

	Cost (total in USD)	Per unit (USD)	Quantity Required	Link			
Pumps:							
Peristaltic Pump	24.95	24.95	1	https://www.adafruit.com/product/163			
Electronics:							
Arduino Uno	16.99	16.99	1	https://www.adafruit.com/product/33			
DC Motors	6.99	1.7475	2	https://www.adafruit.com/product/164			
Magnet for Stir Bar	1.5	0.75	2	https://www.kjma.com/Products/Magnets-for-Stir-Bar.html			
Neo Pixel RGB Strip (1 meter)	16.95	4.97	1	https://www.adafruit.com/product/1640			
Neo Pixel UV Strip (1 meter)	19.95	4.92	1	https://www.adafruit.com/product/3129			
Capacitor	6.99	0.466	1	https://www.adafruit.com/product/165			
Diodes	5.99	0.04	2	https://www.adafruit.com/product/166			
N Channel Mosfet	8.99	0.9	2	https://www.adafruit.com/product/167			
Resistors	7.99	0.015	3	https://www.adafruit.com/product/168			
5V/12V Power Supply (and Cord)	20.98	20.98	1	https://www.adafruit.com/product/169			
Connectors/Crimps	12.99	0.02	50	https://www.adafruit.com/product/170			
Wire	9.98	0.2	10	https://www.adafruit.com/product/171			
Shrink wrap tubing	24.99	0.25	1	https://www.adafruit.com/product/172			
Proto board	9.99	0.31	1	https://www.adafruit.com/product/173			
header pins	12.75	0.11	35	https://www.adafruit.com/product/174			
Data/power cable (for arduino)	6.99	3.5	1	https://www.adafruit.com/product/175			
Laser (10 pack)	6.79	0.679	1	https://www.adafruit.com/product/176			
Photoresistor	14.89	0.07	1	https://www.adafruit.com/product/177			
Tubing/connections/Stoppers:							
1mm id tubing	5.49	0.07	18	https://www.adafruit.com/product/178			
Pasteur Pipettes	40.61	0.2	4	https://www.adafruit.com/product/179			
Large diameter tubing for pipette connection	7.99	2.44	2	https://www.adafruit.com/product/180			
Rubber stoppers (4 count)	5.28	1.32	4	https://www.widg.com/rubber-stopper-4-count			
3d Printing Filament	25.99	15.6	Roughly 600g	https://www.adafruit.com/product/181			
Female 1/16" Luer lock connector	8.99	0.3	6	https://www.adafruit.com/product/182			

Male 1/4" Luer lock connector	7.99	0.27	6	https://www.ama
Other				
M3 bolts	0.92	0.23	4	https://www.ama
M3 Nuts	0.6	0.15	4	https://www.ama
M2 bolts	8.99	0.011	12	https://www.ama
M2 nuts	8.99	0.011	12	https://www.ama
Optional Components				
SD card Module	6.99	1.4	1	https://www.ama
LCD Screen	10.99	10.99	1	https://www.ama
Rotary Encoder	8.89	1.78	1	https://www.ama
Net Total:	386.35	Actual Total:	123.449	
Assumptions:				
Access to a 3d printer				
Access to tools to crimp wires for connections				
Ability to cut glass pipettes				
Access to soldering iron and solder				
Access to wire cutters/strippers				
Access to heat gun to shrink shrink wrap				
Access to incubator				
Access to sterilization, either chemical or autoclave				
Access to glassware and stir bar				
Some form of adhesive ideally superglue				
Access to laptop				