Fifth Grade

Answer Key
Unit 8: Measurement

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for navigation

Name _____

Problem of the Day

Lesson 1

Explain how the value of the digit 4 in the number 4,200 compares to the value of the digit 4 in the number 420.

Sample answer: The 4 in 4,200 is 10 times larger than the 4 in 420.

Lesson 2

List three metric units of length.

centimeters, kilometers, millimeters

Lesson 3

List three metric units of mass.

grams, milligrams, kilograms

Lesson 4

Marlon has 100 centimeters of yarn. How many meters of yarn does he have?

1 meter

Lesson 5

Complete the conversion.

1,000 mL. = ___1___ L.

Name _____

Problem of the Day

Lesson 6

Complete the conversion.

1 ft. = **12** in.

Lesson 7

Complete the conversion.

1 lb. = **16** oz.

Lesson 8

Complete the conversion.

1 pt. = **2** c.

Lesson 9

Don has 36 inches of yarn. How many yards of yarn does he have?

1 yard

Lesson 10

Write the formula for finding the area of a rectangle.

length × width

Name _____

Problem of the Day

Lesson 11

Name a real-world classroom object for which you could measure the volume.

Answers will vary.

Lesson 12

List some units used to represent volume.

Answers will vary.

Lesson 13

Draw a rectangular prism.

Lesson 14

Explain how to find the area of a square.

Sample answer:
Multiply length times width.

Lesson 15

Describe how the volume of a rectangular prism compares to the area of its base.

Sample answer:
The volume of a rectangular prism is the area of the base times its height.

Name _____

Problem of the Day

Lesson 16

Draw an example of a figure that is composed of two non-overlapping rectangular prisms.

Answers will vary.

Lesson 17

Name a metric unit of measurement that is larger than a centimeter.

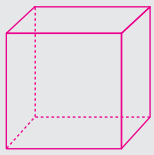
Answers will vary.

Lesson 18

Draw a rectangular prism with a height of 1 centimeter, width of 3 centimeters, and length of 4 centimeters.

Lesson 19

Draw a rectangular prism with equal dimensions.



Lesson 20

Describe how the concept of volume relates to area.

Sample answer:
Volume is area times height.

Name _____

Pre-Assessment

For items 1-6, write an equivalent measurement.

1. 1 m. = 100 cm.

2. 6,000 g. = 6 kg.

3. 12 cm. = 120 mm.

4. 4 yd. = 12 ft.

5. 24 fl. oz. = 3 c.

6. 2 oz. = $\frac{2}{16}$ lb.

7. The dimensions of a rectangular tabletop are 54 inches long and 3 feet wide. What is the perimeter of the tabletop, in feet?

$9\frac{1}{2}$ feet

8. How many cubic units would be used to fill a rectangular prism with a height of 3 inches, width of 4 inches, and length of 6 inches?

60 inches cubed

9. Hannah drank 32 ounces of milk in one week. Each gallon of milk costs $2.50. How much did the milk she drank cost? Round to the nearest whole cent.

$0.63

10. A gift box has a length of 200 millimeters, width of 8 centimeters, and height of 55 millimeters. What is the volume of the box, in cubic centimeters?

8,800 centimeters cubed

Name _____

Metric Measurements Quiz

For items 1-6, complete each conversion. Show or explain how you found your answers.

1. 7 cm. = 0.7 m.

2. 2,000 kg. = 2,000,000 g.

3. 0.4 L. = 400 mL.

4. 0.08 km. = 80 m.

5. 6 g. = 6,000 mg.

6. 3,250 cm. = 32,500 mm.

7. A straight race track is 0.2 kilometer long. If Jeremiah can run 5 meters in 1 second, how long will it take him to run the total distance of this track?

20 seconds

8. A stack of paper clips has a total mass of 10,000 milligrams. Each paper clip has a mass of 1 gram. How many paper clips are in the stack?

10 paper clips

9. Heidi has a 3-meter long roll of wrapping paper. She needs 40 centimeters of paper for each small gift she wraps. How many small gifts can she wrap using this roll?

