

## Standing Workstations

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The following is a description of the standing desk project as it relates to my classroom. Anyone interested in building their own workstations is reminded that these are my plans and that any classroom construction activity or product should be undertaken/examined by someone with an appropriate background before being used in a classroom. I encourage you to seek administrative support and guidance before undertaking any similar venture, and I assume no liability for experiences or accidents in your classroom that occur as a result of this document.

The origin of the two-part design:

The Options and Opportunities (O2) program is designed to prepare students for, and offer exposure to, a variety of post-secondary options. The overarching goal of the program is to help students build confidence through hands-on, applicable tasks, and as such we are often using tools in our classroom (which doubles as our workshop). In order to curb damage from errant screws and hammer swings, the top part of the standing workstations was designed and created to fit down over the top of three of our desks put together. These 'tabletops' became our work benches, and we have been putting them on and taking them off for three years now; it was a simple, functional solution. When I decided to bring the standing workstations into our classroom, we built them, but noticed that they were too tall to safely and effectively use simple hand tools. We needed to get back to a lower level, and the natural solution was to build a freestanding base that the 'tabletops' could again be put onto and taken off of (and put down onto three desks as before). What arose was the current design, and so far it seems to be a nice answer to the problem.



*The tabletops fit down over three desks*



*Protect and serve*



*Nicks and dings accumulated over the years*

Part One: Tabletops (built to fit over top of three 29 5/8" x 17 3/4" desktops-modify to whatever size you have)

<p>You will need (tools)</p> <ul style="list-style-type: none"><li>• Impact gun/Drill</li><li>• Handsaw</li><li>• Skill saw/table saw</li><li>• Measuring tape</li><li>• Square</li><li>• Level</li></ul>	<p>You will need (supplies)</p> <ul style="list-style-type: none"><li>• One 4'x8' sheet of 1/2" plywood or OSB</li><li>• Three 8' lengths of 2x4"</li><li>• 1" screws</li><li>• 2 1/2" screws</li></ul>
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1. Cut two pieces of 2x4 to 92" in length
2. Cut two pieces of 2x4 to 17 7/8" in length
3. Using 2 1/2" screws fasten the pieces together to create a box that is 92" x 20 7/8"
4. Using a skill or table saw and cut a piece of plywood or OSB that measures 92" x 20 7/8"
5. Using 1" screws fasten the plywood/OSB to the box you made of the 2x4s.

Part Two: Standing workstation base

<p>You will need (tools)</p> <ul style="list-style-type: none"><li>• Impact gun/Drill</li><li>• Handsaw</li><li>• Skill saw/table saw</li><li>• Measuring tape</li><li>• Square</li><li>• Level</li></ul>	<p>You will need (supplies)</p> <ul style="list-style-type: none"><li>•</li></ul>
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1. Using 2x4, cut 2 x 36 1/2" and 2 x 39" pieces to build the base of a platform that is 42" wide by 36 1/2" deep. (see figure 1)

Figure 1

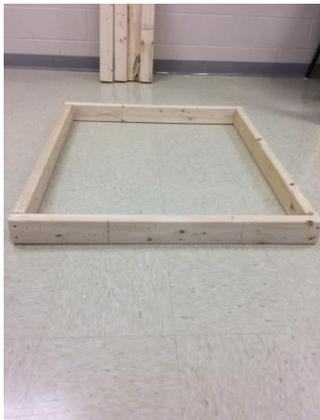


Figure 2



Figure 3



2. On the 36½" sides mark lines at 9½" and 25½"; this is where your supports will line up (see figure 1)
3. Cut six-42" pieces of 2x4; these will be your supports
4. On each of your supports mark a line 18" up from the bottom
5. Cut six-14.5" pieces of 2x4; these will be your joining supports
6. Create three sets, with each set containing two 42" supports and two 14½" joining support
7. For each set align one of the joining supports in an East-West manner so that the top aligns with the 18" line drawn on all of the supports (see figure 2), and the other so it aligns perfectly flush with the top of the vertical support. Check with a level. Do this for all three sets (see figure 3)
8. Fasten two of the support sets so that they align with the lines you drew on the platform base (at 9½" and 25½"). Check with a level to ensure that they are plumb. (see figure 4)

Figure 4



Figure 5



Figure 6



9. Cut two horizontal supports of 42" each (out of 2x4)
10. Fasten these horizontal supports to the standing support sets on one side of the platform. You will need to use 4" screws. Your desk should now look like what is pictured in Figure 5.
11. Using a skill saw, cut a piece of plywood (should be at least 5/8" thick) that measures 42" x 36½"
12. Place this on top of the support base and screw it down.
13. Cut four new horizontal supports (two for top and two for the bottom) of 36" out of 2x4
14. Lay two of the 36" supports on the ground so that they are aligned with the vertical support set on one side of the raised platform you have built. Fasten them in place. See Figure 6.
15. As per Figure 6 take your last of the three vertical support sets and fasten to the other end of the 36" horizontal supports you have just screwed to your raised platform.
16. Use your other two 42" horizontal supports to run perfectly flush along the top of this section, joining the middle and this new end vertical support set.
17. Cut one more 14½" support set and use it to brace the last open section, which should be the bottom of your third vertical support set.
18. It should now look like the two in the picture below (Figure 7). Congratulations! Snap the tabletops down over them (you might want to put 4 screws in to attach the tabletop to the

base- these can quickly and easily be removed later on if you want to put the tabletops onto regular desks), and let the kids have some fun painting them. Good work!

*Figure 7 (the bases of two stations set off to the side during exams)*



*Some of my favourite tabletop artwork from my kids over the years (they really brighten up the room!)*

