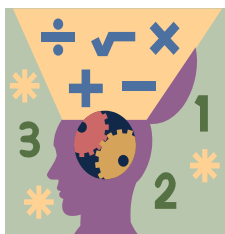


Name: \_\_\_\_\_ Section: \_\_\_\_\_



### Homework

Greetings Scholar and Parents. We will focus our efforts this week on Chapter 15, *Volume*. Scholars will learn how to find the volume of rectangular prisms and compound figures using formulas. Please complete homework daily based on the schedule provided below. **Please do not work ahead on homework assignments.** Failure to complete homework or bring packet to class will result in points deducted. Scholars will complete the Chapter 15 Test on Monday April 2, 2024 reviewing lessons 15.1 – 15.6.

### Extra Practice

Additional practice for the daily lessons is available on IXL. To access extra practice, please have your child login into IXL. Under the **“What should I work on”** section, scholars will find Teacher Assigned Lessons. From there, you will see a list of lessons reinforcing the daily skills.

- Volume of irregular figures made of unit cubes
- Volume of rectangular prisms made of unit cubes
- Volume of rectangular prisms made of unit cubes: word problems
- Volume of cubes and rectangular prisms
- Volume of cubes and rectangular prisms : word problems
- Volume of compound figures

### Notes

**Completed homework packets should be uploaded or turned in on Monday April 1st, 2024.** Students must prove and show all their work in the provide space. Scholars should use a separate sheet of paper if they need additional space. Failure to show work or packets submitted after the due date will result in a lower grade. If a scholar struggles with a lesson, they can review the daily lesson on HMH. Please feel free to contact me with any questions or concerns at [peter.vanegas@archimedean.org](mailto:peter.vanegas@archimedean.org).

<u>Monday</u>	March 25 <sup>th</sup>	– 15.1 and 15.2
<u>Tuesday</u>	March 26 <sup>th</sup>	– 15.2 and 15.3
<u>Wednesday</u>	March 27 <sup>th</sup>	– 15.4 and 15.6
<u>Thursday</u>	March 28 <sup>th</sup>	– Review for Monday’s assessment
<u>Friday</u>	March 29 <sup>th</sup>	– No Homework

Name \_\_\_\_\_

LESSON 15.1

Practice and Homework

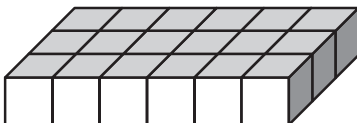
# Unit Cubes and Three-Dimensional Figures

Go Online

Interactive Examples

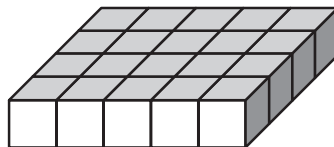
Count the number of cubes used to build each three-dimensional figure.

1.



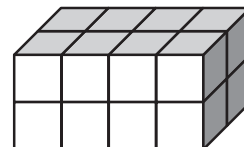
18 unit cubes

2.



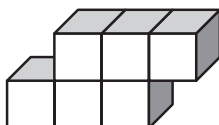
\_\_\_\_\_ unit cubes

3.



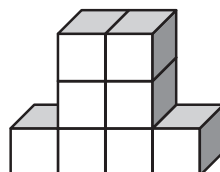
\_\_\_\_\_ unit cubes

4.



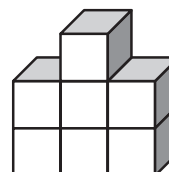
\_\_\_\_\_ unit cubes

5.



\_\_\_\_\_ unit cubes

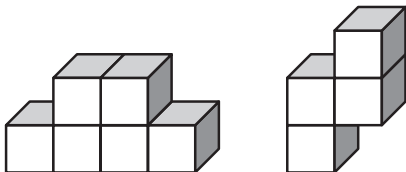
6.



\_\_\_\_\_ unit cubes

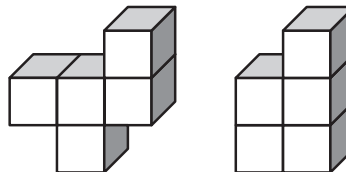
Compare the number of unit cubes in each three-dimensional figure. Use  $<$ ,  $>$ , or  $=$ .

7.



\_\_\_\_\_ unit cubes ○ \_\_\_\_\_ unit cubes

8.



\_\_\_\_\_ unit cubes ○ \_\_\_\_\_ unit cubes

## Problem Solving



9. A carton can hold 1,000 unit cubes that measure 1 inch by 1 inch by 1 inch. Describe the dimensions of the carton using unit cubes.

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Name \_\_\_\_\_

LESSON 15.2

Practice and Homework

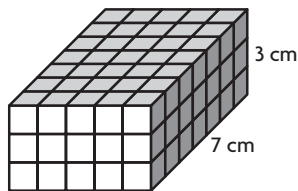
# Understand Volume

Go Online

Interactive Examples

Use the unit given. Find the volume.

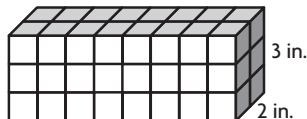
1.