7 gifts

10. Hannah makes 1.5 liters of lemonade. Megan makes 2.5 liters of lemonade. If the girls combine their lemonade and divide the amount equally into cups that each hold 80 milliliters, how many cups can they fill?

500 cups

Name _____

Volume Quiz

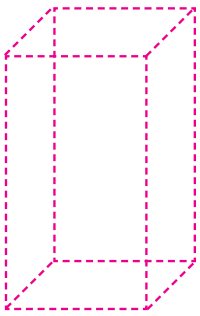
1. Define a cubic unit.

Sample answer: A cubic unit is the product of a unit tall times a unit long times a unit wide.

2. A rectangular prism has a length of 2 centimeters, width of 4 centimeters, and height of 6 centimeters. How many cubic units will fill the prism?

48 cubic units

3. Draw a net of a rectangular prism with a length of 5 centimeters, width of 4 centimeters, and height of 9 centimeters.



4. Find the volume of a rectangular prism with dimensions of 6 inches, 7 inches, and 12 inches.

504 cubic inches

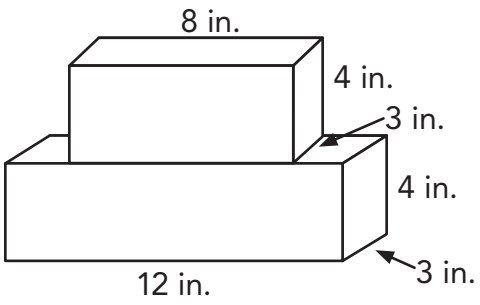
5. Find the volume of a rectangular prism with a base area of 15 square centimeters and a height of 4 centimeters.

60 cubic centimeters

6. Find the volume of a rectangular prism with a square base with side lengths of 3 centimeters and a height of 11 centimeters.

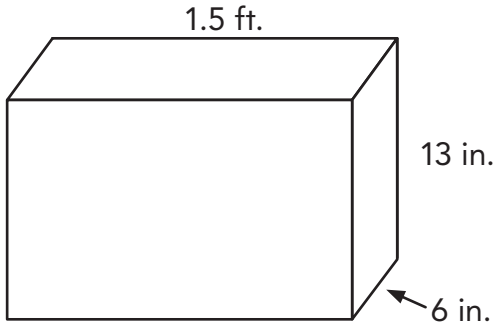
99 cubic centimeters

7. What is the volume of the solid figure shown below?



240 cubic inches

8. What is the volume of the gift box below?



1,404 cubic inches

9. A storage cabinet has a length of 4 feet, width of 18 inches, and height of 1 yard. What is the volume of the cabinet in cubic feet?

2,592 cubic feet

10. A pantry has dimensions of 2 meters, 260 centimeters, and 25 centimeters. What is the volume of the pantry in cubic centimeters?

1,300,000 cubic centimeters

Name _____

Assessment

For items 1–10, complete each conversion. Show or explain how you found your answer.

1. 1 m. = 100 cm.

2. 10 kg. = 10,000 g.

3. 50 m. = 50,000 cm.

4. 10 yds. = 360 in.

5. 48 fl. oz. = 6 c.

6. 192 oz. = 12 lbs.

7. 15 cm. = 150 mm.

8. 15 qt. = 60 c.

9. 12,000 g. = 12 kg.

10. 1800 mL. = 1.8 L.

For items 11–12, write the missing values in the table.

11.

cm.	m.
15	0.15
25	**0.25**
35	**0.35**
45	**0.45**
55	**0.55**

12.

yd.	in.
2	72
4	**144**
6	**216**
8	**288**
10	**360**

For 13–15, find the volume of the rectangular prism with the given dimensions.

13. $l = 4$ cm., $w = 7$ cm., $h = 12$ cm.

336 cubic cm.

