Dis Component	Approx Dring	Price Each Total	Payer 1	Source 2	Sauran 2	Notes								
Component	Approx Price	Price Each Total	Souce 1	Source 2	Source 3	My website will sell them or you can download the Gerber and drill files and								
1 MIYBot Circuit Board	\$50 for 10	\$5 \$5	MIYElectronics.com		oshpark.com	submit them to be manufactured								
1 Pro Trinket 5V	\$10	\$10 \$10	https://www.adafruit.com /products/2000			In bulk they are cheaper. Adafruit has lots of other cool stuff. Shop around!								
			https://www.jameco.com /webapp/wcs/stores/sen	http://www.ebay.com/itm/A UGA1-17CO-24-PIN-x-6- PC-IC-SOCKETS-20-pcs- /7718610711717hash-nic m2803676543:g-o5UAAOS wsydVqEB1 http://www.ebay.com/itm/1		On ebay search for 24 pin .6 inch socket. Do not get machine pins								
			Tastoreid=10001&catalo	PC-IC-SOCKETS-20-pcs- /1718610711717hash=ite										
1 24 pin 0.6" wide socket dual wipe	\$0.30	\$0.30 \$0.30	gld=10001&productid=1 12284	m2803b7d543:g:o5UAAOS w3ydVqEB1										
				http://www.ebay.com/itm/1 Opes-tot-Connector-2- 54mm-40-Prin-Mate-Single- Row-Gold-Prin-Header- Strip-New- /ZDZ174Z755417hash=ite msabbc213d5;g:YZ4AAOS wu4BVuIST		Buy in bulk on ebay. Gold ones are better. Need 1 row per board								
			http://www.jameco.com/	Row-Gold-Pin-Header- Strip-New-										
1 40 pin row of male headers - the	40.6	\$0.10 \$0.10	webapp/wds/stores/serv et/Product_10001_1000	r252174275541?hash=ite m3ab6c213d5:g:YZ4AAOS wu4BVufST	8									
1 40 pili low of male fleaders - tile:	5 10 101 31	\$0.10 \$0.10	1_2100211_11	http://www.ebay.com/itm/5		Buy in bulk on ebay. Make sure you buy Common cathode.								
			http://www.iameco.com/	http://www.ebay.com/itm/5 mm-water-clear-RGB- Cottor-ED-Common- Cathode-Pack-of-10-E6-2- /3017167-340517/hash=le- ma6s/b80063:ga/QAAOS wbNdv007L		Collision casione.								
1 Common Cathode RGB LED 5m	100 for 815	\$0.15 \$0.15	webapp/wcs/stores/serviet/Product_10001_1000	73017167340517hash=ite m463fb80063:g:a7QAAOS										
I Collinol Cauloue RGB LED SIII	100 101 \$15	\$0.10 \$0.10	1_2120101_1	http://www.ebay.com/itm/1 00-Pcs-Tactrie-Tact-Push-		Common part. Buy on ebay. Search for								
				Button-Switch-Momentary- 6x6x5mm-4-Pin-DIP-		Common part. Buy on ebay. Search for Tactile Push Button Switch Momentary 6x6x5mm 4 Pin DIP Through-Hole								
			http://www.jameco.com/ webapp/wcs/stores/servi	Through-Hote- /360816463169?hash=ite m5402564641:g:B0UAAOx yrrp11bAt										
2 Pushbutton Switches Tactile 6mr	n 100 for \$5	\$0.05 \$0.10	1 119011 -1	yrrp1hbAt	m/products/367	9								
				http://www.ebay.com/itm/1 00pcs-NEW-SS12D00G4- SPDT-1P2T-2-Position-3-		Common part. Buy on ebay. Search for SPDT 1P2T 2 Position 3 Pin PCB Panel Vertical Slide Switch								
			http://www.jameco.com/	Pin-PCB-Panel-Vertical- Slide-Switch										
2 Slide Switches 0.1" pitch spdt 2 p	100 for \$5	\$0.05 \$0.10	etProduct_10001_1000 1 2258831 -1	http://www.ebay.com/itm/1 00pcs-NEW-SS12D00G4- SPD1-1P21-2-Position-3- Prin-PCB-Panel-Vettical- Side-Switch- 1918924083207hash=ite mzca1c20600;g:ZCsAAOS w37tV-TAL										
