



## Archimedean Solids



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[VIEW IN BROWSER](#)

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### Summary

Models of all 13 Archimedean solids.



8.96 hrs



1 pcs



0.20 mm



0.40 mm



PLA



94 g



Prusa MINI /  
MINI+

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The Archimedean solids are the 13 polyhedra that are convex, have identical vertices, and their faces are regular. They don't include the Platonic solids, which have identical faces.

All 13 can be listed in Mathematica with the expression

```
In[1]:=PolyhedronData["Archimedean"]
```

```
Out[1]=
```

```
{Cuboctahedron,GreatRhombicosidodecahedron,GreatRhombicuboctahedron,Icosidodecahedron,TruncatedOctahedron,TruncatedDodecahedron,TruncatedIcosahedron,TruncatedDodecahedron,TruncatedIcosahedron,TruncatedDodecahedron,TruncatedIcosahedron,TruncatedDodecahedron,TruncatedIcosahedron}
```

An .STL file for any of them can be generated with the function

```
model[name_] := PolyhedronData[name] // Export[name <> ".stl", #,  
"STL"] &
```

All of the files can be created with one line:

```
Map[model,PolyhedronData["Archimedean"]]
```

These files are provided here. A .3mf file is provided, together with a .gcode file that will print all 13 polyhedra in roughly the same size (pictured) in about 9 hours with the Prusa Mini+.

## Model files



**truncatedicosahedron.stl**



**greatrhombicosidodecahedron.stl**



**snubdodecahedron.stl**



**cuboctahedron.stl**



**smallrhombicosidodecahedron.stl**



**icosidodecahedron.stl**



**archimedean.3mf**

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**snubcube.stl**

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**truncateddodecahedron.stl**

---



**truncatedtetrahedron.stl**

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**truncatedcube.stl**

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**smallrhombicuboctahedron.stl**

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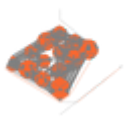
**truncatedoctahedron.stl**

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**greatrhombicuboctahedron.stl**

# Print files



## archemedean\_02mm\_pla\_mini\_8h58m.gcode

🌀 PLA 📏 0.40 mm 📐 0.20 mm ⌚ 8.96 hrs ⚖️ 94 g 🖨️ Prusa MINI / MINI+

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