

Crystal/Cleavage Models

L.S. Fichter

Dept of Geology/Environmental Science

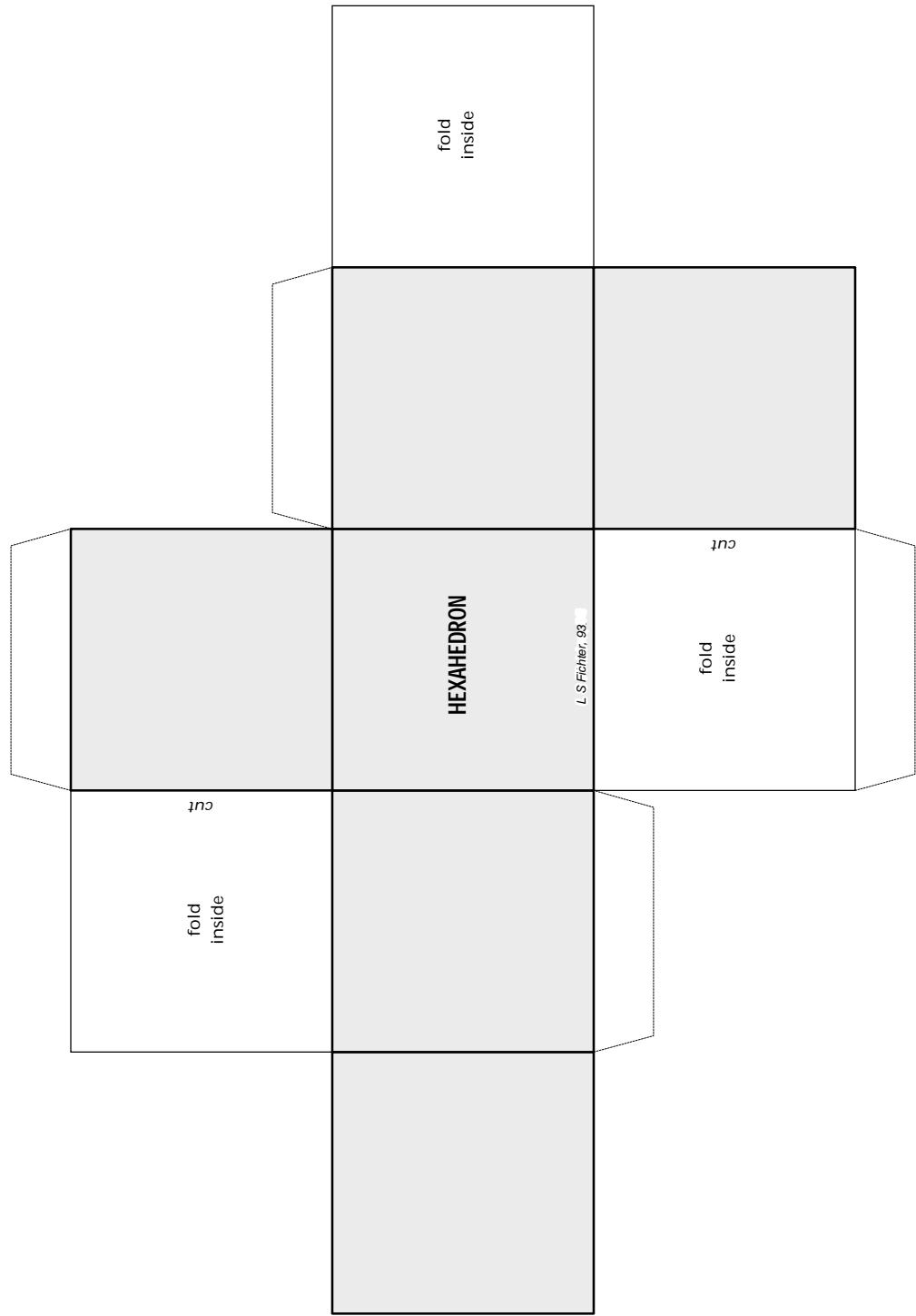
James Madison University

<http://geollab.jmu.edu/Fichter/Fichterls.html>

1. Photocopy on to other paper. The stiffer the paper the better; card stock works well.
2. Make sure all the folds are well creased. If working with cardstock it helps to use a ruler to begin the fold. Then crease hard with fingernail, or some smooth object.
3. Unshaded cleavage faces (white portions) go inside. Sometimes they are not essential, but tend to provide rigidity, especially with light weight paper.
4. Gluing: When gluing up you can use a Post-It type glue stick which allows easy realignment. But, permanent glue, or even tape works well too.
5. It usually works best to begin to glue some of the tabs first to hold the shape and then keep gluing additional tabs. If you do it in steps you can get your fingers around both sides of the paper to make sure the joints are well sealed before moving on to the next one.

