



DNA helix pencil holder



override2231

[VIEW IN BROWSER](#)

updated 6. 5. 2022 | published 6. 5. 2022

Summary

DNA helix pencil holder. holds 16 pencils.

[Hobby & Makers](#) > [Organizers](#)

<Updated with a little tongue and groove to help place the two halves and provide better capillary action when glueing. Much thanks to user Ridley for the design tip! >

This is a "two parts in one print" design with no raft or supports needed.

Print the "DNA_Helix_Pencil_Holder_Full_06.stl" STL file

1. After print, remove two parts from print bed.
 - a. bottom of helix is outer print
 - b. top of helix is inner print.
2. (Optional) Use "DNA_Helix_Pencil_Holder_Optional_U_Snaps.stl" x 2 on the outside of the helix to secure the top and bottom parts together. These are pressure-fit snaps that fit on the outside of the Helix. Use a screwdriver to gently lever them out if you need to remove them.
3. Assemble with glue, or your favorite adhesive to make the bond permanent. (I used super glue). With the snaps in place glue may be optional.
4. Insert Pencils and display.
5. Take a picture and post on Printables :)

Print Settings

Printer:

Ender 3

Rafts:

No

Supports:

No

Resolution:

.15

Infill:

20%

Notes:

Update Notes:

10/27

- added tongue and groove design
- added U-snaps and holes to create an optional "Glueless" fit
- added optional separate files for dual printers and customizations:
 - a. "DNA_Helix_Pencil_Holder_06PartA.stl" - this is the bottom part
 - b. "DNA_Helix_Pencil_Holder_06PartB.stl" - this is the top part
 - c. "DNA_Helix_Pencil_Holder_Extension_01.stl" - this is an optional extension (so far untested). Put this part in the middle and add 8 pencils (or 8 DNA letter pairs).
 - d. "DNA_Helix_Pencil_Holder_Optional_U_Snaps01" - this is a u shaped pressure fit snap that fits on the outside of the Helix into the two 4mm holes at the middle. (I'll add a picture to clear up any confusion). It should also be able to bond the optional extension.

10/4

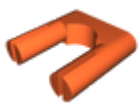
- Added a Smoother version
- fixed slic3r issue
- Added a tall version (215mm tall) for those with printers that can print that high. You probably need supports for the top of the design. If you get a successful print with the tall STL file, let us know the settings you used so I can post it here.

- For those like me with normal sized printers - use the "DNA_Helix_Pencil_Holder_Full_06.stl" file and follow instructions above.

Post-Printing

Use Snaps or Super glue bottom of helix to top of helix. (or use alternative bonding method).

Model files



dna_helix_pencil_holder_optional_u_snaps01.stl



dna_helix_pencil_holder_06parta.stl



dna_helix_pencil_holder_06partb.stl



dna_helix_pencil_holder_full_06.stl

License

This work is licensed under a
[Creative Commons \(International License\)](#)



Public Domain

- ✓ | Sharing without ATTRIBUTION
- ✓ | Remix Culture allowed

- ✓ | Commercial Use
- ✓ | Free Cultural Works
- ✓ | Meets Open Definition