



TEACHER PAGE

Lesson: Camping with a Triangular Prism and Its Net

Teacher-Author: Judy Reihard

ASSET Animator: (Tim) Sumongol Viriyaampaivong

New Arizona Math Strand 4 Geometry and Measurement Grades 8-12

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 triangular prism from other prisms and from other three-dimensional figures
- identify the attributes of a triangular prism
- recognize and draw the net of a triangular prism
- build a triangular prism by moving line segments to their appropriate places

Overview:

Students will see the attributes of a triangular prism identified and they will see the triangular prism unfold into its net. They 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 triangular prism. They will be shown practical examples of a triangular prism.

Engaging Students:

Help students relate to a triangular prism by bringing in Toblerone™ candy bars. Let them eat the candy bars and then dismantle the packaging so they can see the net of a triangular prism.

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. Use the DIG DEEPER and TALK ABOUT IT! to maximize the study of triangular prisms.

Classroom Management:

This can be used in large group lessons, perhaps with a Smartboard™, 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 triangular prism and be able to recognize the net of a triangular prism

