



YOUIMAGINE

3D Printed Rope Puzzler

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Located at: <http://www.youmagine.com/designs/3d-printed-rope-puzzler>

Short description:

Another "magic trick / puzzle" from my childhood.

Description:

<https://youtu.be/OIJ8DJW0MLk> A "3D Printed Rope Puzzle" is yet another "magic trick" from my childhood. I designed this version for the grandkids who love magic tricks and puzzles! This is a simple model to 3D print and assemble and consists of only three unique parts: "Base.stl", "Case, Lower.stl", and "Case, Upper.stl". I 3D printed all parts at .15mm layer height with 20% infill and no supports. I 3D printed one "Base.stl", two "Case, Lower.stl" and two "Case, Upper.stl", then assembled the model as shown in the video. You will also need "rope" about 8mm in diameter, I stole some red soft "rope" from my wife's sewing room, but don't tell her! Prior to assembly, I test fitted and trimmed, filed, sanded, etc. all parts as necessary for smooth movement and alignment of moving surfaces, and tight fit for non moving surfaces. Depending on your slicer, printer, printer settings and the colors you chose, more or less trimming, filing, drilling and/or sanding may be required to successfully recreate this model. I carefully filed all edges that contacted the build plate to make absolutely certain that all build plate "ooze" is removed and that all edges are smooth using small jewelers files and plenty of patience. I hope you enjoy it! Designed using Autodesk Fusion 360, sliced using Ultimaker Cura 4.9.0, and 3D printed in PLA on Ultimaker S5s.

If you can, please use the online documentation found at <http://www.youmagine.com/designs/3d-printed-rope-puzzler> because those may have been been updated. Also, there you can interact and provide praise and/or feedback.