

| 2010 FTC Game | | Bill Of Materials | | | | | | | | | | | | | |
|---|----------------------|---|--|-------|---|-------|--------------------------|-------|------------------------|-------|--------------------------|-------|-------|--------------|--|
| 9-Sep-10 | | Corresponds to FTC Field drawings on 9/6/10 | | | | | | | | | | | | | |
| Items that have suppliers and Part# / UPC #s are recommended. If unable to purchase, then follow specifications | | | | | | | | | | | | | | | |
| Item | Size | Field Item # | Rolling Goal | | Bridge | | Cliff | | Mountain | | Batons/Dispensers | | Total | Supplier | UPC |
| | | | 4 assemblies per assy | total | 2 assemblies per assy | total | 2 assemblies per assy | total | 1 assembly per assy | total | 6 assemblies per assy | total | | | |
| Rolling Goal | | | | | | | | | | | | | | | |
| Casters | 2" | 53 | 4 | 16 | - | - | - | - | - | - | - | - | 16 | McMaster | Part #: 78155T11 |
| 3/4" Plywood | 11.75" x 11.75" | 54, 55 | 1 | 4 | - | - | - | - | - | - | - | - | 4 | | |
| Pan Head Wood Screws | #8 - 0.75" | 56 | 5 | 20 | - | - | - | - | - | - | - | - | 20 | | |
| Pan Head Wood Screws | #8 - 0.5" | 57 | 16 | 64 | can use screws that come with casters | | - | - | - | - | - | - | 64 | | |
| 2" PVC Pipe | 6" | 61 | 1 | 4 | - | - | - | - | - | - | - | - | 4 | | |
| 2" Drain Plug | | 62 | 1 | 4 | - | - | - | - | - | - | - | - | 4 | HD/Lowes | 038753007304 |
| 4" PVC Pipe | 4.5" | 63 | 4 | 16 | may vary in color due to regional inventories | | - | - | - | - | - | - | 16 | | |
| 4" PVC Sewer or Drain Caps | | 64 | 4 | 16 | - | - | - | - | - | - | - | - | 16 | Lowe's | 052063434056 |
| Bridge | | | | | | | | | | | | | | | |
| 1/2" MDF Plywood | 48" x 24" | 81 | - | - | 1 | 2 | - | - | - | - | - | - | 2 | HD | 099167733357 |
| 2"x2" Furring Strip | 23" | 82 | - | - | 2 | 4 | - | - | - | - | - | - | 4 | | |
| Drywall screws | 1.25" | 83 | - | - | 8 | 16 | - | - | - | - | - | - | 16 | | |
| Cliff | | | | | | | | | | | | | | | |
| 1/2" MDF Plywood | 24" x 24" | 41 | - | - | - | - | 1 | 2 | - | - | - | - | 2 | | |
| Low Goal Corrugate | ~24" x ~24" | 121 | replaces 2 field tiles (same as Face Off) | | - | - | 1 | 2 | - | - | - | - | 2 | Lowe's | Item #: 12753 or similar from Home Depot |
| Mountain | | | | | | | | | | | | | | | |
| 1/2" MDF Plywood | 12" x 42" | 101 | MDF can be purchased as 2'x4', 4'x4', or 4'x8' as needed | | - | - | - | - | 2 | 2 | - | - | 2 | | |
| Piano hinge | 12" | 102 | - | - | - | - | - | - | 2 | 2 | - | - | 2 | Ace Hardware | 5298328 |
| Hinge Screws | #8 - 0.25" | 103 | can use screws that come with hinges | | - | - | - | - | 24 | 24 | - | - | 24 | | |
| 2" Anti-skid Tread tape | 42" | 104 | - | - | - | - | - | - | 4 | 4 | - | - | 4 | Lowe's | 040074020306 |
| Bridge/Cliff/Mountain Support | | | | | | | | | | | | | | | |
| Drywall screws | 1.25" | 83 | - | - | 6 | 12 | - | - | - | - | - | - | 12 | | |
| Pan Head Machine Screws | #10-32x2" | 93 | - | - | 2 | 4 | - | - | - | - | - | - | 4 | | |
| Wood Screw | 2.5" | 110 | - | - | 2 | 4 | - | - | - | - | - | - | 4 | | |
| 2x4" Cliff/Bridge Support | 49.25" | 111 | - | - | - | - | - | - | 2 | 2 | - | - | 2 | | |
| 2x4" Mountain Support | 20.75" | 112 | - | - | - | - | - | - | 2 | 2 | - | - | 2 | | |
| 1/16" in thick Angle Aluminum | 0.5" x 0.5" x 24" | 113 | - | - | 2 | 4 | - | - | - | - | - | - | 4 | | |
| 1/2" Wood Dowel | 1/2" X 42" long | 94 | - | - | - | - | - | - | 1 | 1 | - | - | 1 | Home Depot | Store SKU # 14815 |
| 2" Black Gaffer's Tape | AR | 95 | - | - | - | - | - | - | - | - | - | - | - | | |
| Batons/Dispensers | | | | | | | | | | | | | | | |
| 1/2" PVC Pipe | 6" | 9 | - | - | - | - | - | - | - | - | 15 | 90 | 90 | | |
| 1/2" PVC Pipe (Preloads) | 6" | 9 | - | - | - | - | - | - | 10 | 10 | - | - | 10 | | |
| IR Beacon | (from Hot Shot) | 14 | one master/one slav | | - | - | - | - | - | - | - | 2 | 2 | HiTechnic | |
| Pan Head Wood Screw | #8 x 0.75" | 56 | - | - | - | - | - | - | - | - | 6 | 36 | 36 | | |