Each cube = 1 cu cm

Volume = 105 cu cm

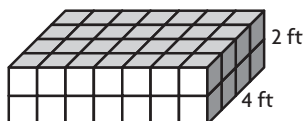
2.



Each cube = 1 cu in.

Volume = \_\_\_\_\_ cu \_\_\_\_\_

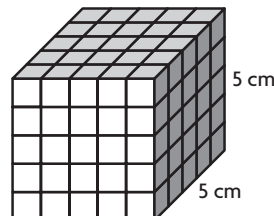
3.



Each cube = 1 cu ft

Volume = \_\_\_\_\_ cu \_\_\_\_\_

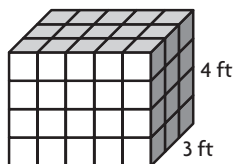
4.



Each cube = 1 cu cm

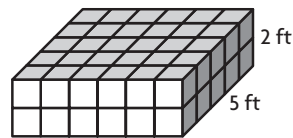
Volume = \_\_\_\_\_ cu \_\_\_\_\_

5. Compare the volumes. Write  $<$ ,  $>$ , or  $=$ .



Each cube = 1 cu ft

\_\_\_\_\_ cu ft  $\bigcirc$  \_\_\_\_\_ cu ft



Each cube = 1 cu ft

## Problem Solving

6. A manufacturer ships its product in boxes with edges of 4 inches. If 12 boxes are put in a carton and completely fill the carton, what is the volume of the carton?

\_\_\_\_\_  
\_\_\_\_\_

7. Hugo and Ava each built a rectangular prism that has a length of 5 units, a width of 2 units, and a height of 4 units. Hugo used cubes that are 1 cm on each side. Ava used cubes that are 1 in. on each side. What is the volume of each prism?

\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_

LESSON 15.3

Practice and Homework

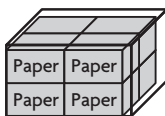
# Estimate Volume

Go Online

Interactive Examples

Estimate the volume.

1. Volume of package of paper: 200 cu in.



**Think:** Each package of paper has a volume of 200 cu in. There are 8 packages of paper in the larger box. So, the volume of the large box is about 8  $\times$  200, or 1,600 cubic inches.

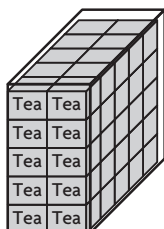
Volume of large box: 1,600 cu in.

2. Volume of rice box: 500 cu cm



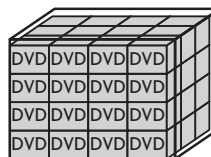
Volume of large box: \_\_\_\_\_

3. Volume of tea box: 40 cu in.



Volume of large box: \_\_\_\_\_

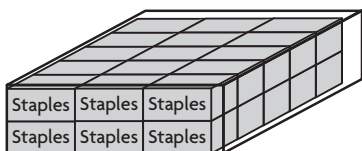
4. Volume of DVD case: 20 cu in.



Volume of large box: \_\_\_\_\_

## Problem Solving

5. Theo fills a large box with boxes of staples. The volume of each box of staples is 120 cu cm. Estimate the volume of the large box.



\_\_\_\_\_

Name \_\_\_\_\_

LESSON 15.4

Practice and Homework

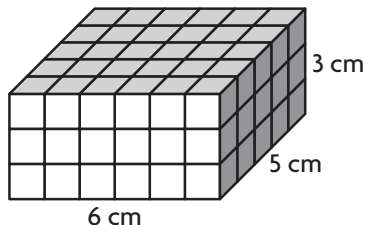
# Volume of Rectangular Prisms

Go Online

Interactive Examples

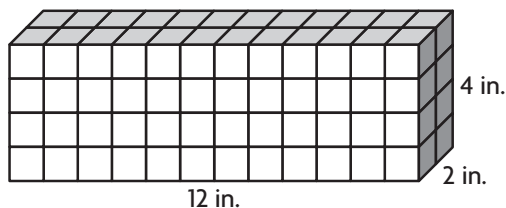
Find the volume.

1.



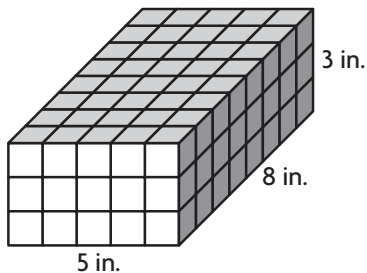
Volume: 90 cu cm

2.



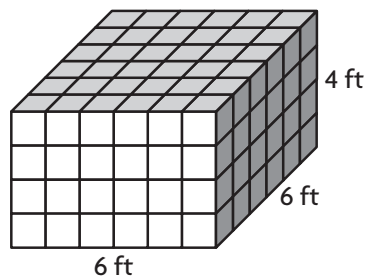
Volume: \_\_\_\_\_

3.



Volume: \_\_\_\_\_

4.



Volume: \_\_\_\_\_

## Problem Solving



5. Aaron keeps his baseball cards in a cardboard box that is 12 inches long, 8 inches wide, and 3 inches high. What is the volume of this box?

