


Straw connectors

A straw connector is a small device that, used along with other similar ones, allows to connect straws and to create virtually any form, to build constructions of any shape and dimension. Available straws which exist on the market come in a great variety of diameters – from 3.5mm to 12mm or even 14mm. 3D printed connectors present the benefit of being customizable; they can be printed so that they fit any straw diameter.

 Difficulty Easy

 Duration 1 hour(s)

 Categories Art, Machines & Tools, Play & Hobbies

 Cost 10 EUR (€)

Contents

Introduction

Step 1 - Description of the object that we have prototyped

Step 2 - For further discussion and work

Notes and references

Comments

Introduction

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Materials

Tools

3D printer

Step 1 - Description of the object that we have prototyped

The objects we have prototyped are several different 3D printed straw connectors, allowing the construction of different shapes. They are easily done and cost-effective: it takes about 5 minutes of printing to achieve one item. It is possible to modify the design in order to adapt it to different straw diameters, and to different numbers of connected straws. These 3D printed straw connectors can be printed by designers, amateurs, teachers, educators, parents and even children, under appropriate supervision. The straw connectors designs can be downloaded from [here](#).



Step 2 - For further discussion and work

The 3D printed straw connectors that we have prototyped can serve to introduce kids to 3D printing and to the concept of parametric design. They can be used in children's games in order to encourage creativity, imagination, the sense of space and spatial planning, geometrical thinking. Moreover, they may come in a large variety of colors and they can be designed to connect 2, 3, 4, 6, 8 or even more straws, in any possible shape. This is what recommends them as a perfect toy for children aged 4-14: according to their age and skills, children can spend from a few minutes to as much as a few hours building virtually any shape of any dimension: towers, castles, cars, spaceships etc.

Plastic bottles connectors are based on the same principle as straws connectors. They can be used to produce virtually any design. Thus, they allow for a creative way of reusing bottles, rather than disposing of them.

3D designs for plastic bottles connectors available [here](#)



Notes and references

A romanian version of this tutorial is available [here](#)

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