Lesson: Sketching Pyramids
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New Arizona Math Strand 4 Geometry and Measurement Grades 9-12
Articulated 4MH1-05 Draw 2- and 3-dimensional figures with appropriate labels;
4MH1-03 Make a net to represent a three-dimensional object; 4MH1-04 Make a three-dimensional model from a net.
Old Arizona Math Standard 4 Geometry Proficiency 1 Grades 9-12
4MP1-PO1 Sketch prisms, pyramids, cones, cylinders and spheres.

Learning objectives: the student will be able to:
• recognize polygons by number of sides
• distinguish pyramids from other 3-dimensional shapes
• identify pyramids by base shape
• identify attributes of a pyramid
• draw 3-dimensional figures (pyramids).

Overview:
The student is guided through the process of sketching a pyramid using a drag and place technique.

Classroom Management:
This can be used in large group lessons, small group, or individual assignments. Each student will move through the lesson at differing speeds.

Engaging Students:
Provide a variety of different type of pyramids for students to see, touch and hold. These models may be purchased geometric models and/or they may be real-life examples (e.g., dice, game pieces, toys, etc.)

Follow-up:
Take advantage of unusual opportunities. DIG DEEPER: Students choose their own base shape and build a pyramid out of toothpicks and gumdrops. Questions to ask, or journal writing: what determined the time it took to construct and the amount of materials needed? Did one base shape make a stronger construction than the other and why? SO WHAT: who built the pyramids of ancient Egypt? Were there architects then? What crafts were used? TALK ABOUT IT has a web exploration followed by a chance to build Century 21 pyramids.

Teacher Note:
This lesson might be used in the 8th grade to support Articulated PO4M81-03: Recognize the three-dimensional figure represented by a net.

Assessment:
Multiple-choice questions must be correctly responded to in order to finish the lesson.