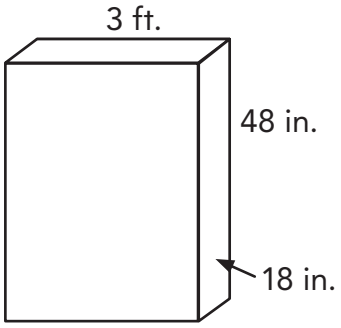
14. $l = 5$ in., $w = 3$ in., $h = 8$ in.

120 cubic in.

15. $B = 48$ cm.^{2}, $h = 6$ cm.

288 cubic cm.

16. What is the volume of the rectangular prism below?



31,104 cubic in.

17. Arlan has a string that is 45 centimeters long. Marlon has a string that is 0.5 meters long. If they place their strings end-to-end, how long is the string in centimeters?

95 centimeters

18. A class hydration booth has 5 gallons of water at the beginning of a running event. After 1 hour, the booth has 7 quarts of water remaining. How many pints of water were consumed?

28 pints

19. A gift box has dimensions of 30 centimeters, 40 centimeters, and 0.5 meter. What is the volume of the box in cubic centimeters?

60,000 cubic centimeters

20. A rectangular garden has a perimeter of 20 feet and a length of 84 inches. What is the width of the garden?

3 feet wide

10 mm. = 1 cm.

10 cm. = 1 dm.

10 dm. = 1 m.

1 km. = 1,000 m.

1,000 mL. = 1 L.

1,000 L. = 1 kL.

10 mg. = 1 cg.

1 g. = 100 cg.

1 kg. = 1,000 g.

10 cg. = 1 dg.

1 g. = 1,000 mg.

10 dg. = 1 g.

Fill in the missing values in the table below:

cm.	mm.
1	10
4	40
5	50
8	80
10	100

Fill in the missing values in the table below:

m.	cm.
1	100
3	300
5	500
7	700
9	900

Fill in the missing values in the table below:

dm.	cm.
1	10
3	30
5	50
6	60
9	90

Fill in the missing values in the table below:

g.	mg.
1	1,000
4	4,000
6	6,000
8	8,000
9	9,000

Fill in the missing values in the table below:

kg.	g.
1	1,000
2	2,000
4	4,000
6	6,000
8	8,000

Fill in the missing values in the table below:

kg.	g.
1	1,000
3	3,000
5	5,000
7	7,000
9	9,000

Fill in the missing values in the table below:

mm.	cm.
1	0.1
2	0.2
4	0.4
5	0.5
8	0.8
10	1

Fill in the missing values in the table below:

cm.	m.
1	0.01
3	0.03
6	0.06
8	0.08
9	0.09
10	0.1

Fill in the missing values in the table below:

mg.	g.
1	0.001
4	**0.004**
5	**0.005**
8	**0.008**
9	**0.009**
10	**0.01**

Fill in the missing values in the table below:

g.	kg.
1	0.001
2	**0.002**
10	**0.01**
20	**0.02**
100	**0.1**

Fill in the missing values in the table below:

mg.	g.
1	0.001
2	**0.002**
4	**0.004**
5	**0.005**
7	**0.007**
10	**0.010**
100	**0.100**

Fill in the missing values in the table below:

mL.	L.
1	0.001
2	**0.002**
4	**0.004**
6	**0.006**
7	**0.007**
10	**0.01**
100	**0.1**

Amy buys 8 meters of ribbon. She needs 40 centimeters of ribbon for each photo frame. How many photo frames can she make?

20 photo frames

Adam lives 104 kilometers from Josh's house. Adam can drive 0.5 meter per second. At this rate, how many seconds will it take Adam to reach Josh's house?

2,080 seconds

Mara has 1,500 milliliters of lemonade. She wants to pour the lemonade into containers that each hold 0.5 liter. How many containers can she fill completely?

3 containers

James has 1.3 liters of water. Robert has 2.2 liters of water. They are going to combine their water and pour the water into small bottles that each hold 250 milliliters of water. How many small bottles can they fill?

14 small bottles

Michael walks 30 meters every minute. How long does it take him to walk 3 kilometers?

