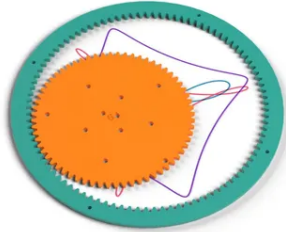


3D MODEL ONLY



Spirograph Set - Toothed Ring, Rack and Five Gears with Pen Holes, Draw Spirals (OpenSCAD)



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[VIEW IN BROWSER](#)

updated 15. 10. 2026 | published 15. 10. 2026

Summary

A drawing toy: roll a gear round the inside of the ring with a pen in one of its holes to draw spirals.

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Pin or tape the ring to a sheet of paper, put a pen through one of the holes in a gear and roll the gear round inside the ring: it draws loops, stars and flowers. Holes near the edge make spiky curves, holes near the middle make soft ones. Roll a gear along the straight rack for wave patterns.

DETAILS

- Ring with 96 teeth inside (165 mm across), gears with 24, 30, 40, 52 and 64 teeth, and a 190 mm rack. All 1.5 mm teeth, so everything meshes.

- Pen holes are 3.2 mm, for fineliners and gel pens. Four small holes in the ring for drawing pins.
- Two plates: the ring with the big gear inside it, and the other gears with the rack. Prints flat with no supports. Bambu Studio: 1 h 10 + 1 h 13, 61 g.
- Print the ring at 3 mm and the gears thin and flat (they're 2.4 mm), and keep the first layer clean so the teeth roll smoothly.

CUSTOMIZE (OpenSCAD)

Tooth size, ring tooth count, the list of gears and the pen hole size.

Designed with AI assistance (OpenSCAD). Rendered images; not printed yet.

Model files



spirograph-set.scad



spirograph-set_h2c.3mf



spirograph-set-gears-and-rack.stl



spirograph-set-ring.stl

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