
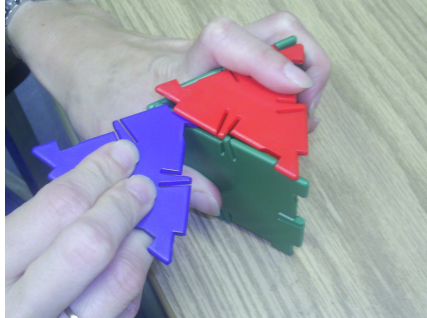


Exploring 3D Geometry with Polydrons!!

Use the required polydron pieces to create six different polyhedra described on each of the task cards.

Assembling the Polydron pieces	Disassembling a Polydron polyhedron
<p>Lay one Polydron flat on the tabletop and push another Polydron <i>at an angle</i> into the correct openings. When properly connected, the pieces will stay hinged together.</p> <div style="text-align: center; margin-top: 10px;">  </div>	<p>Use the tip of another Polydron to pry away connected Polydrons <i>at a vertex</i>. If all Polydron pieces are in use, pry the tip of a pen into the vertex and pop the pieces out.</p> <div style="text-align: center; margin-top: 10px;">  </div>

Be sure to name each figure and determine its number of faces, vertices, and edges. Next, draw TWO different nets for each figure. Finally, complete the table below using the information from the six polyhedra you built.

Figure	Name	# of Faces	# of Vertices	# of Edges
A				
B				
C				
D				
E				
F				

Look for a number pattern among the number of faces, vertices, and edges of the polyhedra. Explain the pattern in your own words. _____

Figure A		Figure B	
<i>6 squares</i>		<i>4 equilateral triangles</i>	
Name: _____		Name: _____	
#F: _____	#E: _____	#F: _____	#E: _____

Figure C		Figure D	
<i>1 square, 4 equilateral triangles</i>		<i>3 squares, 2 equilateral triangles</i>	
Name: _____		Name: _____	
#F: _____	#E: _____	#F: _____	#E: _____

Figure E		Figure F	
<i>8 equilateral triangles</i>		<i>2 squares, 8 equilateral triangles</i>	
Name: _____		Name: _____	
#F: _____	#E: _____	#F: _____	#E: _____