

PLATONIC SOLIDS

Definition **REGULAR POLYHEDRA**

A 3-dimensional object bounded by regular polygons.

Can you guess **how many regular polyhedra exist?**

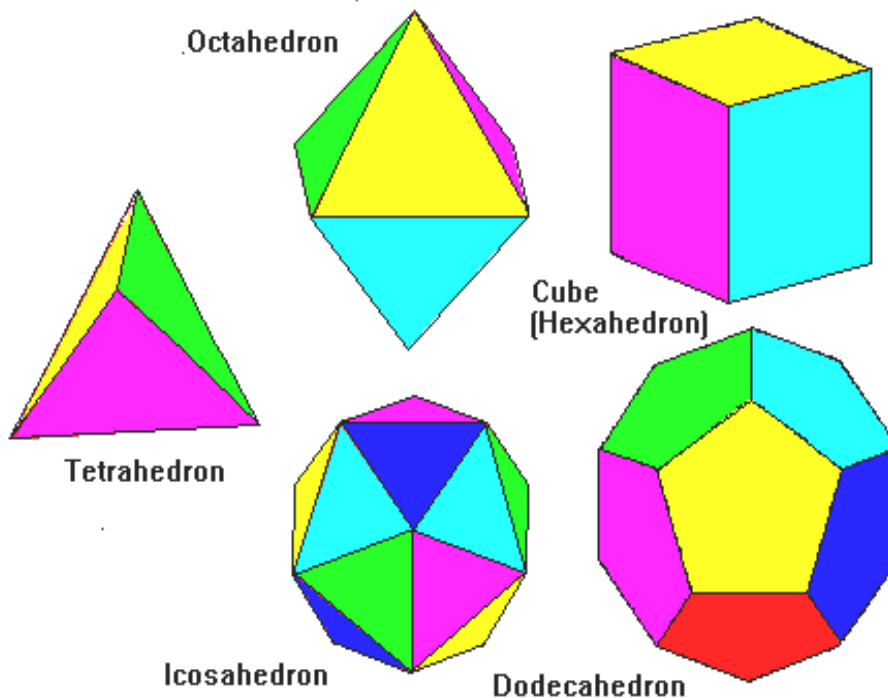
SURPRISINGLY.... There are **only FIVE** regular solids composed of just 3 regular polygons: the triangle, square and pentagon.

The five regular polyhedrons are Tetrahedron, Cube, Octahedron, Icosahedron and Dodecahedron.

Also, if you combine 2 regular polygons triangle with square, pentagon with triangle and so on, you can make other polyhedra. There are 13 such more solids known as “**Archimedian Solids**”.

S. No.	Regular Polyhedra	No. of Vertices(V)	No. of Edges(E)	No. of Faces(F)
1	Tetrahedron	4	6	4
2	Cube	8	12	6
3	Octahedron	6	12	8
4	Icosahedron	12	30	20
5	Dodecahedron	20	30	12

Also, verify **Euler’s formula** $V - E + F = 2$



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