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3D Printing for Biomedical and Bioprinting

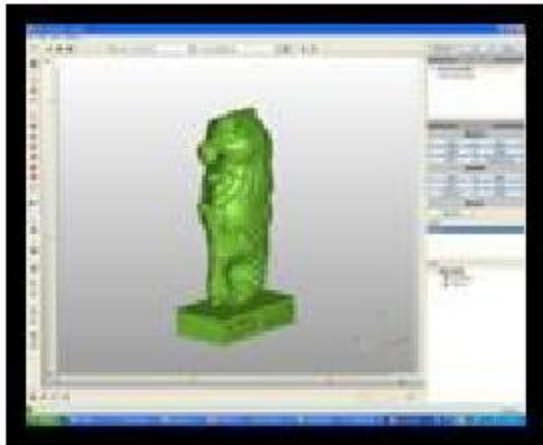
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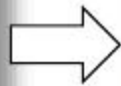


What is 3D Printing?

- Construct physical models directly from Computer-Aided Design (CAD) data.
- Other names: 3D printing, Additive Manufacturing, Rapid Prototyping, layered manufacturing, solid freeform fabrication



Design Drawing



3D Printing



Completed Part



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Expanding Roles



Rapid Prototyping



Cast Pattern
Rapid Tooling



Direct Manufacturing
Additive Manufacturing



Visualization
Design aid
Form and fit
testing

Fabrication tooling

Finished goods
High mix, low
volume
Aerospace,
medical devices

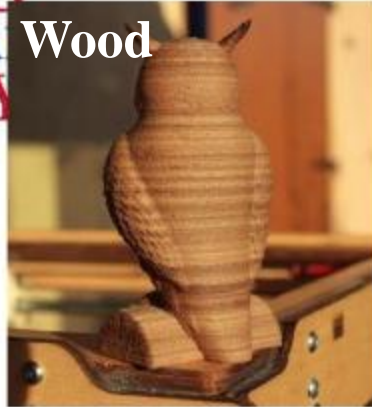
What can you print: Materials



Plastic



Wood



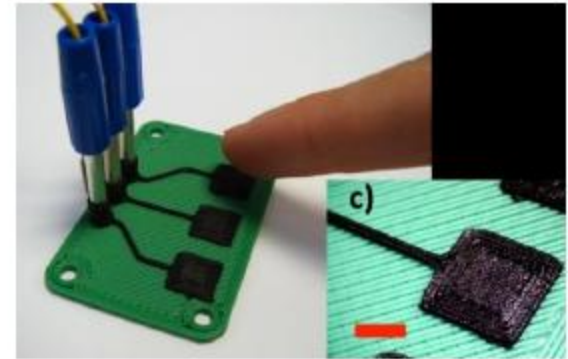
Metal

plastic and carbon composite

Biomaterials



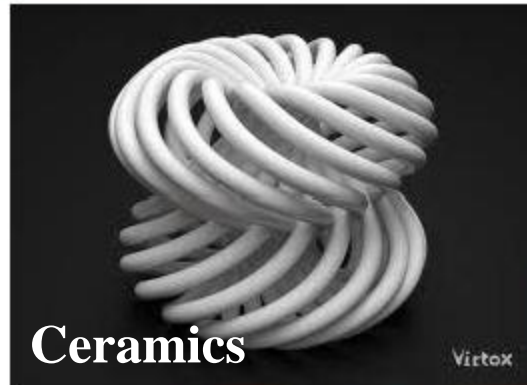
Glass



Cells



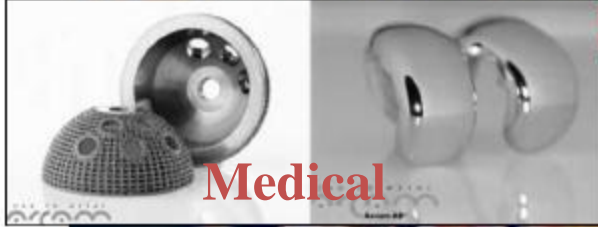
Ceramics



Chocolate



What can you print: Applications



Medical



Furniture, even a house!



Automotive



Aerospace



Food



Wearables



Fashion

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