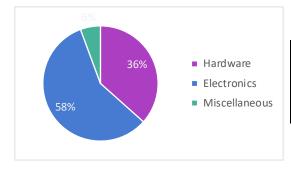
## Sand Table Bill of Materials

By Ravi Dudhagra (https://github.com/rdudhagra/Sand-Table)

	Item	Link	Price	)	Quantity	To	tal	Remarks
	1x8 pine board (8'), square edges	https://www.homedepot.com/p/1-in-x-8-in-x-8-ft-Select-Pin	\$	22.22	2	Ľ	44.44	If you have proper woodworking tools, you could probably get away with lower-quality boards
	1/2" sanded plywood, 4'x8'	https://executiveneds.got.com/s/12mmSandis/Boured-12/in/Satespoy.ce/Box/s/Betsal/6-472/inv-4Bcins/6-6-454512/00141055	\$	35.95	1	\$	35.95	
	5.0mm underlayment plywood, 4'x4'	2005: If warm homefrost conf of 14-9/1-Underlayment Common 5-0-mm x 4-8x 4-8x4-0-316-in x 47-75-in x 48-in 48887/202327907	\$	10.48	1	'	10.48	Any thin wood will work, this is a pretty economical choice
	Finishing nails	https://www.homedepot.com/p/Grip-Rite-13-x-2-in-6-Penny-Bright-Steel-Finish-Nails-1-lb-Pack-6F1/100027781	\$	4.75	1		4.75	
ب	Gray spray paint primer	https://www.homediaget.com/of/hist/filesum/Reintess/Tourh/97/12-on/files/ious/himstell-tourness/Series/Alice	\$	3.98	6	\$	23.88	You'll need more than you think
Hardware	Gloss black spray paint	Sites//zerow.homelmost.com/n/flust.Chem.Painter.is.South.2X-12-oz.Gloss.Black.General.Purpose-force-Paint 334026/107244831.	\$	3.98	4	\$	15.92	These are probably not the best optionsbut choose whatever you need for the finish that you want to achieve
Harc	Clear coat spray paint	Saltasi/Jeouw.homedenot.com/a/Bust-Oleum-Painter-s-Touch-2X-12-oc-Gloss-Clore-General-Purasse-Socae-Paint-114029/107244797,	\$	3.98	1	~	3.98	Makes the finish slightly less glossy, but improves durability
e l	M8 Nuts	https://www.homedepot.com/p/Everbilt-M8-10-9-Zinc-Metric-Hex-Nut-5-per-Bag-802418/204281770	\$	2.27	1	\$	2.27	For use with the IKEA legs
Table	M8 Washers	tatos://www.homedeoot.com/o/Everbilt-Mil-Zinc-Plated-Metric-Flat-Washer-5-Piece-Bia-802458/204504800	\$	0.97	1	\$	0.97	Or whatever you can find in your spare parts drawer that's close enough
L	BRENNÅSEN bed legs (IKEA)	https://www.ikea.com/us/en/p/brennasen-leg-black-stained-00299689/	\$	30.00	1	\$	30.00	Not always in stock, but alternatives either have long shipping times or are pricey (or you could make your own legs)
	36"x36" Glass table top (1/4" thick)		\$	99.95	1	\$	99.95	You should check the availability of local glass suppliers in your area for a better deal (I purchased mine for around \$60
	3D Printer Filament (PLA)	hatos://www.amazon.com/HATCHBCU-3D-Flament-Dimensional-Accuracy/do/fl00005CBS17ref =ast sto.do	\$	22.99	1	\$	22.99	Whatever you have will work, but you'll need the majority of the spool for all the parts. If you can print with something stronger like PETG, that's better.
	Stepper motor dampers	https://www.amazon.com/en/product/B07GWN6V89/refeppy.yo_dt_h_asin_title_n08_s002iesLITE88psc=1	\$	13.99	1	\$	13.99	Not required, but greatly reduce noise
	M5 Square nuts	https://www.amazon.com/ep/oroduct/B01HSKL7Z6/ref=pox_vo_dt_b_asin_title_o03_s00?ie=UTF8&osc=1	\$	8.09	1	\$	8.09	You won't need this many
	12V to 5V step-down, 15A max	https://www.amazon.com/ep/product/B07V/YY5X6/ref=ppx_vo_dt_b_asin_title_o05_s00?le=UTF8&psc=1	\$	13.95	1	\$	13.95	
	M5 10mm bolts	https://www.amazon.com/ep/product/R07KWO41EK/ref=ppx_vo_dt_b_search_asin_title?le=L1TE8&psc=1	\$	8.49	1	'	8.49	
	M5 40mm bolts	https://www.amazon.com/ep/product/B083F9M/W/T/ref=ppx_vo_dt_b_asin_title_o07_s00?ie=UTF8&psc=1_	\$	8.99	1	т.	8.99	
	TMC2209 Stepper drivers	https://www.amazon.com/ep/oroduct/807W5\$3KVF/ref=ppx_vo_dt_b_asin_title_o07_s02?ie=UTF8&osc=1	\$	29.98		\$		You only need two, this comes with four
	1 kOhm resistors	1006 / Horans amazon.com/Printch: 1008 9514 1800 - Ohm-Resiston - Park Life L 1018 1615 1616 v. 1. 37 okthid-1 likeconomic-1 knotmensistonik nide 1500 177 184 v. indus 1818 s. n. 1. 2	\$	5.82	1	\$	5.82	You only need two, this comes with 100
	Jumper Wires		\$	6.98	1	\$	6.98	You only need three female-to-female cables that you'll hav to cut and splice, so if you have that or have the materials to crimp your own wires, this isn't necessary
	Power wire	State Chance a consistence Constitution Advantage Consistence Cons	\$	15.99	1	\$	15.99	Stranded is best, but if you have solid-core wire on hand, that will work as well (that's what I did)
	NEMA17 Steppers	hatos://www.amazon.com/soforoduct/800PNEG17W/mf=pox_vo_dt_b_asin_title_p07_s037s=UTE8&pox=1	\$	12.99	2	\$	25.98	These have long cables already soldered with female connectors. If you get steppers from somewhere else, you may have to solder connectors yourself.
	12V 10A power supply	https://www.amazon.com/ep/product/800Z9X4GLW/ref=ppx_vo_dt_b asin_title_o07_s03?ie=UTF8&psc=1	\$	19.99	1	\$	19.99	
	F623ZZ Bearings	https://www.amazon.com/go/product/B07MGTM2L4/ref=pox_vo_dt_b_asin_title_o07_s05?ie=LJTF8&psc=1	\$	8.48	2	\$	16.96	
	GT2 Belt - 10m	http://www.amaron.com/Macs.un-Addun-Semine Ass.tock-G-T2-Semin/do/10119354NB/ref-sv 1 12-bit hids-18-becompts-1-Omes/2-bit/Reids-15980085936 - indox bit/8-se-13	\$	10.99	1	\$	10.99	
<u></u>	Mini V-Wheels (off-brand)	https://www.amazon.com/go/product/B07V4GHLL8/ref=ppx_vo_dt_b_asin_title_o07_s06?ie=UTF8&psc=1	\$	9.99	2	\$	19.98	
ctronics	16 teeth GT2 pulleys	Extos://www.amazon.com/ro/oroduct/807DBNSKTT/ref=nox_vo_dt_b_asin_title_c07_s06?i==UTF88.orc=1	\$	7.96	1	\$	7.96	
cti	RAMPS 1.6+ board	httos://www.amazon.com/eo/orodust/8078F576WC/ref=pox_vo_dt_b_asin_title_c07_s067ie=UTF88osc=1_	\$	12.99	1	\$	12.99	Any RAMPS board will work

