

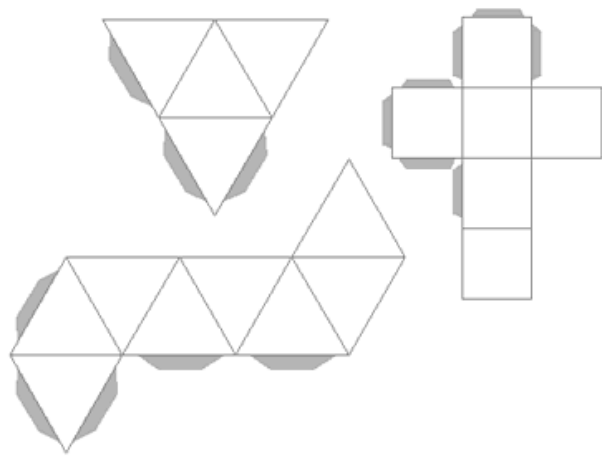
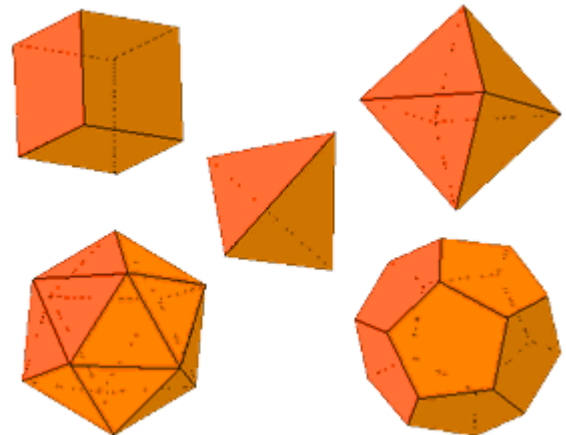
Sticky Tabs

To create the five Platonic solids, you can cut paper and then fold it. One of the best ways to do this is to cut out little tabs along with the appropriate shape.

Unfortunately, the placement of the little tabs is incorrect in each of the following diagrams. Place the tabs correctly.

Is there more than one way to do this?

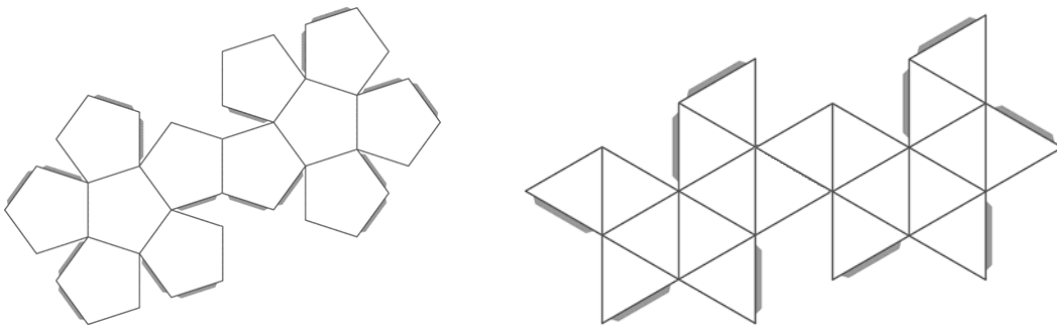
How many tabs must there be for each of the Platonic solids?



Lastly, create folding patterns (maybe different from those at the left) that fold into the tetrahedron, cube and octahedron such that tabs placed along successive edges will work.

Extensions:

- Answer the same questions for the dodecahedron and Icosahedron:



The Math in This Problem:

Every student goes through school constructing 3D shapes out of paper, using outlines that are provided by their teachers. However, in this math puzzle, the challenge is to analyze the structures of various Platonic solids and correctly place the tabs along their successive edges.

