Paper Models of Polyhedra

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Polyhedra are beautiful 3-D geometrical figures that have fascinated philosophers, mathematicians and artists for millennia.
Paper Models of Polyhedra

Platonic Solids
Dodecahedron
Cube and Tetrahedron
Octahedron
Icosahedron

Archimedean Solids
Cuboctahedron
Icosidodecahedron
Truncated Tetrahedron
Truncated Octahedron
Truncated Cube
Truncated Icosahedron (soccer ball)
Truncated dodecahedron
Rhombicuboctahedron
Truncated Cuboctahedron
Rhombicosidodecahedron
Truncated Icosidodecahedron
Snub Cube
Snub Dodecahedron

Kepler-Poinsot Polyhedra
Great Stellated Dodecahedron
Small Stellated Dodecahedron
Great Icosahedron
Great Dodecahedron

Other Uniform Polyhedra
Tetrahemihexahedron
Octahemioctahedron
Cubohemioctahedron
Small Rhombihexahedron
Small Rhombicosahedron
Small Dodecahemioctahedron
Small Ditrigonal Icosidodecahedron
Great Dodecahedron

Compounds
Stella Octangula
Compound of Cube and Octahedron
Compound of Dodecahedron and Icosahedron
Compound of Two Cubes
Compound of Three Cubes
Compound of Five Cubes
Compound of Five Octahedra
Compound of Five Tetrahedra
Compound of Truncated Icosahedron and Pentakisdodecahedron
Other Polyhedra
  Pentagonal Hexecontahedron
  Pentagonalconsitetrahedron
  Pyramid
  Pentagonal Pyramid
  Decahedron
  Rhombic Dodecahedron
  Great Rhombihexacron
  Pentagonal Dipyriramid
  Pentakisdecahedron
  Small Triakisoctahedron
  Small Triangmic Icosahedron
  Polyhedra Made of Isosceles Triangles
  Third Stellation of the Icosahedron
  Sixth Stellation of the Icosahedron
  Seventh Stellation of the Icosahedron
  Eighth Stellation of the Icosahedron
  Ninth Stellation of the Icosahedron
  Final Stellation of the Icosahedron

  Prism and Antiprism
  Triangular Prism
  Pentagonal Prism
  Pentagonal Antiprism
  Triangular Prism
  Octagonal Prism
  Octagonal Antiprism
  Pentagrammic Prism
  Pentagrammic Antiprism
  Hexagrammic Prism
  Hexagrammic Antiprism
  Twisted Rectangular Prism

  Kaleidocycles
  Hexagonal Kaleidocycle
  Octagonal Kaleidocycle
  Decagonal Kaleidocycle

  Other Paper Models
  Cylinder
  Tapered Cylinder
  Cone
  Special Cones
  "Matryoska house"
  "Matryoska house" 50%
  Globe
  Chevaux-de-frise
Octahedron
Cuboctahedron
Icosidodecahedron
Truncated Tetrahedron
Truncated Octahedron
Truncated icosahedron
Truncated dodecahedron
Rhombicuboctahedron
Truncated cuboctahedron
Rombicosidodecahedron
Truncated Icosidodecahedron
Snub cube
Snub cube
Right-handed
Snub dodecahedron
Right-handed
Small Stellated Dodecahedron

On this page a model out of one piece On the next pages a model out of six pieces. Fold the long lines backwards fold the short lines forwards
Octahemioctahedron

type 1

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type 2

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11

5

6

10

3

4

1

2

13

14

8

7

12

13
Cubohemioctahedron
Small Rhombidodecahedron
(small version)
Fold the dotted lines forwards
Fold the other lines
Small Rhombidodecahedron
(large version)
Fold the dotted lines forwards
Fold the other lines
Folds the lines between the triangles forwards. Folds the other lines backwards.
Great Stellated Dodecahedron
made out of one piece of paper.
Cut the lines between the long
and the short sides of the triangles.
Fold the long lines backwards and
fold the short lines forwards.
Great Stellated Dodecahedron made out of two pieces of paper. Cut the lines between the long and the short sides of the triangles. Fold the long lines backwards and fold the short lines forwards. This is piece one. On the next page is piece two.
Great Stellated Dodecahedron made out of five pieces of paper. Cut the lines between the long and the short sides of the triangles. Fold the long lines backwards and fold the short lines forwards.
N= Next part  P= Previous part
Great Stellated Dodecahedron made out of five pieces of paper. Cut the lines between the long and the short sides of the triangles. Fold the long lines backwards and fold the short lines forwards.

N= Next part   P= Previous part
Great Stellated Dodecahedron made out of five pieces of paper. Cut the lines between the long and the short sides of the triangles. Fold the long lines backwards and fold the short lines forwards.

N= Next part   P= Previous part
Great Stellated Dodecahedron made out of five pieces of paper. Cut the lines between the long and the short sides of the triangles. Fold the long lines backwards and fold the short lines forwards. N = Next part  P = Previous part
Great Stellated Dodecahedron made out of five pieces of paper. Cut the lines between the long and the short sides of the triangles. Fold the long lines backwards and fold the short lines forwards. N= Next part  P= Previous part
Pentagonale hexacontahedron
Pentagonal consis tetrahedron
Stella Octangula

Type 1
Type 2

Fold lines of type 1 backwards
Fold lines of type 2 forwards
Fold the lines with a right-angle backwards.
Fold the other lines forwards.

Compound of two Cubes.
Compound of Three Cubes
(Small version)
Fold the dotted lines forwards
Fold the other lines backwards
Compound of Three Cubes
(Small version)
Fold the dotted lines forwards
Fold the other lines backwards
On this page a compound of five cubes made of one piece of paper.
On the next pages a compound of five cubes made of 7 pieces of paper
Instructions:

Cut and fold the piece(s) of paper. Glue the part without tabs around it last. This is the top part of piece F. This one opposes the center part of piece A.

