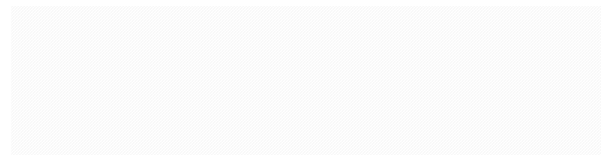


PRODUCT NAME	Graffiti Bot	
PART COUNT	123	
TOTAL COST	\$ 159.69	



ITEM NUMBER	PART NAME	QUANTITY	SOURCE	MODEL/PART NUMBER	MATERIAL	PART IMAGE	UNIT COST	AMOUNT
1	Arduino CNC Kit Consisting of:	1	AMAZON: https://www.amazon.com/dp/B072N4FMRN/	LKB02			\$ 62.24	\$ 62.24
1.1	CNC Shield Expansion Board V3.0	1						
1.2	Longrunner Board (Arduino Uno Clone)	1						
1.3	1.5m USB cable for Board	1						
1.4	Nema 17 Stepper Motor	3						
1.5	Stepper Motor Mounting Bracket	3						
1.6	M3 Screws For Mounting Brackets	12						
1.7	DRV8825 Stepper Motor Driver	3						
1.8	Aluminum heatsink w/ 3M tape backing	3						
2	MG90S 9g Metal Gear Digital Micro Servo	1	AMAZON: https://www.amazon.com/dp/B07NV7SD3F	MG90S4			\$ 4.25	\$ 4.25
3	20 Teeth 5mm bore 6mm Width 20T Timing Belt Pulley Wheel	3	AMAZON: https://www.amazon.com/dp/B077GNZK3j	TBLS	Aluminum		\$ 1.20	\$ 3.60
4	Toothless Bore 5mm Aluminum Timing Belt Idler Pulley	5	AMAZON: https://www.amazon.com/dp/B07RV2T54M	20-05-0514-10	Aluminum		\$ 1.20	\$ 6.00
5	GT2 Open Timing Belt 2mm Pitch 6mm Width		AMAZON: https://www.amazon.com/dp/B08974S1CC	ZR-200527002	Fiberglass Reinforced Rubber		\$0.46/ft.	
5.1	4.5 Foot Length	2					\$ 2.07	\$ 4.14
5.2	6 Foot Length	1					\$ 2.76	\$ 2.76
6	11.8 x 8.2 x 0.15-in Board	1	AMAZON: https://www.amazon.com/dp/B0BF8PZ9WX	QXUS-067	Medium Density Fiberboard		\$3.67/pc	\$3.67
6.1	6 x 4-in Base Board	2						
6.2	4.375 x 3.5-in Pulley Mount	2						
6.3	2.5 x 1.5-in Pulley Mount	1						
7	2 x 4 x 48-in Stud	2	Lowes	13765	Pine		\$ 1.88	\$ 3.75
8	3/8 x 48-in Round Rod	2	True Value	110243	Hot Rolled Plain Steel		\$ 8.99	\$ 17.98
9	1/4 x 36-in Round Rod	2	True Value	49350	Hot Rolled Plain Steel		\$ 2.19	\$ 4.38
10	1/8 x 36-in Round Rod	2	True Value	110365	Hot Rolled Plain Steel		\$0.10/in	\$0.60

11	5/8 x 5/8 x 2.5-in Wood Dowel	2	True Value	444533	Poplar		\$0.11/in	\$0.22
12	1x1x1-in Wood Dowel	4	True Value	444555	Poplar		\$0.17/in	\$0.68
13	3/8 X 1/2 X 1-in Sleeve Bearing	4	True Value	58079	Bronze		\$ 2.25	\$ 9.00
14	M5 X 25mm Hex Head Lag Bolt	5	True Value	4162	Stainless Steel		\$ 0.50	\$ 2.50
15	M5 Nylon Lock Nut	5	True Value	803678	Stainless Steel		\$ 0.60	\$ 3.00
16	M5 Washer	15	True Value	803538	Stainless Steel		\$ 0.07	\$ 1.05
17	#8 UNC-32 x 1/2-in Machine Screw	12	True Value	67569566	Stainless Steel		\$ 0.12	\$ 1.44
18	#8 UNC-32 Nut	4	True Value	2539	Stainless Steel		\$ 0.09	\$ 0.36
19	#8 UNC-32x 5/8-in Machine Screw	2	True Value	67569556	Stainless Steel		\$ 0.14	\$ 0.28
20	DC 24V 10A 240W Power Supply Universal	1	AMAZON https://www.amazon.com/dp/B078RYWZMH	AL24V10AT			\$ 22.99	\$ 22.99
21	Compression Spring Wire Diameter 0.039", OD 0.28", Free Length 0.79"	2	AMAZON https://www.amazon.com/dp/B07MDVTJKJ	A18111200ux0261	Stainless Steel		\$ 0.08	\$ 0.16
22	Compression Spring - 1.2mm Wire Dia, 12mm OD, 15mm	1	AMAZON https://www.amazon.com/dp/B076LVS4J3/	a17020800ux1344	Stainless Steel		\$ 0.85	\$ 0.85
23	3D-Printed 2.5-Axis Movement Assembly	1			PLA		\$0	\$0
24	3D-Printed Marker Holder Assembly	1			PLA		\$0	\$0
25	3D-Printed 1/4-in Rail Brace	3			PLA		\$0	\$0
26	3D-Printed GT2 Pulley Clamp	6			PLA		\$0	\$0
27	Sharpie Marker	1	True Value	112541	PLA		\$ 3.79	\$ 3.79
		123					TOTAL	\$ 159.69

Project Cost Estimate

Purchasing all main components for the graffiti bot the total cost comes out to be \$159.69. Having several of the product materials be recycled from the shop, the most expensive purchased parts included the Arduino CNC Kit (\$62.24), Power Supply (\$22.99), and two of the 3/8 x 48 in steel rods (\$17.98)