

### **Polyhedra in a Box Solution:**

Since a cube consists of 6 faces in 3 pairs of parallel planes. The key to determining how the polyhedron fits into the cube is to identify the 6 faces of the polyhedron that can map to the faces of the cube.

For example in the polyhedron below, you can see a square on the top that will be in a plane parallel to the plane containing a square at the bottom. The square in the front is in a plane parallel to the plane containing the square in the back. Similarly there are squares in parallel planes to the left and right. By matching these parallel planes to the faces of the cube allows you to place the polyhedron into the cube.