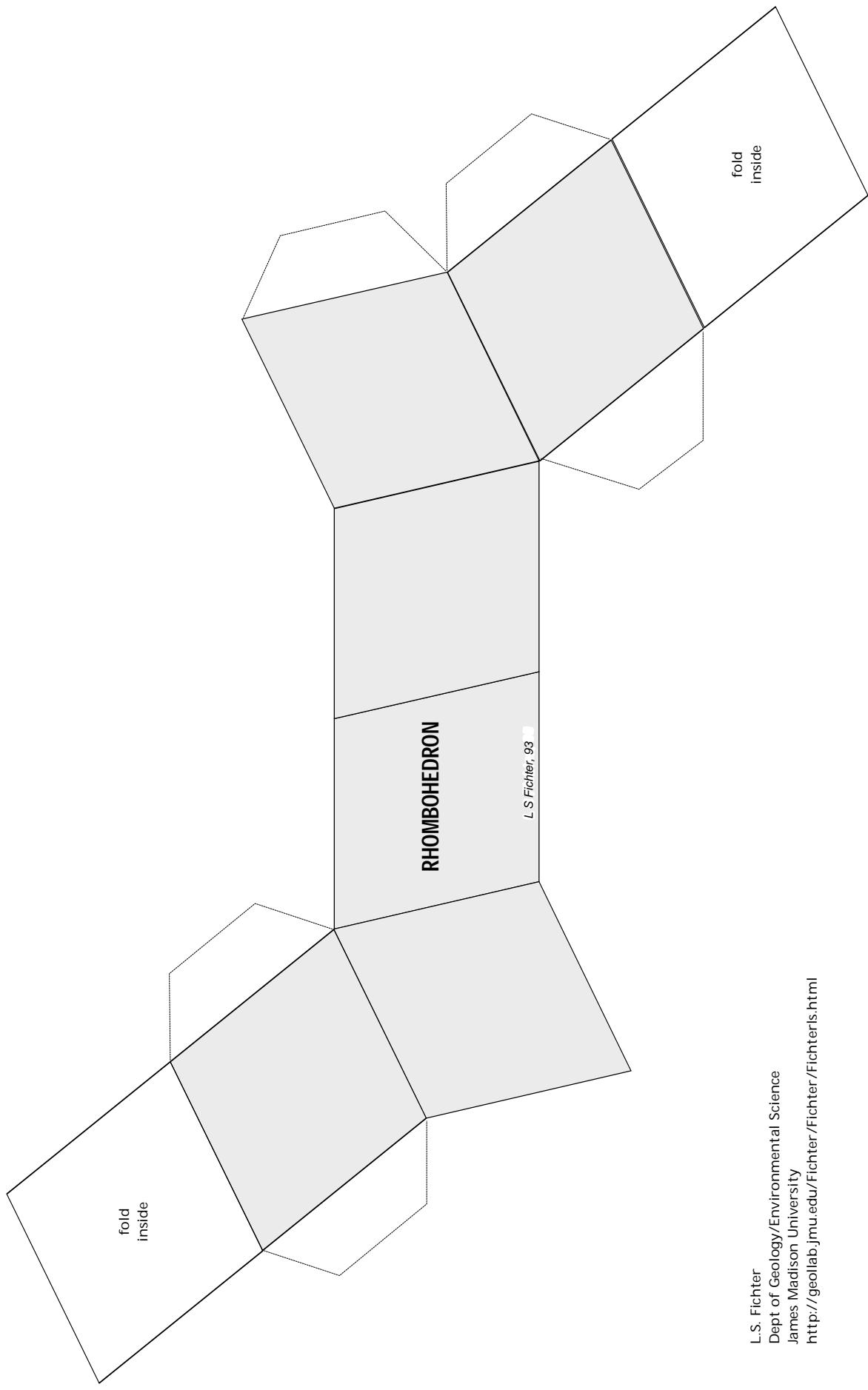
Toward the last tabs it gets harder to apply uniform pressure, especially with light weight paper. I try to plan the construction so that the last tabs are the easiest to glue or the largest.

