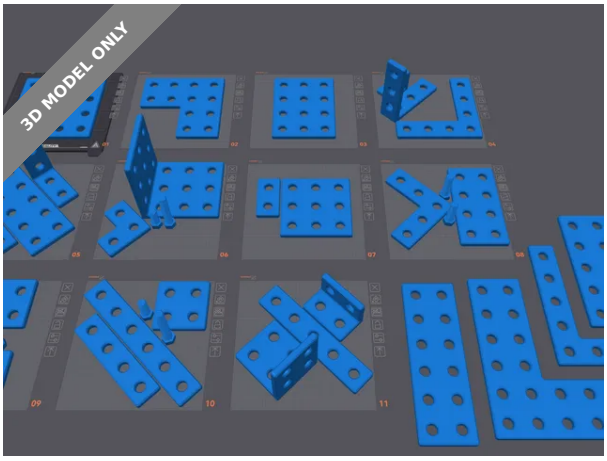

Modular 3D Printable Construction Set for Kids

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VIEW IN BROWSER

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Summary

An engaging, modular 3D-printable building construction set designed to inspire creativity, spatial reasoning, and fine

Toys & Games > Building Toys

Tags: nut panel bolt bracet

Sorry guys, AI generated description, have fun with the set:

Modular 3D Printable Construction Set for Kids

An engaging, modular 3D-printable building construction set designed to inspire creativity, spatial reasoning, and fine motor skills in children!

Inspired by classic construction kits like Meccano, this set allows kids to build endless 3D structures, boxes, frames, and mechanisms using sturdy panels, brackets, bolts, and nuts.

Features & Key Highlights

- **Modular Grid System:** Features consistent hole spacing across all plates, beams, and angle brackets, allowing components to connect seamlessly in any orientation.

- **Wide Variety of Parts:**
  - **Square & Rectangular Plates:** Flat panels ranging from 2×2 up to 4×4 grids.
  - **Straight Beams & Strips:** Long structural elements (1×5, 1×6, etc.) for framing and linkage.
  - **L-Shapes & Brackets:** Flat L-brackets and 90-degree corner brackets for constructing sturdy 3D structures.
  - **Child-Friendly Hardware:** Oversized printable bolts and hex nuts designed specifically for little hands to easily grip and thread.
- **Safe & Durable:** Rounded corners and thick walls make the parts child-friendly, strong, and resistant to snapping during play.
- **Endless Expandability:** Print as many pieces as you need in different vibrant colors to build larger and more complex projects!

Recommended Print Settings

- **Material: PLA** or **PETG** (PLA is great for bright colors and easy printing; PETG offers extra durability for tight nuts/bolts).
- **Layer Height:** 0.20 mm (Standard) or 0.16 mm for cleaner bolt/nut threads.
- **Infill:** 15% – 20% (Gyroid or Grid recommended).
- **Perimeters/Walls:** 3 or 4 walls (essential for mechanical strength around the bolt holes and threads).
- **Supports: No supports needed!** All panels, brackets, and hardware are designed to lay flat on the print bed.
- **Brim:** Generally not required unless you experience bed adhesion issues on long/thin beams or small bolt threads.

Hardware & Assembly Tips

- **Thread Tolerance:** Thread clearances are calibrated for standard 3D printer tolerances. If the nuts feel tight on the first run, threading them back and forth a couple of times using a pair of pliers will smooth out the layer lines.
- **Color Coding:** Try printing different panel sizes and hardware in contrasting primary/neon colors to make building even more fun and visually appealing!

Model files

toolset_plank-angle-2-1.3mf

toolset_plank-angle-1-1.3mf

toolset_plank-angle-3-2.3mf

toolset_plank-angle-4-1.3mf

toolset_plank-bolt-35.3mf

toolset_plank-angle-4-2.3mf

toolset_plank-angle-2-2.3mf

toolset_plank-part-2-1.3mf

toolset_plank-angle-3-1.3mf

toolset_plank-bolt-40.3mf

toolset_plank-part-4-1.3mf

toolset_plank-clip-2-1.3mf

toolset_plank-nut.3mf

toolset_plank-nut-with-washer.3mf

toolset_plank-part-3-1.3mf

toolset_plank-clip-1-2.3mf

toolset_plank-bolt-30.3mf

toolset_plank-part-4-2.3mf

toolset_plank-part-5-2.3mf

toolset_plank-bolt-45.3mf

toolset_plank-part-6-2.3mf

toolset_plank-clip-3-2.3mf

toolset_plank-part-5-1.3mf

toolset_plank-clip-3-1.3mf

toolset_plank-part-3-3.3mf

toolset_plank-bolt-55.3mf

toolset_plank-clip-1-1.3mf

toolset_plank-part-6-1.3mf

toolset_plank-bolt-50.3mf

toolset_plank-part-2-2.3mf

toolset_plank-bolt-70.3mf

toolset_plank-part-3-2.3mf

toolset_plank-bolt-60.3mf

toolset_plank-clip-3-3.3mf

toolset_plank-part-4-4.3mf

toolset_plank-clip-2-2.3mf

toolset_plank-part-4-3.3mf

toolset_plank-bolt-80.3mf

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