			http://www.jameco.com/ webapp/wcs/stores/serv et/Product_10001_1000			Buy in bulk. You can buy these from ebay too, but they are very cheap from Jameco								
3 220 ohm 1/4 w resistors	\$0.01	\$0.01 \$0.03	1 050700 -1											
			http://www.jameco.com/ webapp/wcs/stores/servi			Buy in bulk. You can buy these from ebay too, but they are very cheap from Jameco								
2 10K ohm 1/4w resistors	\$0.01	\$0.01 \$0.02	1_6911041											
			https://www.jameco.com /webapp/wcs/stores/scarc	http://www.ebay.com/itm/1 0Pcs-5v-Active-Buzzer- Magnetic-Long-Continous- Beep-Tone-Alarm-Ringer- 17mm.		Cheaper on ebay. Search for 12mm buzze piezo 5v arduino								
			let/ProductDisplay?langl	Beep-Tone-Alarm-Ringer- 12mm-										
1 12mm piezo Buzzer Transducer	B \$1 from Jameco.	\$1 \$1	gld=10001&productid=2 210968	7321800017267?hash=ite m4ae0dad373:g:IFIAAOSw ofxUduG1	4									
				http://www.ebay.com/itm/1 UU-pcs-3-81mm-Prich- 150V-9A-2P-Poies-PCB- Screw-Terminal-Block- Connector-Green- 73515821655097/hash=ite m510bee1absrg:U0g/AUCx VUNRK7/SZ		Search for screw terminal 3.81 2 pos. Do not buy 5mm!								
				150V-9A-2P-Poles-PCB- Screw-Terminal-Block-		not buy sinn.								
			https://www.jameco.com /webapp/wcs/stores/sen	/3515821656097hash=ite										
1 Screw Terminal 2 pos 3.81 mm p	it 100 for \$18	0.18 0.18	1_20945061	yUnRR7jS2		Vanconmon nort. Duy on about or								
				yUninkryjsz http://www.ebsy.com/itm/L of-10-PGs-New-4AA-ZA- Battery-6V-Cip-Holder- Box-Case-wint-6-Leads- Back- 1809071106747hash=ile mza1eer/111zg:frcAAOSw g/JUGVXA- http://www.ebsy.com/itm/5		Very common part. Buy on ebay or Jameco. Swich on holder is not needed.								
			https://www.jameco.com	Black- Black- Pranto 71106742hasheile										
1 4 AA battery holder	\$1.20	\$1.20 \$1.20	T_216152_1	mzatee77112:g:frcAAOSw q7JUGVXK	¥									
			http://www.amazon.com. Ultrasonic-Distance-	http://www.ebay.com/itm/5 pcs-Ultrasonic-Module-HC-		Buy on ebay. Search for HC-SR04 ultrasonic sensor								
			Measuring-Transducer- Arduno/dp/B0181ZBL91	SR04-Distance-Measuring- Transducer-Sensor-tor-										
			ie=UTF8&qid=14481321 94&sr=1-	http://www.ebay.com/itm/5 pcs-ultrasonic-Module-HC- SR04-Distance-Measuring- Transducer-Sensor-lor- Arduno- X813747894717hash=ite m580b05775fg.Rd0AAOxy SOJTWL-h	,									
1 HC-SR04 Ultrasonic Sensor	\$1.25	\$1.25 \$1.25	88keywords=hc-sr04			Needed if you want to be able to sense black and white lines								
			https://www.pololu.com/	en/pototu-qtr-1rc- reflectance-sensor-		black and white lines								
1 QTR-1RC Reflectance Sensor (2-Pa	\$4.25	\$4.25 \$4.25		2pk.html?gclid=CM2e0OK ZoskCFYRCaQodSk4Rgw http://www.rohotshop.com/		Might be possible to buy directly from								
				http://www.robotshop.com/ en/9g-continuous-rotation- micro-		Might be possible to buy directly from Feetech in China. Make sure they are continuous rotation!								
