



Mark making

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## ARTIST REIMAGINES OLD-FASHIONED CHALK USING A 3D PRINTER

 ARCHITECTURE & DESIGN

### Artist Nikolas Bentel gives kids new architectural and design toys

**Spotted:** New York-based artist [Nikolas Bentel](#) has given ordinary chalk sticks a makeover using 3D printing. The idea was to rethink how drawing tools are designed, while also giving kids a fun tool to enjoy architecture and design.

He used a computer to model the shapes and then made 3D prints of the designs. From the 3D prints, he made urethane moulds to shape the toys. The collection of three chalks make geometrically precise patterns including dots, straight lines and circles. The Circle Drawer is shaped like a spinning top. It creates five concentric lines when rolled across a surface. The Line Drawer creates squiggly marks and the round Dot Drawer makes perfect dotted patterns.

“Chalk is a widely available material that has been in use for thousands of years. Just about every shape and use has been tried with chalk. In order to reimagine an original use, I had to reimagining its structure through modern manufacturing techniques, such as 3D printing,” [Bentel explained on Kickstarter](#).

The project was part of Bentel’s residency at the [New Museum’s design incubator, New Inc](#), in New York City. The “chalk drawers” were initially on display at the museum store. Bentel launched a successful [Kickstarter campaign](#) to crowdfund for the toys late last year and has already shipped some kits to his funders. He is now looking at [adding colour versions](#).

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## Takeaway:

It was only a matter of time before simple chalks for kids got a 3D makeover. Bentel's 3D "chalk drawers" are the latest in children's toys that combine old fashioned playthings with new technology. They join an increasingly crowded market that uses 3D printers -- or their products - - to engage children. The toys also underscore how artists and designers are using advanced 3D printing techniques to make art and also art tools. Artists using 3D printing is something we often spot. Recently, we wrote about advanced [3D printing techniques](#) that use artificial intelligence to produce complex artwork, and a [3D printer that recreated Rodin's Thinker](#) in just minutes.