100 minutes

A map shows that two cities are 1.5 centimeters apart. The map scale states that 5 mm = 10 miles. How many miles apart are the two cities?

30 miles

A box of cereal contains 519 grams of bran flakes. How many milligrams of bran flakes are in 3 boxes?

1,557,000 milligrams

A snail traveled 180 meters in a day. The snail traveled at a rate of 15 centimeters per minute. How many minutes did it take the snail to travel that distance?

120 minutes

A bottle of medicine contains 0.10 liter of antibiotic liquid. If each 5 milliliters of liquid costs $10, how much does this bottle of medicine cost?

$200

A salon manager needs to purchase 3 liters of a hair serum. The hair serum is available in bottles, each containing 120 milliliters of product. How many bottles does she need to purchase?

25 bottles

Megan has 25,000 millimeters of string. She plans to use the string to create centerpieces for a table. Each centerpiece requires 50 centimeters of string. How many centerpieces can she make?

50 centerpieces

Zach donates 120 liters of water to a local school. Each bottle of water contains 500 milliliters. How many bottles of water does he donate to the school?

240 bottles

Fill in the missing values in the table below:

ft.	in.
1	12
4	48
5	60
8	96
10	120

Fill in the missing values in the table below:

in.	ft.
12	1
24	2
36	3
48	4
60	5

Fill in the missing values in the table below:

ft.	yd.
3	1
6	2
9	3
12	4
15	5

Fill in the missing values in the table below:

yd.	ft.
1	3
4	12
5	15
8	24
10	30

Fill in the missing values in the table below:

in.	yd.
12	$\frac{1}{3}$
24	$\frac{2}{3}$
36	1
48	$\frac{2}{3}$
60	$\frac{5}{3}$

Fill in the missing values in the table below:

yd.	in.
1	36
2	72
3	108
4	144
5	180

Fill in the missing values in the table below:

oz.	lb.
16	1
32	2
48	3
64	4
80	5

Fill in the missing values in the table below:

lb.	oz.
1	16
3	48
5	80
7	112
9	144

Fill in the missing values in the table below:

lb.	T.
2,000	1
4,000	2
6,000	3
8,000	4
10,000	5

Fill in the missing values in the table below:

T.	lb.
1	2,000
4	8,000
5	10,000
8	16,000
10	20,000

Fill in the missing values in the table below:

oz.	T.
16,000	$\frac{1}{2}$
32,000	1
48,000	$\frac{3}{2}$
64,000	2
80,000	$\frac{5}{2}$

Fill in the missing values in the table below:

T.	oz.
1	32,000
2	64,000
3	96,000
4	128,000
5	160,000

Fill in the missing values in the table below:

fl. oz.	c.
8	1
16	2
24	3
32	4
40	5

Fill in the missing values in the table below:

c.	fl. oz
1	8
3	24
5	40
7	56
9	72

Fill in the missing values in the table below:

c.	pt.
2	1
4	2
6	3
8	4
10	5

Fill in the missing values in the table below:

qt.	pt.
1	2
4	8
6	12
8	16
9	18

Fill in the missing values in the table below:

kg.	g.
1	1,000
2	2,000
4	4,000
6	6,000
8	8,000

Fill in the missing values in the table below:

pt.	gal.
4	1
8	2
12	3
16	4
20	5

Robin has 12 yards of string. She needs 24 inches of string for each kite. How many kites can she make?

6 kites

Jackson's filled backpack weighs 8 pounds. Henry's filled backpack weighs 160 ounces. How many more pounds does Henry's backpack weigh than Jackson's backpack?

2 pounds more

Jaimie has 120 cups of lemonade. She wants to pour the lemonade into containers that each hold 0.5 gallon. How many containers can she completely fill?

15 containers

Macy has 32 pints of water. Kim has 2.5 gallons of water. How many more gallons of water does Macy have than Kim?

$1\frac{1}{2}$ more gallons

Tim has 60 feet of ribbon. He will use 18 inches of ribbon to decorate each gift box. How many gift boxes can he decorate?

