

Product Name	Description (Use in Project)	Unit Price	Qty	Total Cost	Link				
Acrylic Mirror Sheet	Reflective mirror surface for concentrating sunlight onto the thermal absorber.	\$15.35	1	\$15.35	<a href="https://a.aliexpress.com/_mz2n0oZ">https://a.aliexpress.com/_mz2n0oZ</a>				
Aluminum Sheeting	Base for the Acrylic Mirror Sheet to be placed on	\$8.10	3	\$24.30	<a href="https://a.aliexpress.com/_mQa0g89">https://a.aliexpress.com/_mQa0g89</a>				
Plywood Panel	Wood sheet for mounting mirrors and building structural surfaces.	\$17.48	1	\$17.48	<a href="https://www.homedepot.com/p/OSB-7-16-Application-as-4ft-X-8-ft-Sheathing-Panel-386081/202106230">https://www.homedepot.com/p/OSB-7-16-Application-as-4ft-X-8-ft-Sheathing-Panel-386081/202106230</a>				
2x2x8ft Plank	Wood planks for building frame, supports, and mounts.	\$2.97	3	\$8.91	<a href="https://www.homedepot.com/p/2-in-x-2-in-x-8-ft-Furring-Strip-Board-165360/202076422">https://www.homedepot.com/p/2-in-x-2-in-x-8-ft-Furring-Strip-Board-165360/202076422</a>				
200 Pcs Stainless Steel Screws	Fasteners for assembling wood frame, mirrors, heatsinks, and hardware.	\$2.97	1	\$2.97	<a href="https://a.aliexpress.com/_m1EigEv">https://a.aliexpress.com/_m1EigEv</a>				
Compression Springs	Springs to allow adjustable mirror angles (attach between mirror mounts and frame).	\$1.97	3	\$5.91	<a href="https://a.aliexpress.com/_m0TiIel">https://a.aliexpress.com/_m0TiIel</a>				
Aluminum Bar 6mmx60mmx500mm	Metal sheet to use as absorber plate beneath focused sunlight (better heat conduction than wood).	\$27.71	1	\$27.71	<a href="https://a.aliexpress.com/_mMZBSHR">https://a.aliexpress.com/_mMZBSHR</a>				
Thermoelectric Module (TEG) 3 Piece	Thermoelectric generator modules to convert heat differential to electrical energy; plan to use 3	\$10.08	1	\$10.08	<a href="https://a.aliexpress.com/_mOfct1b">https://a.aliexpress.com/_mOfct1b</a>				
8g Thermal Paste Compound	Thermal interface paste to improve heat transfer between absorber and TEG hot side.	\$5.29	1	\$5.29	<a href="https://a.aliexpress.com/_mvyQWxj">https://a.aliexpress.com/_mvyQWxj</a>				
Aluminum Heatsink With Fan	Combined heatsink and fan for cooling TEG cold side to maximize $\Delta T$ .	\$6.63	3	\$19.89	<a href="https://a.aliexpress.com/_m08Sk7x">https://a.aliexpress.com/_m08Sk7x</a>				
Electronic Wiring (5M 18AWG)	General-purpose wire for electrical connections (positive/negative DC).	\$6.78	1	\$6.78	<a href="https://a.aliexpress.com/_msJaiU1">https://a.aliexpress.com/_msJaiU1</a>				
5V Power Bank 2000mAh	Battery power supply with USB inout; powers fans & electronics.	\$14.44	1	\$14.44	<a href="https://a.aliexpress.com/_mP1l0GV">https://a.aliexpress.com/_mP1l0GV</a>				
High Precision Voltmeter Ammeter	Meter to display voltage and current for monitoring TEG output and battery.	\$6.46	1	\$6.46	<a href="https://a.aliexpress.com/_mM2Mf73">https://a.aliexpress.com/_mM2Mf73</a>				
DC-DC Boost Converter	Converts TEG raw voltage to 5V USB charging voltage for power bank charging circuit.	\$2.44	1	\$2.44	<a href="https://a.aliexpress.com/_m0OLXii">https://a.aliexpress.com/_m0OLXii</a>				
USB Micro cord	Connects Boost Converter to Power Bank	\$1.13	1	\$1.13	<a href="https://a.aliexpress.com/_mNWu6F3">https://a.aliexpress.com/_mNWu6F3</a>				
Blocking Diode (Schottky)	Prevents backflow discharge from battery into TEG array at low voltages.	\$4.13	1	\$4.13	<a href="https://a.aliexpress.com/_m1Xo1z">https://a.aliexpress.com/_m1Xo1z</a>				
**Heatshrink/tools/other already owned									
Contingency	In case of broken/missing parts or changes in pricing								
				Subtotal	\$173.27				
				10%	Total:	\$190.60			