Arduino MEGA 2560	tons / James annuant con (11500). (Process 200). (PMG ALG) 2 Invites Complain (del 2010) 2 Ft (10 Abril 2 1 10 Abb 1 2 Annuant condenses as and 115000002 Each 2	\$ 15.99	1	\$ 15.99	You could replace this and the RAMPS board with a single board such as the SKR 1.3l had the MEGA already, so the RAMPS was the best option for me.
Assorted M3 Screws	https://www.amaxon.com/en/oroduct/808125LTBT/ref=pox_vo_dt_b_asin_title_p07_5072le=UTF88pox=1	\$ 25.98	1	\$ 25.98	You need 5% of the screws in this pack, but it's a good deal
M5 Washers	https://www.amaxon.com/tro/oroduct/80090K4TZO/ref=ppx_vo_dt_b_asin_this_o07_s082ie=UTF88psc=1_	\$ 3.66	1	\$ 3.66	
M5 Nylock Nuts	https://www.amazon.com/sp/product/80761189F5/ref=pox_vo_dt_b_asin_title_p07_s082ie=LITE88.psc=1	\$ 5.64	1	\$ 5.64	
Raspberry Pi	https://www.adafruit.com/product/4295	\$ 30.00	1	\$ <b>≺() ()()</b>	A Model 3B+ (what I used) or newer will work, this is the cheapest one I could find (Pi 4 Model B 1GB).
Micro SD Card	The Class and a colorisation and the area hard according to the area and a considerate and a considera	\$ 6.19	1	\$ 6.19	Anything of acceptable quality should be fine
LED Strips (4m)		\$ 24.99	1	\$ 24.99	Go for whatever you are comfortable with. These are a goo price and should work. I used something a bit more pricey since I had some on-hand (https://www.mouser.com/ProductDetail/Seed- Studio/104020109?qs=byeeYqUlh0PmEriTC2u0yQ%3D%3D, Qty 4)
Openbuilds V-Slot Linear Rail (1500mm)	http://makerstore.cc/product/v-slot-20-x-40mm/	\$ 20.90	2	\$ /11 ON	There are many other places that sell thislook for one that's on sale (when I bought mine makerstore was 30% of
1" Cube Neodynium Magnet	https://www.amston.com/CMS-Meanedics-G-ode-Neederium/Meaned/dol/800000000/sel-sc-1.322dchilds1&kevmonis-1-instable-neederium-meanedicold-190000010≻	\$ 12.98	1	\$ 12.98	
Arduino Uno (or any other arduino)	The Prima American In 1500 Band of House ASSE (1502 Complete August 1504 Delay & A Complete Assessment Assessm	\$ 12.98	1	\$ 1748	Any Arduino that can run LED strips will work (specifically can run the FastLED library)
Sand	IIII. / Jama amani son/Inli Wila fine kashi / in/WTEYKOY abis 1. 128 hill-14 to asini-decesses sanfachida ini-1180007/4, ed 2	\$ 14.99	2	\$ 29.98	I found this to work well. It's fine, but not too fine to the point where it's just a powder
Assorted Sandpaper	18ths: 17 review amounts com 2 20 PCS Violente Sandinanes Aus contest Sandinas And 20 THE POST For Four 1, 12 The hide-18th revenuelle via andersonic side 15 00 20 20 20 20 20 20 20 20 20 20 20 20	\$ 5.99	1	\$ 5.99	Amazon sandpaper isn't terrible
Wood glue	https://www.homedepot.com/p/Titebond-II-16-oz-Premium-Wood-Glue-5004/100144210	\$ 5.97	1	\$ 5.97	Any wood glue will work



Hardware		272.59
Electronics	\$	430.33
Miscellaneous	\$	41.94
Total	\$	744.86