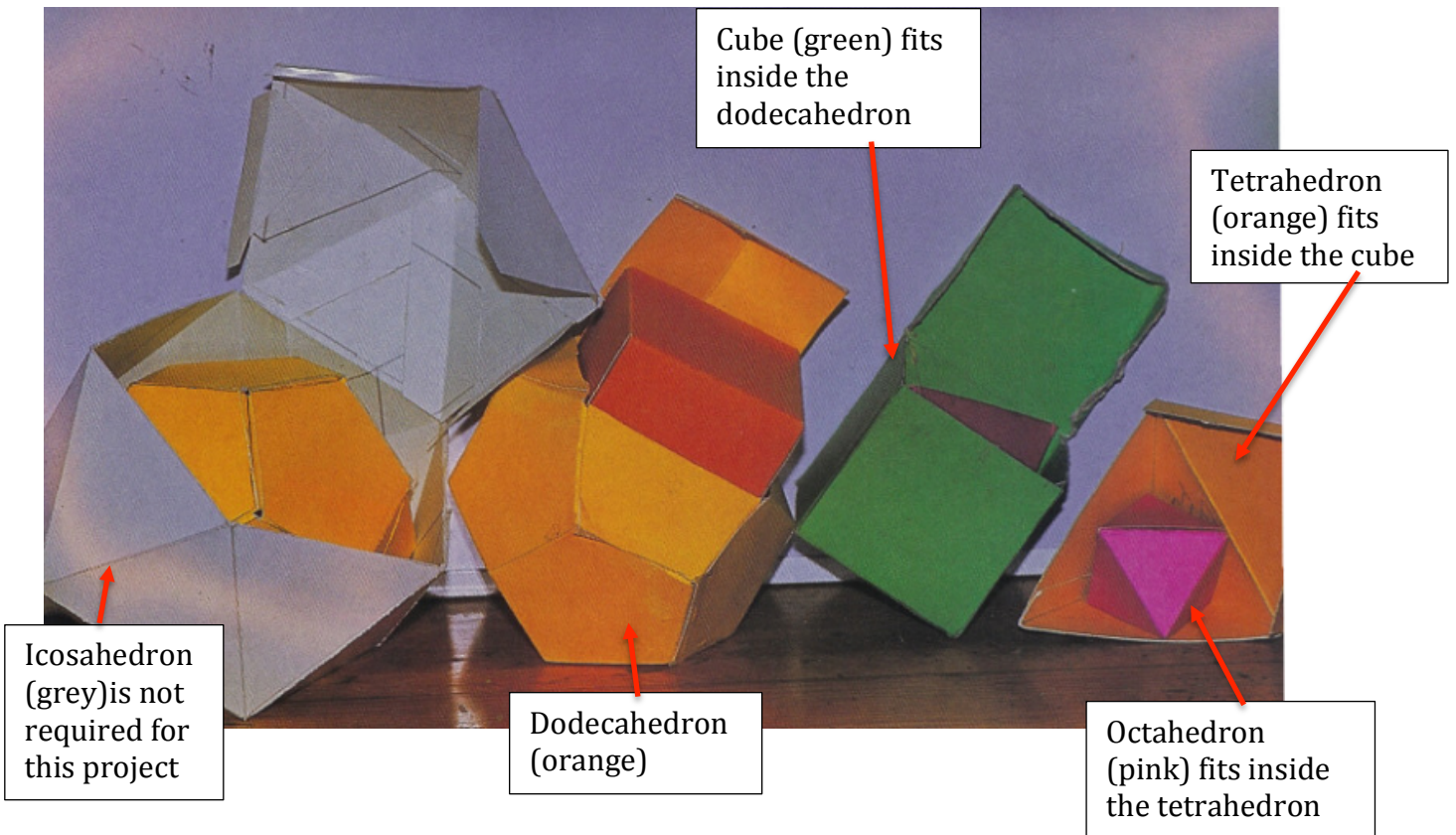


Nested Polyhedrons Overview

This week we will be creating nested polyhedrons. We will start with a hexahedron (a cube), then “nest” inside it a tetrahedron, and nested inside that will be an octahedron. The final shape we will make is the dodecahedron, which fits around the cube.



To create the nested set you will need to draw the net of each shape. You will need very accurate measurements. This will make is so that the net will fold up properly to create the correct 3-dimensional shape and so they will correctly fit inside eachother.

Each day this week you will be expected to create the following:

A sketch of the net (does not need to be drawn to scale) labeled with the dimensions you will be using.

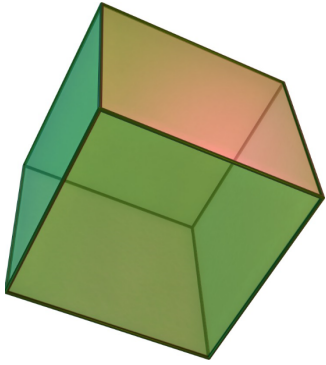
The surface area calculations for the 3D figure you create

The volume calculations for the 3D figure you create

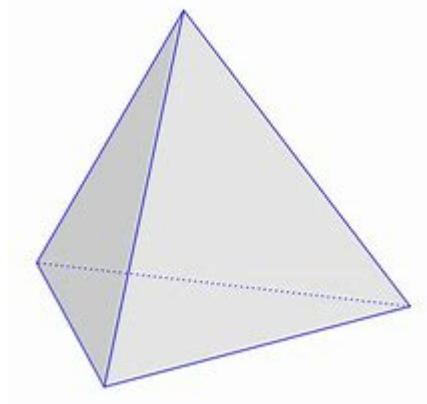
The actual 3D figure cut out of cardstock or paper and folded up to form your shape

Suggested work schedule:

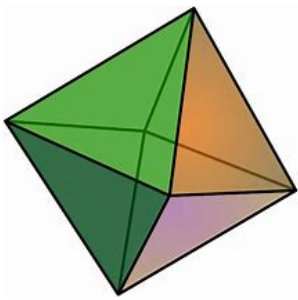
Monday complete the cube



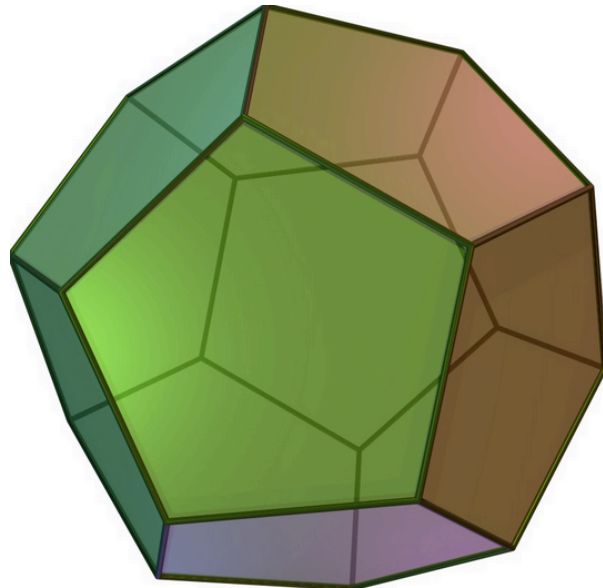
Tuesday completed the tetrahedron



Wednesday complete the octahedron



Thursday and Friday complete the dodecahedron



*When you have completed all four shapes, you will be expected to check in to zoom office hours to show me how they “Nest” together.

All of the assignments are already posted in Teams so you can work at your own pace.