| Drywall Screws | 1.25" | 83 | - | - | - | - | - | - | - | - | 14 | 84 | 84 | | |
| Drywall Screws | 1.25" | 83 | - | - | - | - | - | - | 2 | 2 | - | - | 2 | | |
| Flat Head Machine Screws | #10-32 x 2" | 144 | - | - | - | - | - | - | - | - | 2 | 12 | 12 | | |
| Wing Nuts | #10-32 | 145 | - | - | - | - | - | - | - | - | 2 | 12 | 12 | | |
| Corner Bracket | 1.5" x 1.5" x 0.625" | 146 | - | - | - | - | - | - | - | - | 2 | 12 | 12 | Lowe's | 0033923403078 or 0033923838979 |
| Washer | #10-32 | 147 | - | - | - | - | - | - | - | - | 2 | 12 | 12 | | |
| Front: Lexan | 12" x 2" | 151 | - | - | - | - | - | - | - | - | 2 | 12 | 12 | HD | 726941133019 |
| Batons/Dispensers (cont'd) | | | | | | | | | | | | | | | |

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| | | | | Rolling Goal | | Bridge | | Cliff | | Mountain | | Batons/Dispensers | | Total | | | |
| | | | | 4 assemblies | | 2 assemblies | | 2 assemblies | | 1 assembly | | 6 assemblies | | | | | |
| Item | Size | Field Item # | | per assy | total | per assy | total | per assy | total | per assy | total | per assy | total | | Supplier | UPC | |
| 1" Square Wood Dowel | 13.25" | 152 | | - | - | - | - | - | - | - | - | 2 | 12 | 12 | HD/Lowes | 038453831605 or 080307448736 | |
| Back: 3/4" Plywood | 13.25" x 8.25" | 153 | | - | - | - | - | - | - | - | - | 1 | 6 | 6 | | | |
| Side: 3/4" Plywood | 14.5" x 2" | 181 | | - | - | - | - | - | - | - | - | 2 | 12 | 12 | | | |
| Top Support: 3/4" Plywood | 8.25" x 3" | 182 | | - | - | - | - | - | - | - | - | 1 | 6 | 6 | | | |
| Bottom Support: 3/4" Plywood | 8.25" x 3" | 183 | | - | - | - | - | - | - | - | - | 1 | 6 | 6 | | | |
| Alignment: 3/4" Plywood | 1" x 8.25" | 191 | | - | - | - | - | - | - | - | - | | 1 | 1 | | | |
| Alignment: 3/4" Plywood | 12.75" x 6.25" | 192 | | - | - | - | - | - | - | - | - | | 1 | 1 | | | |
| 5/8" Dowel | 1" | 1310 | sand down to snugly fit in baton | | | | | | | | | - | 1 | 4 | | | |
| Magnets | 0.25" x 1" | 1311 | http://www.kjmagnetics.com/proddetail.asp?prod=D4X0 | | | | | | | | | - | 1 | 4 | | | |
| | | | | - | - | - | - | - | - | - | - | - | - | - | | | |
| Field and Global Use (as needed) | | | | | | | | | | | | | | | | | |
| 2" Gaffer's Tape | Red | 21 | | - | - | - | - | - | - | - | - | - | - | - | | | |
| 2" Gaffer's Tape | Blue | 22 | | - | - | - | - | - | - | - | - | - | - | - | | | |
| 1" Gaffer's Tape | White | 23 | | - | - | - | - | - | - | - | - | - | - | - | | | |
| 3/4" Velcro | | 42, 114 | | - | - | - | - | - | - | - | - | - | - | - | | | |
| Behr Premium Plus Semi-Gloss Paint | Mouse Ears (Black) | 43 | | - | - | - | - | - | - | - | - | - | - | - | | | |
| PVC Cement | | 65 | | - | - | - | - | - | - | - | - | - | - | - | | | |
| Behr Premium Plus Semi-Gloss Paint | Mickey's Pants (Red) | 71 | | - | - | - | - | - | - | - | - | - | - | - | | | |
| Behr Premium Plus Semi-Gloss Paint | Midnight Ball Blue (Blue) | 72 | | - | - | - | - | - | - | - | - | - | - | - | | | |
| Wood Glue | | 171 | | - | - | - | - | - | - | - | - | - | - | - | | | |
| 1" Gaffer's Tape | Red | 1312 | | - | - | - | - | - | - | - | - | - | - | - | | | |
| 1" Gaffer's Tape | Blue | 1313 | | - | - | - | - | - | - | - | - | - | - | - | | | |
| Krylon Fusion Spray Paint | Red Pepper/Safety Red | 1314 | | - | - | - | - | - | - | - | - | - | - | - | | | |
| Krylon Fusion Spray Paint | Patriotic Blue/Safety Blue | 1315 | | - | - | - | - | - | - | - | - | - | - | - | | | |
| IR Beacon Cable Assembly | | | | | | | | | | | | | | | | | |
| Connector Housing | Female socket 0.10" pitch | N/A | | | | | | | | | | | | | 2 | www.DigiKey.Com | WM2901 |
| Crimp | Socket Crimp | N/A | | | | | | | | | | | | | 4 | www.DigiKey.Com | WM2555-ND |
| Crimp Tool | | N/A | | | | | | | | | | | | | 1 | www.DigiKey.Com | WM9999 |
| Red Wire | 26 AWG Red Wire | | Available in 100' spools | | | | | | | | | | | | 25' to 30' | www.DigiKey.Com | K386-ND |
| Black Wire | 26 AWG Black Wire | | Available in 100' spools | | | | | | | | | | | | 25' to 30' | www.DigiKey.Com | K387-ND |