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Discussing Symmetries of Polyhedra on their Structures.

A polytope is a geometrical figure bounded by portions of finitely many lines, planes, or hyperplanes. In two dimensions it is a polygon, in three a polyhedron. We study the symmetries of a polyhedron to help us understand the structure of the polyhedron, where a symmetry is a motion that leaves the polyhedron unchanged. In this talk the author will present some examples of polyhedra, and their symmetries on their structures. These structures make up what we will define as *CW-Complexes* of polyhedra. This is applicable to educational purposes for teaching elementary, middle, and high school students how to understand geometric shapes, and develop more three-dimensional thinking skills.

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