$ " brass rod.

2 Cut the rockers (B-E) to shape and sand each curve smooth. Take your time on these curves so the game rocks smoothly in use. Test each one with the board to make sure the board sits level with no game pieces in place.

3 Cut the box sides (F), ends (G), divider (H), and bottom (I) to size [Materials List]. Rabbet the bottom [Exploded View] and dry-fit the pieces.

4 To cut the grooves in the box sides (F) to fit the game board [Exploded View], first cut $\frac{1}{4}$ "-deep grooves slightly wider than the flat edge of the game board (our edge was $\frac{3}{16}$ ").



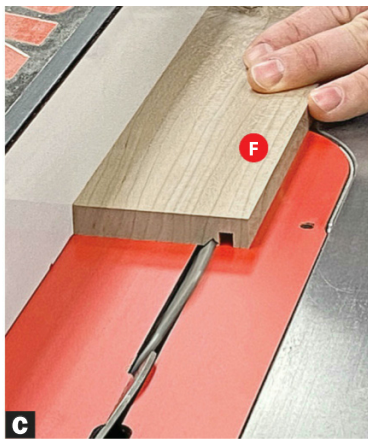
3 ROCKERS

► Create circles using a variety of tools. woodmagazine.com/circlejigs

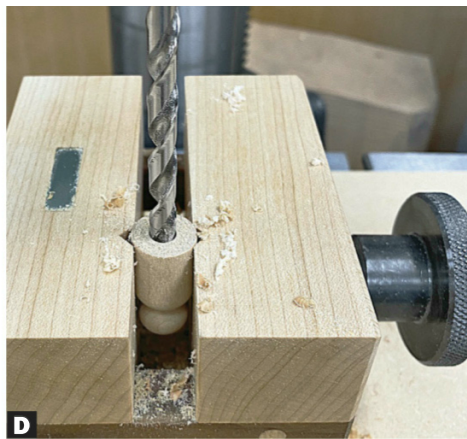
► For a more finished look, and to help the pins register in their holes, file a small chamfer on the end of each pin.

Next, tilt your tablesaw blade to 45° and set the fence to cut away the lower edge of the groove [Photo C].

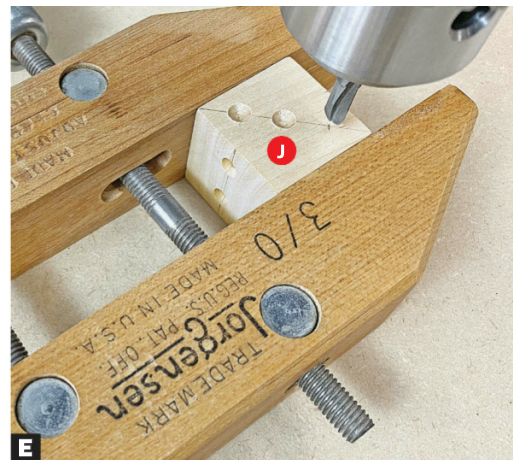
5 Glue and clamp the box ends (G) and divider (H) to the sides (F), then glue that assembly to the box bottom (I) [Exploded View]. Drill a centered $\frac{1}{8}$ " hole with countersink for a wood screw in the divider. Once the glue dries, sand the box assembly smooth, and drive a screw into the divider.



C Sneak up on this cut in both blade height and fence position. Check the fit of the game board (A) in the groove. To enlarge the groove, simply bump the fence toward the blade.



D Mark the center for the first person, then clamp a vise to the drill-press table. By keeping the bottom of the person flush with the vise jaws you can repeatedly drill each one out quickly. Use a handscrew if you don't have a drill-press vise.

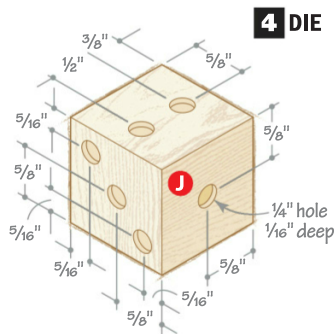


E Set your drill press to high speed, and use the sharp point of the flute grind to line up the bit just as you would the tip of a twist drill.

