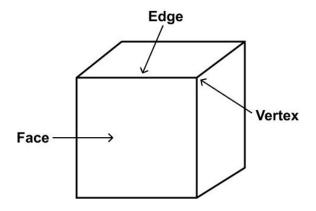# Polyhedron Symmetries

A **polyhedron** is a **closed 3D shape with flat sides,** like a cube.

Polyhedra have **faces, vertices,** and **edges.**

- A **face** is a flat side.
- A **vertex** is a corner where three or more faces meet.
- An **edge** is a line where two faces meet.

A **symmetry** of a polyhedron is a way of moving the polyhedron so that when you're done, it looks exactly the same.

How many different symmetries does this **square pyramid** have?

What if you color the faces so that triangular faces that are **opposite** from each other are the **same** color but triangular faces that are **next** to each other are **different** colors?