

SS5.3

Activity 16.15 BOX COMPARISON—CUBIC UNITS

Provide students with a pair of small boxes that you have folded up from cardstock board (see Figure 16.12). Use unit dimensions that match the blocks that you have for units. Students are given two boxes, exactly one block, and an appropriate ruler. (If you use 2-cm cubes, make a ruler with the unit equal to 2 cm.) The students' task is to decide which box has the greater volume or if the boxes have the same volume.

Here are some suggested box dimensions ($L \times W \times H$):

$6 \times 3 \times 4$

$5 \times 4 \times 4$

$3 \times 9 \times 3$

$6 \times 6 \times 2$

$5 \times 5 \times 3$

Students should use words, drawings, and numbers to explain their conclusions.

 Standards for Mathematical Practice

 **2 Reason abstractly and quantitatively**

From Van de Walle et. al. (2014). *Teaching Student-Centered Mathematics Grades: Developmentally Appropriate Instruction for Grades 3 – 5* (2nd Ed.). Toronto: Pearson Education, Inc. (p. 333).