

DICE

In this project, you'll be making a few dice that you can use in your everyday life. You'll start with a block of wood, and cut it down to a small, four-square die. Additionally, if you want to, you will be able to engrave dots into the wood using a laser cutter, with provided inkscape files.

Trainings required: Wood Room Training, (optional) Laser Cutter Training

1. Find a block of wood suitable to make dice out of (make sure it's larger than 0.7 inches in all dimensions). I used a 2x4x13 block of wood for my dice.



2. Use the planer to make the top side of the block and the one of the sides flat, so that you end up with one 90 degree angle.



3. On the wide face of the block, make a mark at 0.7 inches with a ruler. Make sure this marking is 0.7 inches away from the planed side face of the wood block, not the non-planed one.



The pencil marking at the bottom should be 0.7 inches away from the flat face of the wood block that you ran through the planer, as shown above.

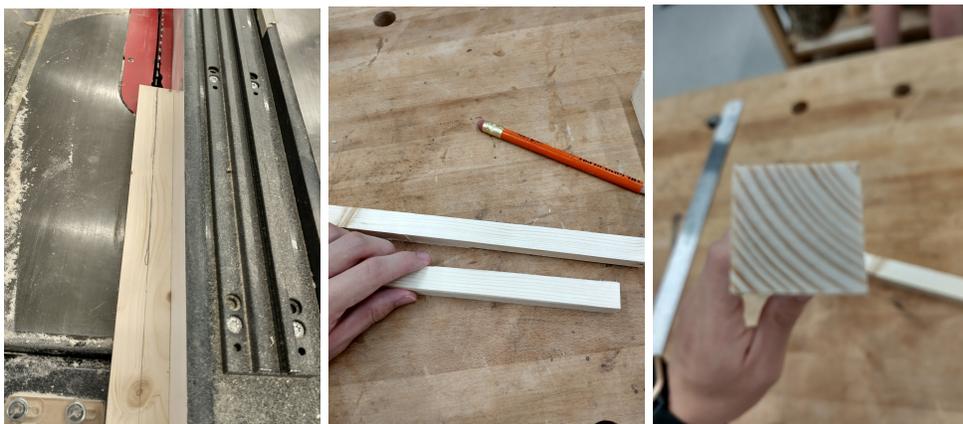
4. Using the table saw, adjust the guide until the saw itself lines up with the pencil-drawn line. Then, turn the table saw on and cut the wood! The piece you cut off should be 0.7 inches wide.



5. Next, make a marking on the wide side of the 0.7 inch wide piece with a ruler.



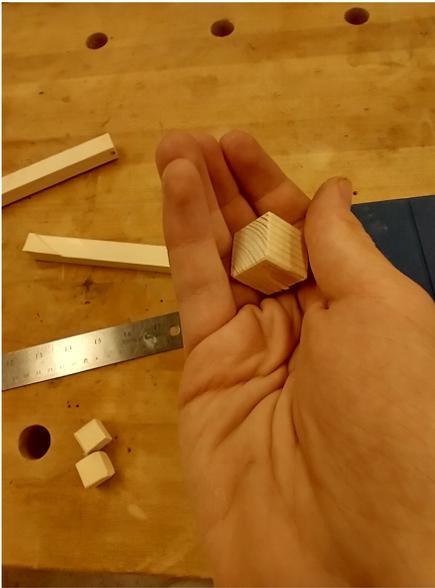
6. (Make sure you have a PI help you with this step) Cut the small piece of wood in half using the table saw(you can push it through, then pull it out once you can't push it anymore). The end should be square. At the time of this tutorial's making, the bandsaw is currently down, so the table saw is the only option. If you can, make sure to use the bandsaw instead, it makes this process a lot easier!
 - a. On the bandsaw, move the guide so that the bandsaw blade lines up with the drawn line, and just guide the wood through. You won't need to worry about kickback like on the table saw, which is why the bandsaw is better for this.



7. Once you have a rectangle with square ends, make another mark with a ruler, but this time 0.75 inches away from the end, to account for the size of the miter saw blade. However, because the bandsaw doesn't work at the time of this recipe's writing, you can use the bandsaw for this instead, and it'll likely be easier and cleaner.



8. Use the miter saw(or bandsaw) to cut your die off. You can keep doing this down the rectangle, and you can get lots of 0.7x0.7x0.7 dice from this process!



9. Sand the edges(use a pair of pliers, because the dice are too small to use your hands to sand) with the circular sander, with the goal of rounding the edges. Make sure not to

sand it too much! This is probably the hardest and most precise step, so be careful.



10. From here, you can either laser engrave the dots on the dice with the laser cutter, or draw them on with a sharpie. Both options are equally viable, but one is easier than the other. However, if you want your dice to look more professional, I have attached 6 files that you can load into inkscape, one for each side. Each one is configured for a 0.7 inch by 0.7 inch die, and you'll probably have to adjust the file for your dice size.

