



YOU COULD WIN \$33,000 CASH

GO TO RoadLoansRacing.com TO FIND OUT HOW!

[Click Here To Enter!](#)

No purchase necessary. See Official Rules for details.



TIMES ONLINE



**“ I felt en
at Headir**

Send yo

[NEWS](#) [COMMENT](#) [BUSINESS](#) [SPORT](#) [LIFE & STYLE](#) [ARTS & ENTERTAINMENT](#) [FOOTBALL](#)

[OUR PAPER](#)

[UK](#) [WORLD](#) [POLITICS](#) [WEATHER](#) [TECH & WEB](#) [RELATED REPORTS](#)

[Where am I?](#) [Home](#) [NEWS](#) [Tech & Web](#) [The Web](#)

Sponsored by [Live Search](#)

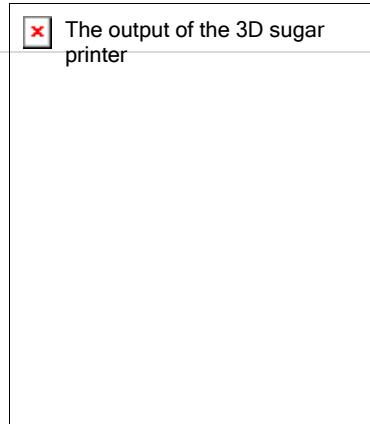
May 26, 2007

Microtrends: Printing in 3D

3D printing is cool, expensive and heading for the mainstream. It lets you print out anything you can build on your computer screen into a little plastic model

Tom Whitwell

Imagine a machine the size of a photocopier which fills up with a fine white powder. Once it's finished, you fish around in the powder and pull out a solid plastic model of whatever was on your computer screen, in full colour. Three-dimensional printing is gradually, and rather expensively, approaching the mainstream.



The real thing: If you've got \$40,000, you can buy a Z Corp Z450 colour 3D printer, which is the real deal, straight out of Star Trek. It lays down layers of starch-based powder, zaps it into shapes and paints them different colours. It takes a few hours to make impossible-looking plastic models. There's a video of the Z450 in action [here at YouTube](#), and here's the [company home page](#).

The sugar printer: Physicist and blogger [Windell Oskay](#) got bored of waiting for an affordable 3D printer, so built his own. The [Candyfab 4000](#) uses three sacks of granulated sugar, an aquarium pump, a car jack and some recycled printer parts. It works, and produces much larger and cheaper models than the professionals can. As they're made of melted sugar, they're also edible. Here's a Flickr set of the [sugar printer in action](#).

Print yourself: [Fbjectory](#) rents time on a Z450. They use it to make and sell 6in high models of avatars – the characters players create to represent themselves in games like Second Life and World of Warcraft. For \$100 and up, a Fbjectory rep will meet you in Second Life, virtually photograph you, and a beautiful little model will be on its way in a few days.

RELATED INTERNET LINKS

[More Microtrends](#)

RELATED LINKS

[Microtrends: Making stuff](#)

Impossible sculptures:

Californian artist [Bathsheba Grossman](#) uses a truly [extraordinary \\$425,000 machine](#) that can print 3D objects in a mixture of stainless steel and bronze. She prints out intricate mathematical sculptures which are 3.5in across and cost \$360. They're the [perfect gift](#) for that

special geek in your life.

Do it yourself: Because not everyone has the \$7,000 for even