Exploring Geometric Solids

NAME_____

Explore the six polyhedron listed below. For each shape, determine the number of faces, edges, and vertices (corners). Record your results below.

POLYHEDRON	NAME OF EACH FACE	NUMBER OF SIDES ON EACH FACE	NUMBER OF FACES	NUMBER OF VERTICES	NUMBER OF EDGES
Tetrahedron					
Cube					
Octahedron					
Dodecahedron					
Icosahedron					
Irregular Polyhedron					

1. Look at the first shape in the table above. Find the sum of the number of faces and the number of vertices. How does this sum compare with the number of edges?

2. Do you think this may be a rule for the other shapes?

3. Add the number of faces and the number of corners for the other shapes in the table. Compare the sum of faces and corners to the number of edges. What did you find out? Is there a rule for all of the shapes?