40 gift boxes

So far, Frank has driven 70,400 yards. He needs to drive a total of 100 miles. How many more feet does he need to drive?

316,800 feet

A truck weighs 1.5 tons.

An SUV weighs 4,000 pounds.

What is the total weight, in pounds, of the two vehicles?

7,000 pounds

Hannah has 10 gallons of water. She wants to divide the water equally into 1-cup containers. How many 1-cup containers can she fill?

160 cups

David has 12 quarts of lemonade.
Marcus has 20 pints of lemonade.
If they combine the lemonade, how many cups of lemonade will they have?

88 cups

Amara ran 1.5 miles this morning. Avery ran 5,280 yards this morning. How many more feet did Avery run than Amara?

7,920 feet

Aubrey has two dogs, Spot and Rover. Spot weighs 670 ounces. Rover weighs 40 pounds. Which dog is heavier? By how many ounces?

Spot is heavier by 28.8 ounces.

Mike has 140 cups of iced tea for a school picnic. Ron has 30 pints of iced tea. How many gallons of iced tea do they have altogether?

$12\frac{1}{2}$ gallons of iced tea

A rectangle has a width of 14 inches and a length of 2 feet. What is the area of the rectangle in square inches?

336 square inches

A rectangle has a length of 3.5 feet and a width of 18 inches. What is the perimeter of the rectangle in feet?

10 feet

A rectangle has a perimeter of 78 inches and a width of 2 feet. What is the length of the rectangle in feet?

$1\frac{1}{4}$ feet

A rectangle has an area of 1,728 square inches and a length of 48 inches. What is the width of the rectangle in feet?

3 feet

A rectangular fence has a length of 162 inches and a width of 8 feet. What is the area inside the fence in square feet?

108 square feet

A rectangular garden has a length of 12 feet and a width of 42 inches. What is the perimeter of the garden in feet?

31 feet

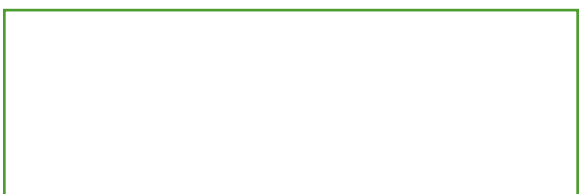
A rectangular porch has a width of 2 feet and a length of 78 inches. What is the area of the porch in square inches?

1,872 square inches

A rectangular garden has a perimeter of 34 feet and a width of 4 feet. What is the length of the garden in inches?

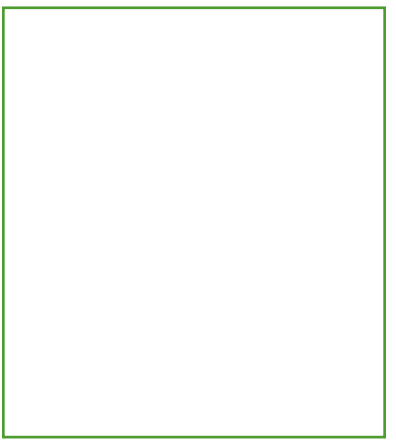
624 square inches

What is the area of the rectangle shown below in square feet?



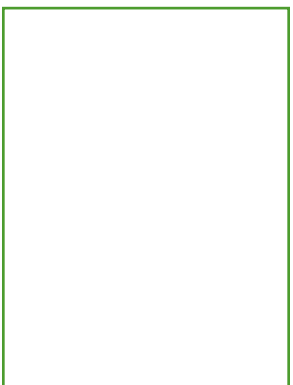
54 square feet

What is the perimeter of the rectangle shown below in feet?



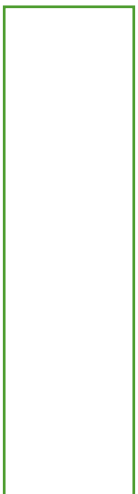
144 square feet

What is the perimeter of the rectangle shown below in inches?



648 square inches

What is the area of the rectangle shown below in square feet?



