

Magnetopult (Magnetic Catapult Game)



Ian Foulds

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Summary

Grab a pile of Rocks and battle your opponent using a magnetic repulsion driven catapult.



6.79 hrs



3 pcs



0.15 mm
0.20 mm



0.40 mm



PLA



52 g



Prusa MINI /
MINI+

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Grab a pile of Rocks and battle your opponent using a magnetic repulsion driven catapult. The magnetopult consists of three parts that can all be printed without supports. The base, throwing arm and the cross bar. Each can be loaded with up to three. 8mm x 2mm magnets. I got them at Princess Auto, but you can get them for about 10 cents a piece on Amazon.


The magnets in the base should be loaded to repel the magnets in the throwing arm and the crossbar can be set up to either attract or repel. For me they fit perfectly, I have to force them in but there is lots of friction to hold them in. To test that your tolerances work I suggest printing the cross bar to test the fit and then you can scale if you need to.


With the full 9 magnets I can easily throw a Rock 6 to 8 feet. You can play with the trajectory by changing the number of magnets as well as the position and direction of the cross bar.


The flop targets have a skull and crossbones on the bottom of them to indicate a downed target (pretty obvious anyway, but I thought it was a fun touch.)


You can throw anything you can stick in the catapult bucket, but I thought some Rocks would be appropriate. (Slightly trimmed version of [masoncfrancis's](#) the [Rock's Head](#))


Model files

 **6mm x 2mm Version** 3 files

 **base_6x2.stl**

 **throwingarm_6x2.stl**

 **crossbar_6x2.stl**

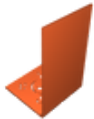
 **magnetopult_throwing_arm.stl**



magnetopult_cross_bar.stl



magnetopult_base_frame.stl



magnetopult_floptarget.stl



magnetopult.3mf



magnetopult_rock.stl

Print files



12rockset_015mm_pla_mini_2h28m.gcode

⚙️ PLA ⚙️ 0.40 mm ⚙️ 0.15 mm ⌚ 2.47 hrs ⚖️ 15 g 🖨️ Prusa MINI / MINI+



floptargets_set_of_9_02mm_pla_mini_2h25m.gcode

⚙️ PLA ⚙️ 0.40 mm ⚙️ 0.20 mm ⌚ 2.42 hrs ⚖️ 24 g 🖨️ Prusa MINI / MINI+



magnetopult_015mm_pla_mini_1h54m.gcode

⚙️ PLA ⚙️ 0.40 mm ⚙️ 0.15 mm ⌚ 1.90 hrs ⚖️ 13 g 🖨️ Prusa MINI / MINI+

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