Hexahedron (cube)

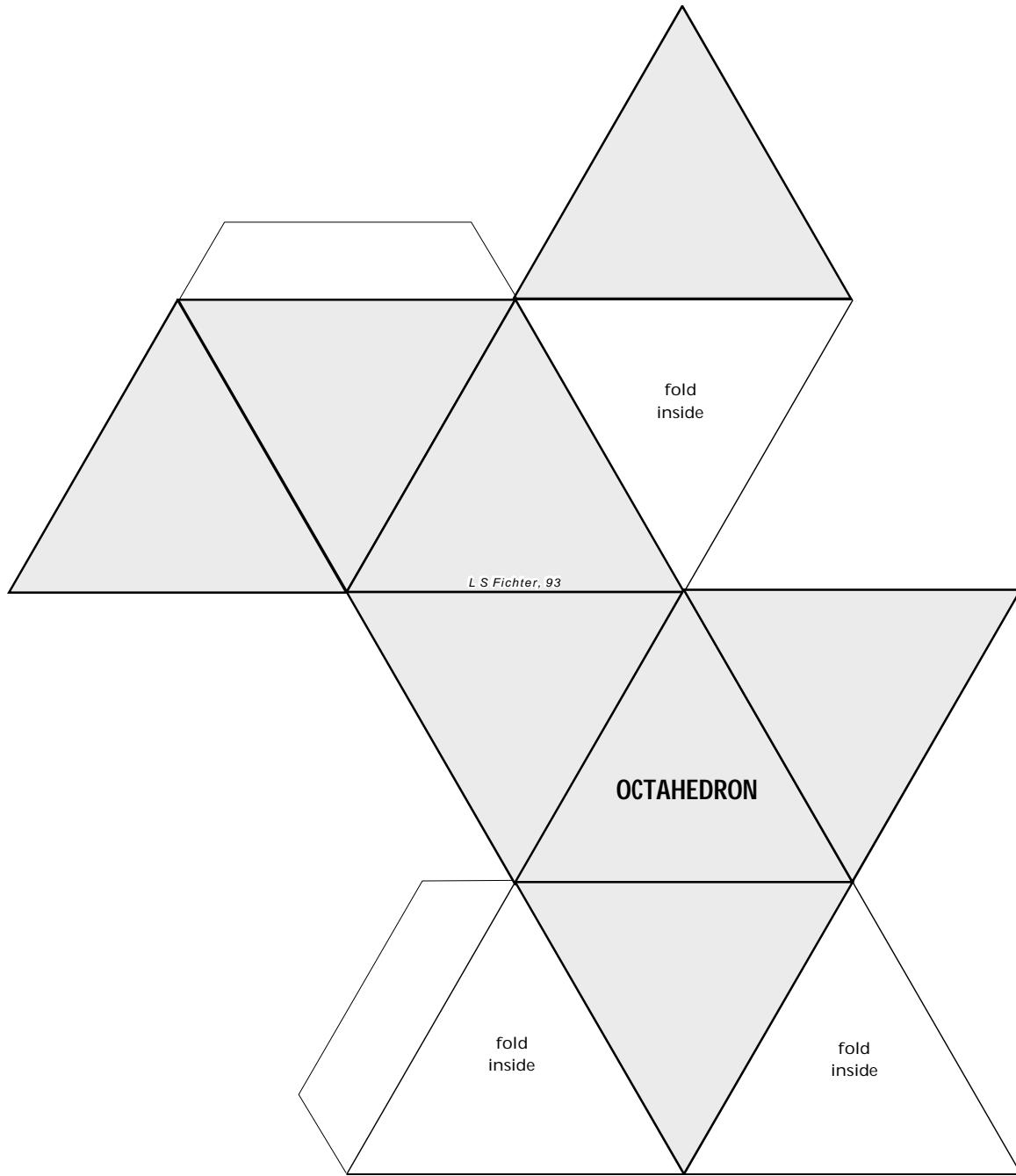


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