18 square feet

Rectangular Prism Dimensions:

$l = 6$ cm., $w = 4$ cm., $h = 5$ cm.

120 cubic cm.

Rectangular Prism Dimensions:

$l = 10$ cm., $w = 8$ cm., $h = 6$ cm.

480 cubic cm.

Rectangular Prism Dimensions:

$l = 5$ cm., $w = 2$ cm., $h = 3$ cm.

30 cubic cm.

Rectangular Prism Dimensions:

$l = 8$ cm., $w = 2$ cm., $h = 9$ cm.

144 cubic cm.

Rectangular Prism Dimensions:

$l = 9$ cm., $w = 3$ cm., $h = 4$ cm.

108 cubic cm.

Rectangular Prism Dimensions:

$l = 7$ cm., $w = 6$ cm., $h = 4$ cm.

168 cubic cm.

Rectangular Prism Net Dimensions:

$l = 8$ cm., $w = 7$ cm., $h = 6$ cm.

336 cubic cm.

Rectangular Prism Net Dimensions:

$l = 9$ cm., $w = 3$ cm., $h = 7$ cm.

189 cubic cm.

Rectangular Prism Net Dimensions:

$l = 6$ cm., $w = 5$ cm., $h = 8$ cm.

240 cubic cm.

Rectangular Prism Net Dimensions:

$l = 7$ cm., $w = 5$ cm., $h = 5$ cm.

175 cubic cm.

Rectangular Prism Net Dimensions:

$l = 6$ cm., $w = 3$ cm., $h = 5$ cm.

90 cubic cm.

Rectangular Prism Net Dimensions:

$l = 9$ cm., $w = 8$ cm., $h = 9$ cm.

648 cubic cm.

A rectangular prism has dimensions of 4 feet, 8 feet, and 2 feet. What is the volume of the prism?

64 cubic feet

A rectangular prism has a length of 8 inches, width of 6 inches, and height of 11 inches. What is the volume of the prism?

528 cubic inches

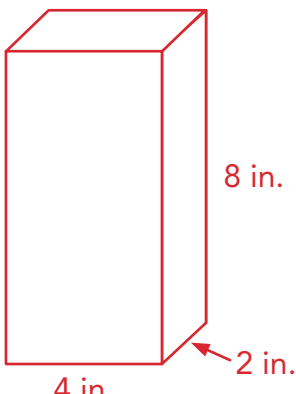
A rectangular prism has dimensions of 7 inches, 12 inches, and 3 inches. What is the volume of the prism?

252 cubic inches

A rectangular prism has a length of 24 centimeters, width of 16 centimeters, and height of 9 centimeters. What is the volume of the prism?

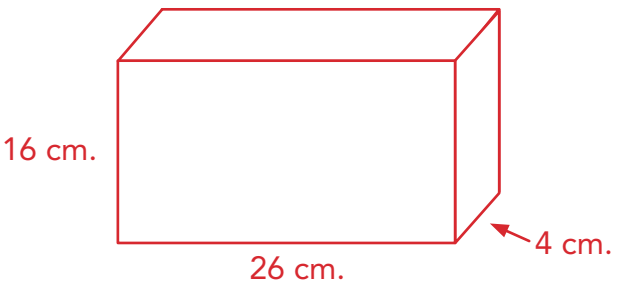
3,456 cubic centimeters

What is the volume of the prism shown below?



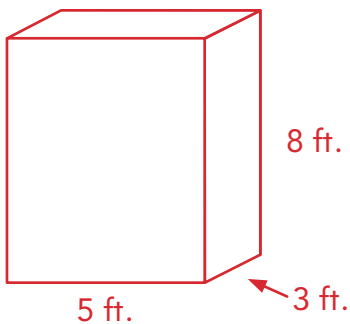
64 cubic in.

What is the volume of the prism shown below?



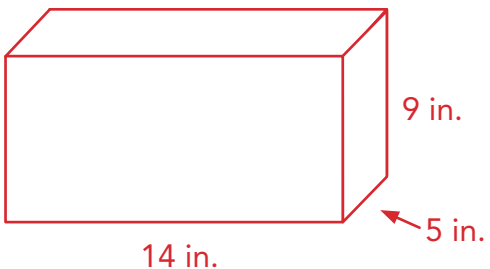
104 cubic cm.