\_\_\_\_\_

6. Riley's jewelry box is in the shape of a cube that has 6-inch edges. What is the volume of Riley's jewelry box?

\_\_\_\_\_

Name \_\_\_\_\_

LESSON 15.5

Practice and Homework

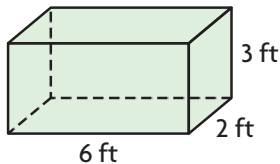
# Apply Volume Formulas

Go Online

Interactive Examples

Find the volume.

1.

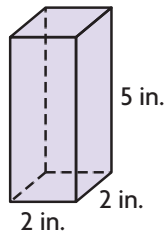


$$V = \underline{l} \times \underline{w} \times \underline{h}$$

$$V = \underline{6} \times \underline{2} \times \underline{3}$$

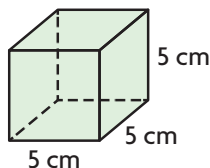
$$V = \underline{36 \text{ cu ft}}$$

2.



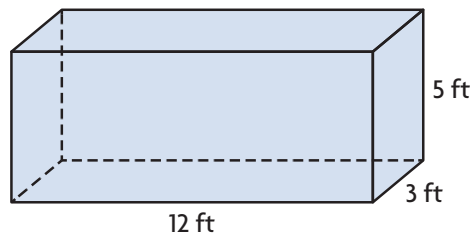
$$V = \underline{\hspace{2cm}}$$

3.



$$V = \underline{\hspace{2cm}}$$

4.



$$V = \underline{\hspace{2cm}}$$

## Problem Solving

5. A construction company is digging a hole for a swimming pool. The hole will be 12 yards long, 7 yards wide, and 3 yards deep. How many cubic yards of dirt will the company need to remove?

\_\_\_\_\_

6. Andrea rents a storage room that is 15 feet long, 5 feet wide, and 8 feet high. What is the volume of the storage room?

\_\_\_\_\_

Name \_\_\_\_\_

LESSON 15.6

Practice and Homework

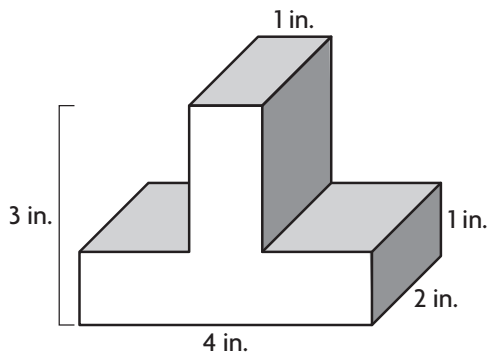
# Find Volume of Composed Figures

Go Online

Interactive Examples

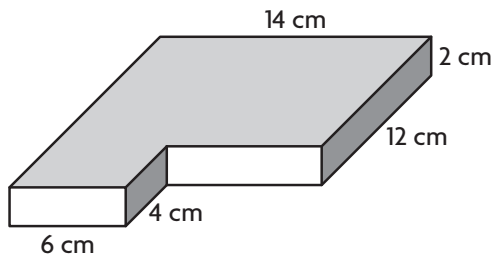
Find the volume of the composite figure.

1.



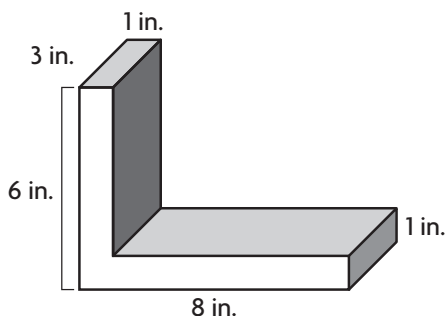
$V =$  \_\_\_\_\_

2.



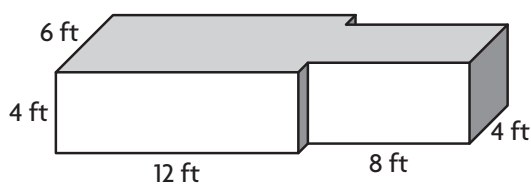
$V =$  \_\_\_\_\_

3.



$V =$  \_\_\_\_\_

4.

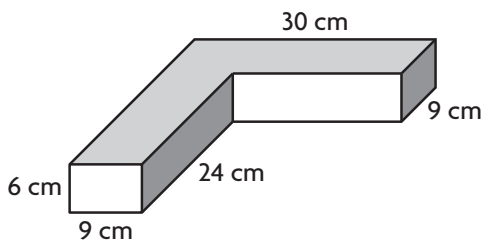


$V =$  \_\_\_\_\_

## Problem Solving

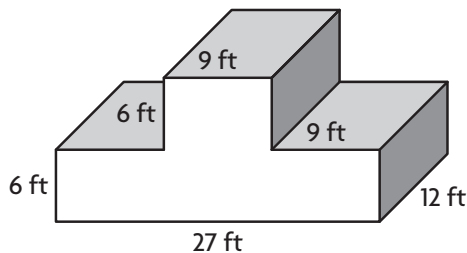


5. As part of her shop class, Jules made the figure below out of pieces of wood. How much space does the figure she made take up?



\_\_\_\_\_

6. What is the volume of the composite figure below?



\_\_\_\_\_