Rhombohedron



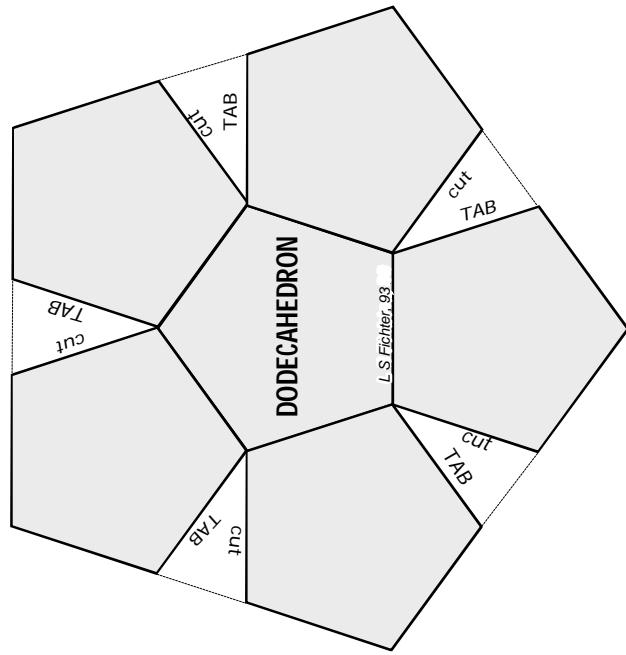
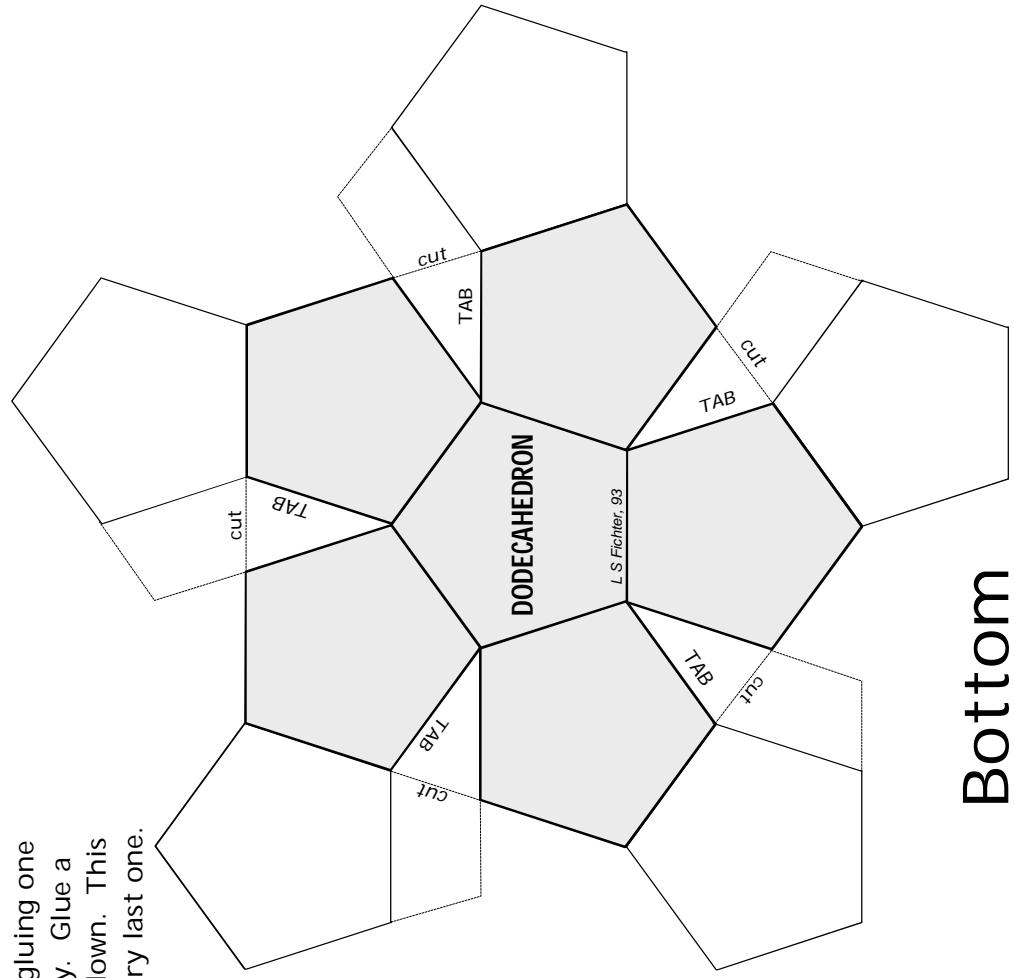
Octahedron



