Lesson: Pyramids on Parade/Nets
Teacher-Author: Judy Reihard
ASSET Animator: (Tim) Sumongol Viriyaampaivong

New Arizona Math Strand 4 Geometry and Measurement Grades 8, 9-12
Articulated 4MH1-03 Make a net to represent a three-dimensional object;
4MH1-04 Make a three-dimensional model from a net; 4M81-03 Recognize the
three-dimensional figure represented by a net.
Old Arizona Math Standard 4 Geometry, Proficiency 1 Grades 9-12
4MP1-PO3 Recognize the three-dimensional figure represented by a two-
dimensional drawing.

Learning Objectives: the student will be able to:
• distinguish a pyramid from other from other three-dimensional figures
• identify the attributes of a pyramid
• recognize and draw the net of a pyramid

Overview:
Students will see examples of three different types of pyramids and their nets. The
attributes of a pyramid are identified. Students will relate the concept of surface
area to the concept of net. Students will have the opportunity to answer questions
related to the attributes of a pyramid. Students will be able to use a paper copy of
the net of a pyramid to build a pyramid.

Engaging Students:
A regular tetrahedron is a pyramid with four equilateral triangular faces. Students
are generally intrigued with a tetrahedron box kite made by using four tetrahedrons
European countries, liquid products are sold by the “tetra-liter”; that is, a container
that is a tetrahedron that holds a liter of liquid. It might be interesting to see if any
of the students are familiar with this container.

Follow-up:
Throughout the units related to three-dimensional figures (nets, surface area and
volume), the teacher should emphasize the importance of maximizing the volume of
a figure while minimizing its surface area. Discuss careers related to the packaging
of commercial products to help students identify with the application of nets, surface
area, and volume. In addition, a discussion related to the ancient pyramids located
around the world would enhance the students’ knowledge related to pyramids.

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.

Assessment:
Students must be able to identify the attributes of a pyramid and be able to
recognize the net of a pyramid.