**Content:** Finding Volume of Rectangular Prisms with Rational Side Lengths

**Instructor:** Christy Miller

**Materials:** card stock, paper, cm cubes, scissors, tape, Activity Sheet, calculator,

**Objective(s):** Students will 1) explore the nets of three dimensional figures 2)find the volume of right rectangular prisms 3) find the volume of right rectangular prisms with fractional side lengths

**CCSS Content:** [CCSS.Math.Content.6.G.A.2](http://www.corestandards.org/Math/Content/6/G/A/2/)
Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas *V = l w h* and *V = b h* to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.

[CCSS.Math.Content.6.G.A.4](http://www.corestandards.org/Math/Content/6/G/A/4/)
Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.

**CCSS Practice:** SMP 1 – Make sense of problems and persevere in solving them.

 SMP 2 – Reason abstractly and quantitatively

 SMP 5 – Use appropriate tools strategically.

 SMP 8 – Look for and express regularity in repeated reasoning.

**Warm-Up:** Students will be asked to find the net (2D pattern) of two different three dimensional figures (prisms/pyramid/cylinder/cone). Students should come up with two different nets for each shape.

**Lesson Body:** See attached activity. (Ornament/Ring Boxes)

**Closing (for CAMP):** Discussion on this lesson including 1) how it could be improved via UDL 2)how it could be improved for teachers’ student make-up 3) how SMP was addressed.

**Assessment:** Exit Ticket

1. What is a net?
2. How can we link nets to both surface area and volume?
3. What formula can we use to find the volume of a right, rectangular prism – regardless of its dimensions?