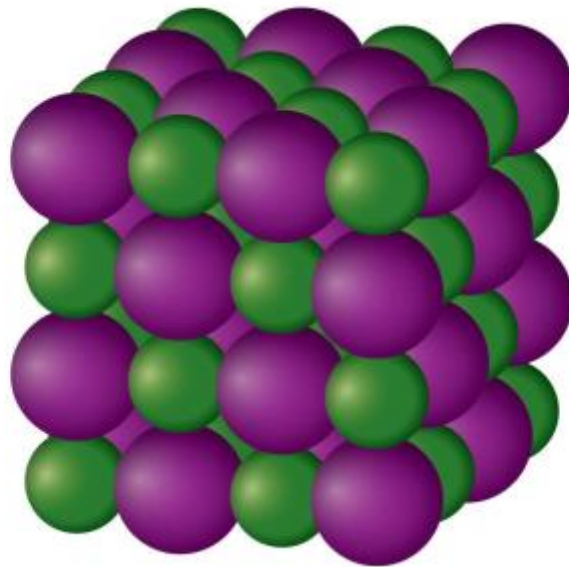
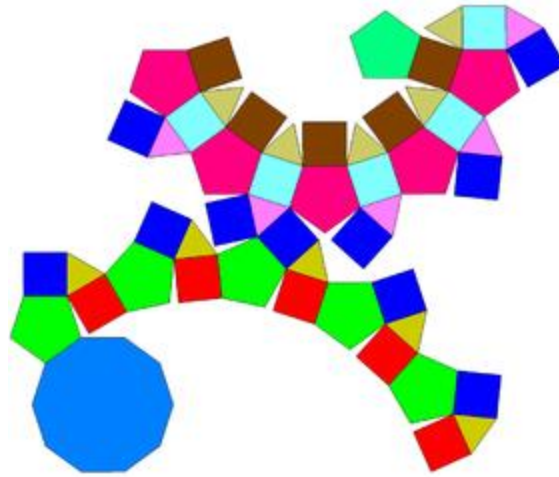


Platonic versus Archimedean Solids

PEOPLE ASK



WHAT'S THE DIFFERENCE ????



In geometry, an **Archimedean solid** is one of the 13 **solids** first enumerated by Archimedes. They are the semi-regular convex polyhedra composed of regular polygons meeting in identical vertices, excluding the 5 **Platonic solids** (which are composed of only one type of polygon) and excluding the prisms and antiprisms.



1 - INTERESTING, ISN'T IT?

The names and faces of the 5 Platonic Solids

Name	n	m	f	v	e
tetrahedron	3	3	4	4	6
hexahedron (cube)	4	3	6	8	12
octahedron	3	4	8	6	12
dodecahedron	5	3	12	20	30
icosahedron	3	5	20	12	30
truncated icosahedron	5,6	3	32	60	90

f, v, e: Faces, Vertices, Edges
 n: number of edges per face;
 m: faces at each vertex

Euler's polyhedron theorem: $v + f - e = 2$

The 5 Platonic Solids
 &
 truncated icosahedron (soccerball)

2 - LET'S LOOK AT THE PLATONIC SOLIDS, FIRST !!!!

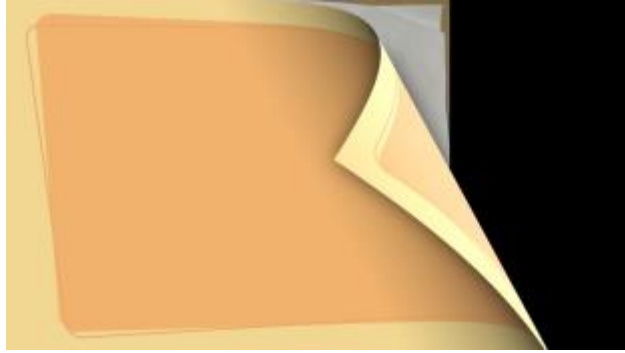
THERE ARE SIX PLATONIC SOLIDS



3 - WHO ARE THEY ? HOW TO MAKE THEM ?



4 - IMAGINE, YOU CAN EAT PLATONIC SOLIDS !!!!!!!!!!!!!



5 -

1. WHAT ABOUT *Archimedean SOLIDS*???



6 - WHO SAIDS MUSIC AND MATH HAVE NO CONNECTION ?????



GOOD LUCK WITH THE SOLIDS :)