We have learned about polygons, regular polygons and about filling up the plane with regular polygons (tessellations).

You also learned about nets of squares used to build cubes.

Question: What 3-dimensional objects can we build with nets of regular polygons?
Example: Equilateral triangles

How many do we need to fold a 3D object with triangles as faces?

1 triangle

2 triangles

3 triangles

4 triangles
**Polyhedra**

A polyhedron is a figure in 3-dimensions with flat faces and straight sides. The **faces** of a polyhedron are polygons.

A polyhedron is **regular** if all its faces are the same, and the same number of faces meet at each corner.

The **Platonic solids** are regular polyhedra whose faces are regular polygons.
Tetrahedron (4 triangles)
Octahedron (8 triangles)
Icosahedron (20 triangles)
The last platonic solid, the **dodecahedron**, is built with 12 pentagons!
HOMEWORK

Build different nets of equilateral triangles to construct one or two of the platonic solids. Turn in your drawings.