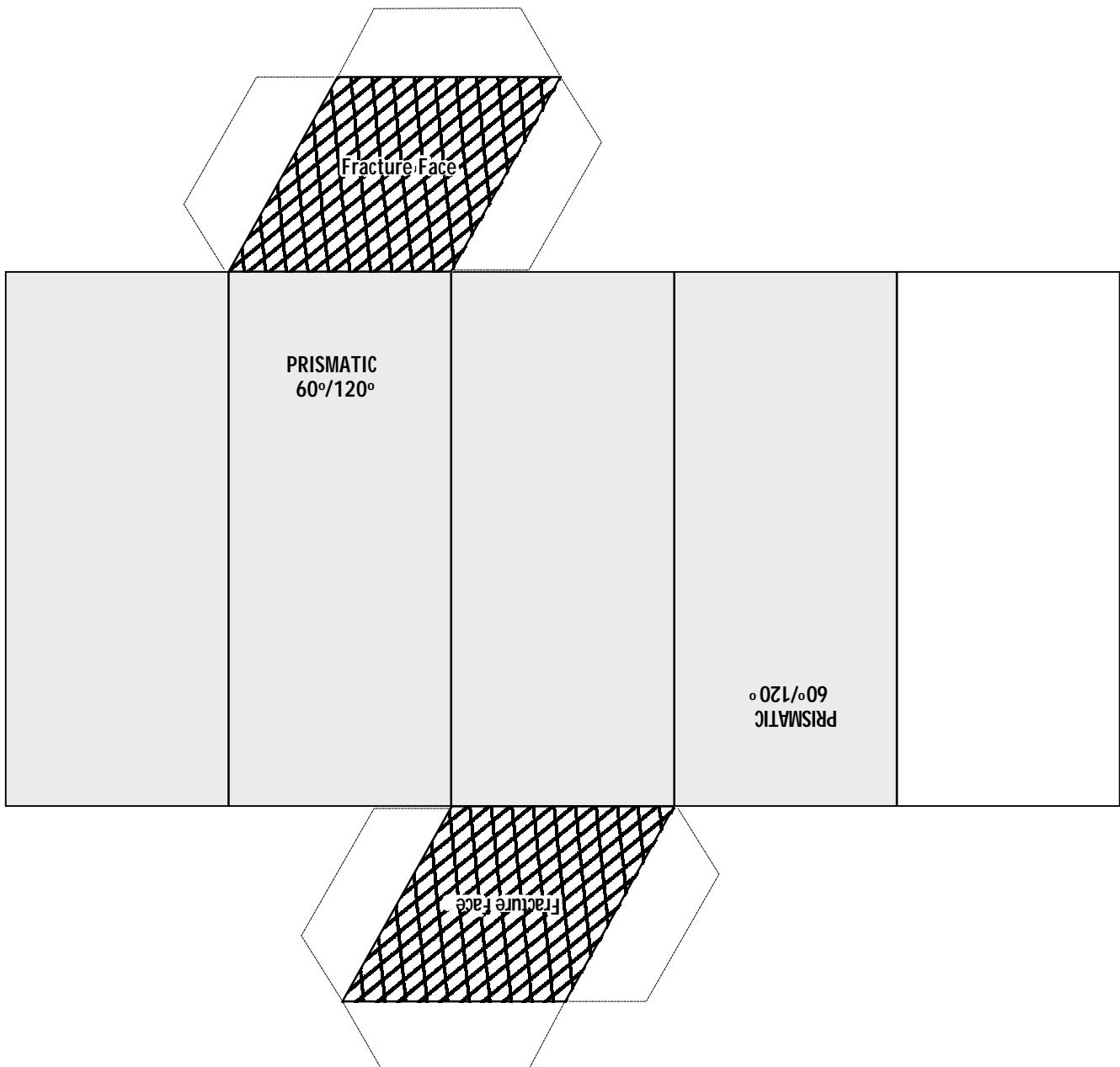
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Dodecahedron

Comes in two sections. Assemble base first (largest drawing), gluing the tabs as you go. Cut out the top and fold, but do not glue tabs. To bring top and bottom together, begin by gluing one pentagon from top to a pentagon on the bottom; let dry. Glue a second set of pentagons, then a third, etc. until all are down. This allows you to firmly hold each pentagon set until the very last one.



Prismatic - $60^\circ/120^\circ$



Prismatic - 87°/93°

