## **Polyhedra Patterns**



Crystals and their structure (crystallography) involve the study of polyhedra. For examples and photos of some common crystals, go online to the website <u>http://mathforum.org/alejandre/workshops/chart.html</u>. Here you will see the crystals halite and spinel described as cubic with squares for their six faces.

Viruses that cause colds and meningitis and their structure are also connected to the study of polyhedra. An important discovery in medicine (1985) found that these viruses were shaped like icosahedrons enabling scientists to better understand their structure with new avenues for research.

The structure of polyhedra has many real-world applications from nature to medicine. You will be investigating the structure of some common polyhedra and finding a relationship among the vertices, edges, and faces.