Below an example of a part

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Fold forwards

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Fold backwards
Compound of five Octahedra
If you use paper in five different colors
each octahedron has a different color

Color 1
Compound of five Octahedra

Color 2
Compound of five Octahedra

Color 3
Compound of five Octahedra

Color 4
Compound of five Octahedra

Color 5
Pyramids
Pentagonal pyramid
Rhombic Dodecahedron
Great Rhombihexacron

Fold the short lines forwards
Fold the long lines backwards
Pentagonal Dipyramid
Pentakisdodecahedron
A convex dodecahedron (not a platonic solid) constructed of 12 isosceles triangles
A convex icosahedron (not a platonic solid) constructed of 20 isosceles triangles.
Icositetrahedron
Icosioctahedron
Tricontidihedron
Hecatonhedron
Third Stellation of the Icosahedron

Fold the dotted lines forwards
Fold the other lines backwards
Sixth Stallation of the Icosahedron

(small version)

Fold the dotted lines forwards
Fold the other lines backwards

First glue part A
Glue the parts A-M on A
Sixth Stallation of the Icosahedron
(large version)
First glue the parts A until F
Glue the 12 other parts on the ABCDEF
Sixth Stallation of the Icosahedron
(large version)
Sixth Stallation of the Icosahedron
(large version)
Sixth Stallation of the Icosahedron
(large version)
Sixth Stallation of the Icosahedron
(large version)
Sixth Stallation of the Icosahedron
(large version)
Sixth Stallation of the Icosahedron
(large)
Sixth Stallation of the Icosahedron
(large)
Sixth Stallation of the Icosahedron
(large)
Sixth Stallation of the Icosahedron
(large)
Sixth Stallation of the Icosahedron
(large)
Sixth Stallation of the Icosahedron
(large)
Seventh Stellation of the Icosahedron
Seventh Stellation of the Icosahedron
Seventh Stellation of the Icosahedron
Seventh Stellation of the Icosahedron
Seventh Stellation of the Icosahedron
Seventh Stellation of the Icosahedron
Seventh Stellation of the Icosahedron
Eighth Stellation of the Icosahedron
(Large version)
Fold dotted lines forwards
Fold other lines backwards
Eighth Stellation of the Icosahedron

(Large version)

Fold dotted lines forwards
Fold other lines backwards
Eighth Stellation of the Icosahedron
(Large version)

Fold dotted lines forwards
Fold other lines backwards
Eighth Stellation of the Icosahedron

(Large version)
Fold dotted lines forwards
Fold other lines backwards
Eighth Stellation of the Icosahedron

(Large version)
Fold dotted lines forwards
Fold other lines backwards
Eighth Stellation of the Icosahedron

(Large version)
Fold dotted lines forwards
Fold other lines backwards
Ninth Stellation of the Icosahedron
Fold the dotted lines forwards
Fold the other lines backwards
Final Stellation of the icosahedron

Fold the dotted lines forwards
Fold the other lines backwards
Final Stellation of the icosahedron

Fold the dotted lines forwards
Fold the other lines backwards
Final Stellation of the icosahedron
Fold the dotted lines forwards
Fold the other lines backwards
Final Stellation of the icosahedron

Fold the dotted lines forwards
Fold the other lines backwards
Final Stellation of the icosahedron
Fold the dotted lines forwards
Fold the other lines backwards
Final Stellation of the icosahedron

Fold the dotted lines forwards
Fold the other lines backwards
Final Stellation of the icosahedron
Fold the dotted lines forwards
Fold the other lines backwards
Final Stellation of the icosahedron
Fold the dotted lines forwards
Fold the other lines backwards
Final Stellation of the icosahedron

Fold the dotted lines forwards
Fold the other lines backwards
Final Stellation of the icosahedron
Fold the dotted lines forwards
Fold the other lines backwards
Final Stellation of the icosahedron

Fold the dotted lines forwards
Fold the other lines backwards
Final Stellation of the icosahedron
Fold the dotted lines forwards
Fold the other lines backwards
Triangular prisms
Pentagonal Prism
Pentagonal Antiprism
Octagonal Prism
Octagonal Antiprism
Pentagrammic Prism
Fold the dotted lines forwards
Fold the other lines backwards
Pentagrammic Antiprism
Fold the dotted lines forwards
Fold the other lines backwards
Hexagrammic Prism
Fold the dotted lines forwards
Fold the other lines backwards
Hexagramic Antiprism

Fold the dotted lines forwards
Fold the other lines backwards
Twisted rectangular prism (45 degrees)
Twisted rectangular prism (90 degrees)
Twisted rectangular prism (+ 45 -45 degrees)
Kaleidocyclus
Cylinder
Tapered Cylinder
Asymetric Cone
Square Cone
Square Cone
Paper Colour 1/ papier kleur1

noordelijke, oostelijke muur huis en de bodem

north, east wall of the house and the floor
Paper Colour 1/ papier kleur1

dakkapel
dormer-window

zuidelijke en westelijke muur huis

south and west wall house
paper colour 2 / papier kleur 2

onderkant dak plus twee zijden
two sides of the roof

(uitsnijden / cut-out)

place dormer-window
Twee zijden dak
Two sides of the roof

onderkant dak/
bottom roof
fits around walls
don't glue roof on the walls

paper colour 2 / papier kleur 2
zuidelijke en westelijke muur huis
south and west wall house

dakkapel
dormer window

noordelijke, oostelijke muur huis en de bodem
north, east wall of the house and the floor
Two sides of the roof

Place dormer window

Bottom roof fits around walls
don’t glue roof on the walls
Large Chevaux-de-frise
The other two parts are on the next two pages