

Giant Connect Four



Images and Resources adapted from: <https://kaboom.org/resources/enhancement-projects/how-to-build-a-life-sized-connect-four>

Materials & Tools

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Materials	Quantity
2x4x8' boards	2
2x6x8' board	1
1x3x8' board	1
1x2x8' boards	6
¾"x4x8' plywood boards	2
2" Door hinges	2
Hook and eyelet	2
7" game pieces	42
Casters	8
1 ¼" deck screws	1 lb.
2 ½" deck screws	2 lbs.
Tools	
Miter saw	
Circular or Jig saw	
6" Hole saw attachment	
Hammer drill	
Pencil	
Chalk line	
Tape measure	
Carpenter's square	
Safety glasses	
Sandpaper	
Painting materials	
Drill	
Screwdriver bit	
Hammer	

Preparation Instructions

- Sort all materials into piles by like item to ensure you have materials needed to complete project.
- Take the [2] 2x4x8' boards. Cut each down to [1] 55" pieces and [2] 17" pieces, for a total of [2] 2x4x55" pieces and [4] 2x4x17" pieces.



- Take the 2x6x8' board. Cut into [2] 36" pieces.



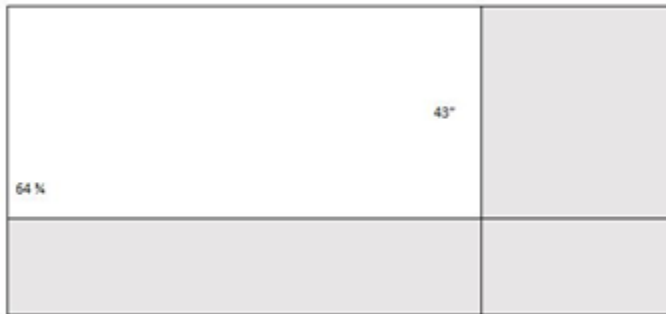
4. Take the 1x3x8' board. Cut down to [1] 62" piece.



5. Take the [6] 1x2x8' boards. Cut each down to [2] 43" pieces, for a total of [12] 1x2x43" pieces.

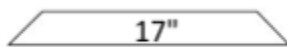


6. Take the [2] plywood boards. Using the chalk line and circular or jig saw, measure and cut a 64 1/2"x43" piece from each board, for a total of [2] 64 1/2"x43" plywood pieces.



7. Angled Cuts:

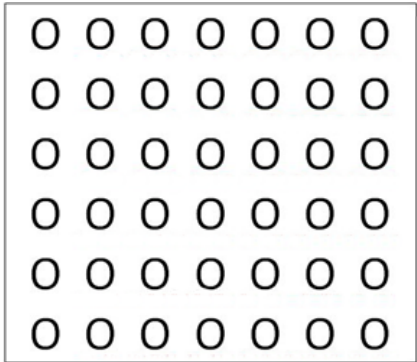
- Take the [4] 2x4x17" pieces cut in step 2. Set the miter saw to a 45° angle, and cut angles off of both ends to create [4] 2x4x17" trapezoids.



8. Hole Layout and Cuts:

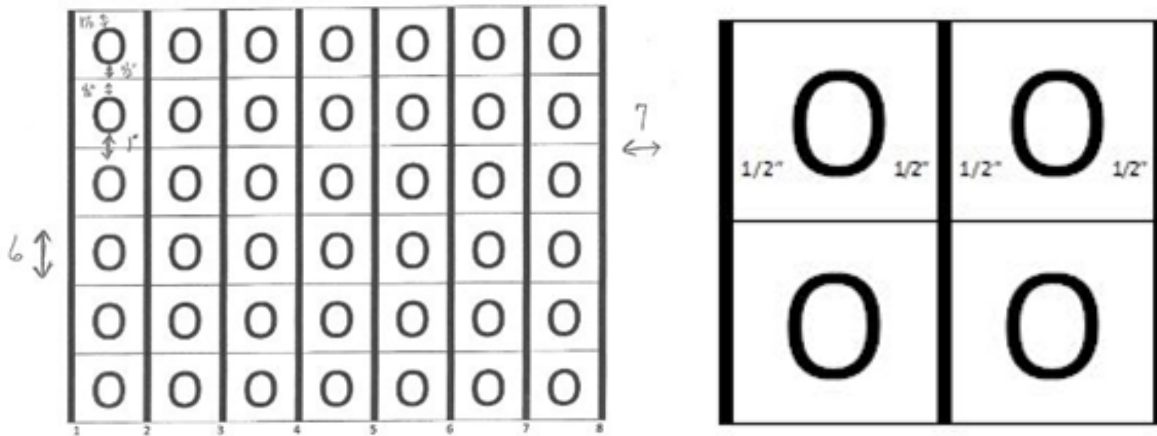
- Take [1] of the 64 1/2"x43" plywood pieces. You will be cutting [42] 6" holes.
- The holes should be laid out 7 across (64 1/2" side) and 6 down (43" side). In order to get the holes and spacing appropriate and symmetrical, use chalk line to create the center point of each hole.
- Along both edges of the 64 1/2" sides, mark the following measurements: 5 1/4"; 14 1/4"; 23 1/4"; 32 1/4"; 41 1/4"; 50 1/4"; and 59 1/4".
- Place the chalk line tightly across the plywood at each of these marks and "snap" to score the wood. Re-chalk the line as needed.
- Along both edges of the 43" sides, mark the following measurements: 4 1/2"; 11 1/2"; 18 1/2"; 25 1/2"; 32 1/2"; and 39 1/2". Again set the chalk line at these marks and "snap"

- You should end up with a grid on your plywood. The intersection of lines represents the center of each of the holes needed to be cut. Place the drill bit of the hole saw at each center point to cut the holes.