2 FEETECH FS90R Micro Continu	0 \$5			micro- servo:html?gclid=CJG25b UaoskCFQ-baQoddckBWg										
			http://www.ebay.com/itm /40pcs-20cm-2-54mm- Male-to-Female-Dunont-	http://www.amazon.com/40										
			Wire-Jumper-Cable-for- Arduno-Breadboard-	PCS-Dupont-cable-color- connector/dp/B007XPSVM		These ribbon cables can be pulled apart and used for multiple robots. The wires are								
1 Dupont wire 20cm 40 pieces Fen	1 \$3	\$3 \$3	em4aea2919a6:g:I80AA OSwBvN1m8tA	http://www.amazon.com/40 PCS-Dupont-cable-color- connector/ap/800/XPSVM Y/ref=sr 1 27/e=01F8&qr d=144814084&s=8 Z&keywords=dupont+wire		and used for multiple robots. The wires are useful for connecting the board to the sensors.								
		Total \$37												
		rusal \$3/												
Other supplies needed - these ar	e some of the suppli	es I use. Your miles	ge might vary.											
			http://www.amazon.com/ gproroduct/B00OC6WR2											
A minus HDD a 11 a	40.6		27psc=1&redirect=true& ref =oh aui detailpage			Any micro usb data/power cable will work and can be reused.								
1 micro USB cable for programmin	g iu for \$15	\$1.50	http://www.amazon.com			and can de reused.								
			Stani-Tools-SSVT- Temperature- Soldering/do/B0029N70	http://www.amazon.com/X- TRONIC-MODEL-4010- XTS-Centigrade-AN11- MAGNET ICP/BIO053491 YO/refear 1 37/e=U1F8& qid=144873347182#8- 38/eeywords=soldering-iro										
			WM/ref=\$r 1 17/1e=UT F8&qid=1448133436&sr	MAGNETIČ/dp/80053491 YO/ref=sr_1_37/e=UTF8&										
Soldering Iron	\$20 - \$80		17&keywords=soldering	3&keywords=soldering+iro n+xtronic		My class uses the Stahl tools one. I use the Xtronic one at home.								
-			http://www.amazon.com Kester-24-6040-0061-											
			Diameter/dp/B00FGHT1 2A/ret=sr 1 17/ie=U1F8 &qid=1448133678&sr=8											
60/40 Tin/Lead Solder	\$30 / lb		1&keywords=60+40+tin+ lead+solder+kester			Tin/Lead is the easiest to work with for new solderers. Wash hands after handling.								
			http://www.amazon.com/ x/dyuer-Soldering- Cleaner-sponge- needed/gbts/UDSC789E Urref=sr 1 5 re=UTF88 gid=1448133763&sr=5 5&keywords=solder+sponge http://www.amazon.com/											
			needed/dp/B005C789E U/rel=sr_1_57ie=UTF88											
Metal Solder Sponge	\$8		qid=1448133763&sr=8- 5&keywords=solder+spo											
openge	- 40		http://www.amazon.com											
			off-Construction-21- Degree/dp/B017ODDPN											
			http://www.amazon.com Hakko-CHP-170-Stand- off-Construction-21- Degree/dp/B017ODDPN OWeles: 1 178=power- hand- todsz.ie=UTF8&qid=144 R133/R4K8r=1.											
W O			8133789&sr=1- T&keywords=Wire+cutter											
Wire Snips	\$5		<u> </u>			No recommendation other than to have them!								
Safety Glasses	\$5					tnem:								

		http://www.amazon.com/											
		Edsyn-Deluxe-											
		Vacuum/ANRORSOKV											
		Kl/ref=sr 1 87s=power-											
		hand-											
		STTTSGEROUT - 144											
		88keywords=solder+suc											
Solder Sucker	\$20	ker											
Hot Glue Gun / Hot Glue Sticks	\$10			I buy these at Walmart or Michaels									