What is the volume of the prism shown below?



120 cubic ft.

What is the volume of the prism shown below?



630 cubic in.

What is the volume of a rectangular prism with dimensions of 11 centimeters, 8 centimeters, and 13 centimeters?

1,144 cubic centimeters

What is the volume of a rectangular prism with dimensions of 4 inches, 8 inches, and 10 inches?

320 cubic inches

What is the volume of a rectangular prism with a length of 15 inches, width of 12 inches, and height of 8 inches?

1,440 cubic inches

What is the volume of a rectangular prism with a length of 32 centimeters, width of 6 centimeters, and height of 2 centimeters?

384 cubic centimeters

Rectangular Prism Dimensions:

$B = 16$ cm.^{2}, $h = 6$ cm.

96 cubic cm.

Rectangular Prism Dimensions:

$B = 18$ cm.^{2}, $h = 4$ cm.

72 cubic cm.

Rectangular Prism Dimensions:

$B = 12$ cm.^{2}, $h = 5$ cm.

60 cubic cm.

Rectangular Prism Dimensions:

$B = 6$ cm.^{2}, $h = 4$ cm.

24 cubic cm.

Rectangular Prism Dimensions:

$B = 24$ cm.^{2}, $h = 6$ cm.

144 cubic cm.

Rectangular Prism Dimensions:

$B = 20$ cm.^{2}, $h = 7$ cm.

140 cubic cm.

A rectangular prism has a base area of 14 square feet and a height of 3 feet. What is the volume of the prism?

42 cubic feet

A rectangular prism has a base area of 18 square inches and a height of 9 inches. What is the volume of the prism?

162 cubic inches

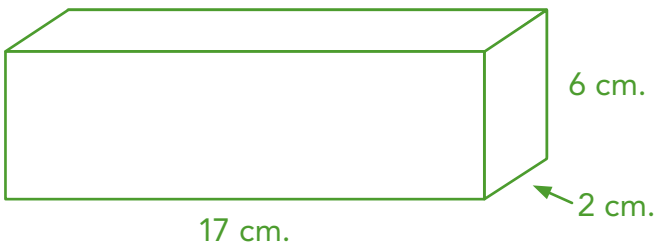
A rectangular prism has a base area of 21 square centimeters and a height of 14 centimeters. What is the volume of the prism?

294 cubic centimeters

A rectangular prism has a base area of 12 square centimeters and a height of 16 centimeters. What is the volume of the prism?

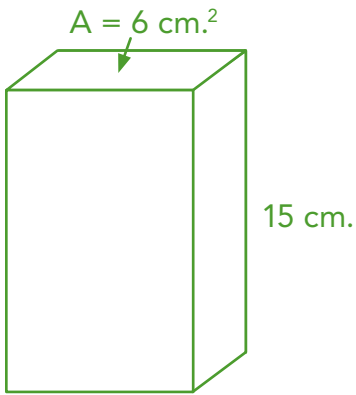
192 cubic centimeters

What is the volume of the rectangular prism shown below?



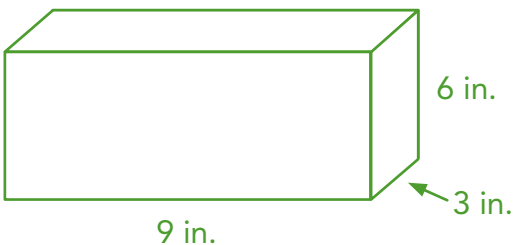
204 cubic cm.

What is the volume of the rectangular prism shown below?



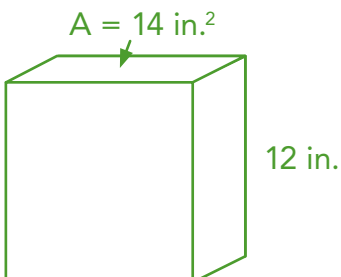
90 cubic cm.