► Get plans for this drill-press vise. woodmagazine.com/drillpressvise

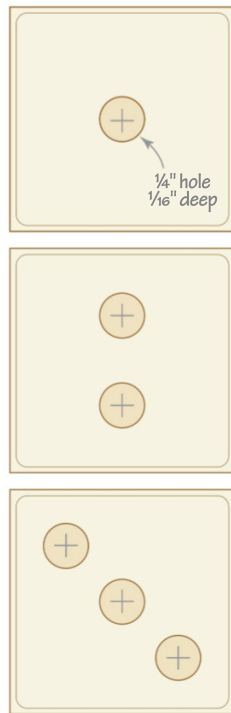
Ready the crew

- The wooden people don't weigh enough on their own to rock the boat, so you have to add a little mass to each. For that, cut to length 24 pieces of $\frac{1}{4}$ " brass rod $\frac{1}{2}$ " long.
- Drill a $\frac{1}{4}$ " hole $\frac{1}{2}$ " deep in the bottom of each person [Photo D], then glue in a section of brass rod with a dab of CA glue. Sand the bottom of each piece smooth.
- To make the die (J), lay out the location of the dots on a $1\frac{1}{4}$ "-square maple blank or photocopy and apply the full-size patterns [Drawing 4]. Drill out the holes using a $\frac{1}{4}$ " roundnose router bit at the drill press [Photo E]. Sand the edges to round them.



4 DIE
Note: For the six faces of the die one face has one dot, two opposite faces have two dots, and three faces have three dots (no 4, 5, or 6).

FULL-SIZE PATTERNS



Finish, ho!

- Paint the people, 12 one color and 12 another color. We used blue and red artists' acrylic.
- Once the paint has dried, apply two coats of lacquer on everything: the board, box, rockers, die, and people. We used a satin sheen spray lacquer.
- Stain the dots of the die, and on the game board the center six holes, and end seven holes [opening photo]. We used Rust-Oleum quick-dry Kona stain.
- Once the stain dries, apply two more coats of finish to all the workpieces and let dry overnight. Then it's time to step aboard, and rock and roll. 🌲

► Applying a base coat of lacquer before staining prevents the stain from soaking into the end grain, and helps if your brush slips and you get stain on an area by mistake. After the stain dries, wipe or sand it off.

Produced by **Zachary Brown** with **John Olson**
Project design: **John Olson**
Illustrations: **Roxanne LeMoine, Lorna Johnson**

Materials List

Part	FINISHED SIZE			Matl.	Qty.
	T	W	L		
A game board	$\frac{1}{2}$ "	$3\frac{3}{4}$ "	22"	M	1
B 6" rocker	$\frac{3}{4}$ "	$2\frac{1}{2}$ "	$5\frac{7}{8}$ "	C	1
C 5" rocker	$\frac{3}{4}$ "	2"	$4\frac{7}{8}$ "	C	1
D 4" rocker	$\frac{3}{4}$ "	$1\frac{1}{2}$ "	$3\frac{7}{8}$ "	C	1
E 3" rocker	$\frac{3}{4}$ "	1"	$2\frac{7}{8}$ "	C	1
F box sides	$\frac{1}{2}$ "	$2\frac{3}{4}$ "	17"	C	2
G box ends	$\frac{1}{2}$ "	2"	$3\frac{5}{16}$ "	C	2
H center divider	$\frac{1}{2}$ "	$1\frac{3}{4}$ "	$3\frac{5}{16}$ "	C	1
I box bottom	$\frac{1}{2}$ "	$4\frac{5}{16}$ "	17"	C	1
J die	$1\frac{1}{4}$ "	$1\frac{1}{4}$ "	$1\frac{1}{4}$ "	M	1

Materials key: M-maple, C-cherry.

Supplies: #8 \times $\frac{3}{4}$ " flathead screws (5), $\frac{1}{4}$ " brass rod, $\frac{3}{8}$ " dia. \times $\frac{1}{4}$ " long rare-earth magnet.

Bits: $\frac{1}{4}$ " spiral downcut router bit, $\frac{1}{4}$ " roundnose router bit.

Source: Small wood people (12), large wood people (12), $1\frac{1}{4}$ \times $1\frac{1}{4}$ " maple blank, kit no. RS-01283, \$16.95 plus shipping, 888-636-4478, woodstore.net/yachtrock.