Build Instructions

1. Inventory and sort all of your materials.
2. Paint one side of the sheet of plywood with no holes yellow. This will be the inside face of the back of the game.
3. Using the 1 ¼" deck screws, attach six (6) 1x2x43" spacers to one side of the plywood with holes. Center each spacer between the holes, and use two (2) 1x2x43" pieces on the ends. This will create 7 columns. Use 3 screws per space (top, bottom, and middle). This way you know where the screws are when they are covered. There should be ½" between the hole and the spacer.

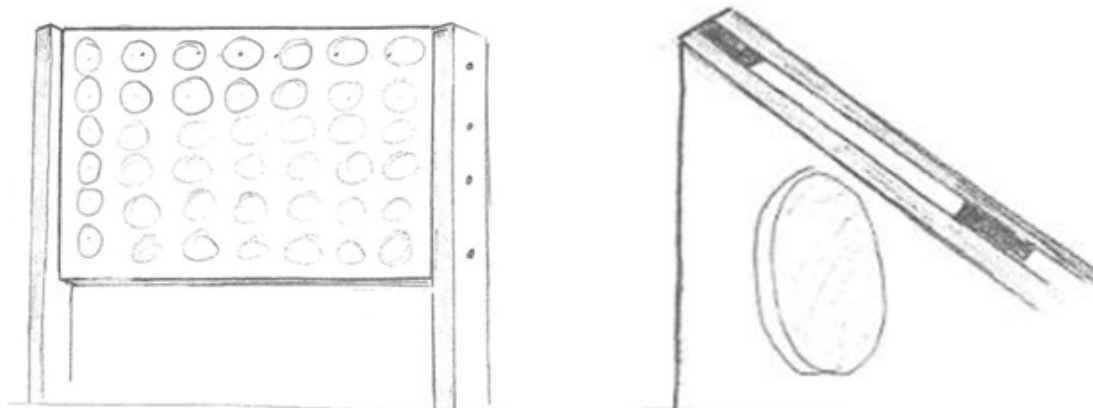


4. Paint the plywood and spacers yellow. This will be the inside of the front of the game.

- While the paint dries, assemble the sides and legs. Attach one (1) 2x4x55" piece to the center of one (1) 2x6x36" piece as shown, with the 2 ½" deck screws. Then attach two (2) 2x4x17" supports as shown.

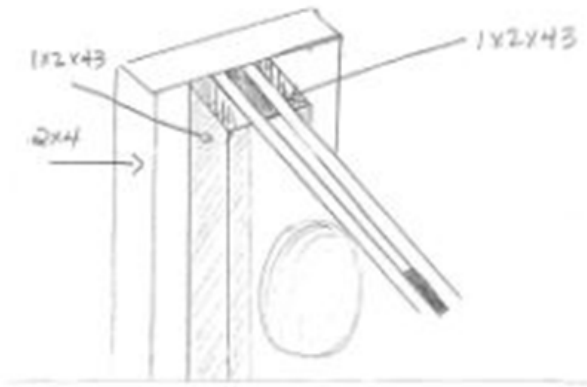


- Repeat Step 5 to assemble the other side and leg.
- Put together the two pieces of plywood (one with holes and one without holes). Make sure you are "sandwiching" the spacers on the inside and making sure that all sides are flush. Use the 1 ¼" deck screws screwing in from the back of the game into the spacers (the plywood that does not have any holes). On spacers 4 and 5 use two (2) screws each at rows 2 and 4 on the front of the game.



- Place the game board and the legs together. Using the 2 ½" deck screws, attach the legs to each side of the game board so that the wide side of the 2x4 is flush at the top and centered, and attached into the side spacers within the game board "sandwich." [NOTE: The top of the game board has a space of 1 ½"

to the first row of holes. The bottom has only ½" space.]



9. Attach the 1x3x62" on the bottom of the game board to create a "trap door" that will allow the game pieces to fall out when opened. Use the 2" door hinges to attach it in place and use the hook and eyelets to keep it closed.
10. Use the last four (4) pieces of 1x2x43" on the outside edges of the game board (vertically) to reinforce the sides of the game face and back, using the 2 ½" deck screws.
11. Paint the plywood yellow and the sides and legs blue. Paint the game pieces an equal number red and black.

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How to play Connect Four

Connect Four is a 2-player game. The Players alternate taking turns. Each side of the Connect Four board has its own color of checkers. There is one color for each player.

The goal of Connect Four is to get 4 of your color checkers in a row—horizontally, vertically, or diagonally—before your opponent does!

When it is your turn, drop 1 of your checkers into the open slot at the top of the Connect Four board. This allows you to either build your row or stop your opponent from getting 4 in a row. After you drop your checker, it's your opponent's turn.

The game is over when one player gets 4 checkers in a row, or when all slots are filled, meaning the game ends in a stalemate.

To play again, pull the slides out of the bottom of the board, releasing the checkers onto the ground.

