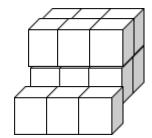
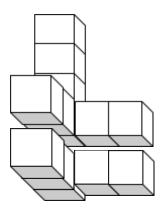
Name ______ Date _____

1. Tell the volume of each solid figure made of 1-inch cubes. Specify the correct unit of measure.

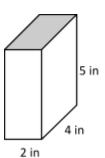
a.



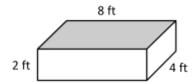
b.



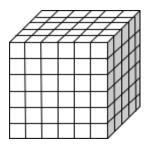
- 2. Ramil found the volume of the prism pictured to the right by multiplying 4×5 and then adding 20 + 20 = 40. He says the volume is 40 cubic inches.
 - a. Carly says he did it wrong. He should have multiplied the bottom first (2×4) and then multiplied by the height. Explain to Carly why Ramil's method works and is equivalent to her method.



b. Use Ramil's method to find the volume of this right rectangular prism.

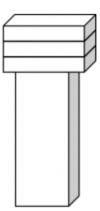


3. If the figure below is made of cubes with 5 cm side lengths, what is its volume? Explain your thinking.

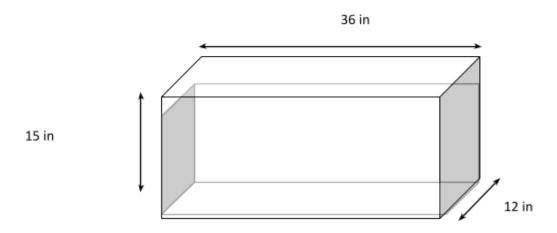


4. The volume of a rectangular prism is 504 in³. If the area of the base is 56 in², find its height. Draw and label a model to show your thinking.

5. The following structure is composed of three right rectangular prisms that each measure 8 inches by 4 inches by 2 inches and one right rectangular prism that measures 6 inches by 2 inches by 24 inches. What is the total volume of the structure? Explain your thinking.

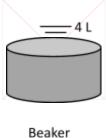


6. a. Find the volume of the rectangular sand table. Explain your thinking.



b. If the sand table is completely filled with sand and then 4,000 cubic inches are poured out, how high will the sand be? Give your answer in inches, and show your work.

7. Juliet wants to know if the chicken broth in this beaker will fit into this rectangular food storage container. Explain how you would figure it out without pouring the contents in. If it will fit, how much more broth could the storage container hold? If it will not fit, how much broth will be left over? (Remember: 1 cm³ = 1 mL.)





13 cm