



Advanced Manufacturing & Prototyping Integrated to Unlock Potential

7th Grade Math Data-Driven Decision Making “Perfecting Your Craft” Manufacturing Quality Control Challenge Materials List

*This material list provides supplies to accommodate five class periods of thirty-five students each.
Please be sure to review the teacher’s edition for more detailed material descriptions.*

Item	Source of Purchase	Item #	Item Description	Qty	Price per item	Total per item
Screws- 1/4"-20 thread size <i>(35 needed-1 per testing device, 65 extra if needed=100 total)</i>	McMaster-Carr	90473A029	Zinc Plated Steel Round Head Phillip Machine Screw 1/4"-20 Thread, 1" Length, Packs of 100 https://www.mcmaster.com/#catalog/123/3046/=17r4gk5	1	\$9.22	\$9.22
Hex Nuts – 1/4"-20 thread size (thin) <i>(25 hex nuts inside the plastic shoe box, 40 extra if needed = 100 total)</i>	McMaster-Carr	91078A029	Low-Strength Steel Thin Hex Nut, Zinc-Plated, Grade 2, 1/4"-20 Thread Size https://www.mcmaster.com/#catalog/123/3213/=17r3298	1	\$3.26	\$3.26
Hex Nuts – 1/4"-20 thread size <i>(425 hex nuts inside the plastic shoe box, 75 extra if needed = 500 total)</i>	McMaster-Carr	90473A029	Low-Strength Steel Hex Nut, Grade 2, Zinc-Plated, 1/4"-20 Thread Size https://www.mcmaster.com/#catalog/123/3208/=17r32fp	5	\$2.68	\$13.40
Hex Nuts – 1/4"-28 thread size <i>(25 hex nuts inside the plastic shoe box, 75 extra if needed = 100 total)</i>	McMaster-Carr	90473A205	Low-Strength Steel Hex Nut, Grade 2, Zinc-Plated, 1/4"-28 Thread Size https://www.mcmaster.com/#catalog/123/3208/=17r32mq	1	\$3.14	\$3.14
Hex Nuts – 5/16"-18 thread size <i>(25 hex nuts inside the plastic shoe box, 75 extra if needed = 100 total)</i>	McMaster-Carr	90473A030	Low-Strength Steel Hex Nut, Grade 2, Zinc-Plated, 5/16"-18 Thread Size https://www.mcmaster.com/#catalog/123/3208/=17r32sh	1	\$4.05	\$4.05
Plastic Shoe Box <i>(1 shoe box per teacher)</i>	Amazon	N/A	Sterilite 6-Quart Storage Bin Shoe Box - Clear and White https://www.amazon.com/s/ref=nb_sb_noss?url=search-alias%3Daps&field-keywords=ONE+Sterilite	1	\$6.77	\$6.77
Post It Chart Paper <i>(1 chart per teacher)</i>	Amazon	N/A	Post-it Self-Stick Easel Pad, 25 x 30.5 Inches, 30-Sheet Pad (2 Pack) https://www.amazon.com/Post-Self-Stick-Easel-Inches-30-Sheet/dp/B00006IA9F/ref=sr_1_1?ie=UTF8&qid=1495555194&sr=8-	1	\$28.86	\$28.86
3D Printed Scooper <i>(1 scooper per teacher)</i>	3D part specifications and file is inside of the Materials folder			1	3D Printed	
3D Printed Testing Device <i>(1 testing device per student, 35 students/class)</i>	3D part specifications and file is inside of the Materials folder			35	3D Printed	
Cardboard Trays	Uline	S-13340	Corrugated Trays - Kraft, 15 x 12 x 2" https://www.uline.com/Product/Detail/S-13340/Special-Use-Boxes/Corrugated-	10	\$0.54	\$5.40
Colored Pencils <i>(1 class set = 1 Box)</i>	Staples	433097	Crayola Classpack Colored Pencils (462-Box) http://www.staples.com/Pencil-Classpack-Colored-462-	1	\$98.99	\$98.99

Estimated Challenge Total Cost per Teacher: \$173.09