What is the volume of the rectangular prism shown below?



162 cubic in.

What is the volume of the rectangular prism shown below?



168 cubic in.

A rectangular prism has a base area of 36 square centimeters and a height of 8 centimeters. What is the volume of the prism?

288 cubic centimeters

A rectangular prism has a square base with side lengths of 2 inches and a height of 9 inches. What is the volume of the prism?

36 cubic inches

A rectangular prism has a base area of 8 square centimeters and a height of 9 centimeters. What is the volume of the prism?

72 cubic centimeters

Zach donates 120 liters of water to a local school. Each bottle of water contains 500 milliliters. How many bottles of water does he donate to the school?

240 bottles of water

A solid figure is composed of two non-overlapping rectangular prisms, one stacked on top of the other.

Dimensions of Smaller Rectangular Prism:

l = 4 cm., w = 3 cm., h = 5 cm.

Dimensions of Larger Rectangular Prism:

l = 6 cm., w = 3 cm., h = 10 cm.

180 cubic cm.

A solid figure is composed of two non-overlapping rectangular prisms, one stacked on top of the other.

Dimensions of Smaller Rectangular Prism:

$l = 5$ cm., $w = 2$ cm., $h = 7$ cm.

Dimensions of Larger Rectangular Prism:

$l = 8$ cm., $w = 2$ cm., $h = 10$ cm.

230 cubic cm.

A solid figure is composed of two non-overlapping rectangular prisms, one stacked on top of the other.

Dimensions of Smaller Rectangular Prism:

l = 8 cm., w = 4 cm., h = 7 cm.

Dimensions of Larger Rectangular Prism:

l = 11 cm., w = 4 cm., h = 12 cm.

752 cubic cm.

A solid figure is composed of two non-overlapping rectangular prisms, one stacked on top of the other.

Dimensions of Smaller Rectangular Prism:

$l = 5$ cm., $w = 2$ cm., $h = 6$ cm.

Dimensions of Larger Rectangular Prism:

$l = 10$ cm., $w = 2$ cm., $h = 12$ cm.

300 cubic cm.

A solid figure is composed of two non-overlapping rectangular prisms, one stacked on top of the other.

Dimensions of Smaller Rectangular Prism:

l = 4 cm., w = 3 cm., h = 8 cm.

Dimensions of Larger Rectangular Prism:

l = 6 cm., w = 3 cm., h = 13 cm.

330 cubic cm.

A solid figure is composed of two non-overlapping rectangular prisms, one stacked on top of the other.

Dimensions of Smaller Rectangular Prism:

l = 6 cm., w = 4 cm., h = 6 cm.

Dimensions of Larger Rectangular Prism:

l = 8 cm., w = 4 cm., h = 9 cm.

432 cubic cm.

A gift box has dimensions of 60 centimeters, 90 centimeters, and 120 centimeters. What is the volume of the gift box in cubic meters?

6,480 cubic meters

A gift box has dimensions of 18 inches, 24 inches, and 30 inches. What is the volume of the gift box in cubic feet?

1,080 cubic feet

A refrigerator has a length of 36 inches, height of 6 feet, and width of 4 feet. What is the volume of the refrigerator in cubic feet?

72 cubic feet

A refrigerator has a length of 3 feet, width of 1.5 yards, and height of 2 yards. What is the volume of the refrigerator in cubic yards?

3 cubic yards

A dresser has dimensions of 24 inches, 4 feet, and 36 inches. What is the volume of the dresser in cubic feet?

24 cubic feet

A dresser has dimensions of 2.5 feet, 60 inches, and 4 feet. What is the volume of the dresser in cubic inches?

86,400 cubic inches

A metal filing cabinet has a length of 36 inches, width of 2 feet, and height of 2 yards. What is the volume of the filing cabinet in cubic feet?

36 cubic yards

A metal filing cabinet has a length of 2.5 feet, width of 42 inches, and height of 54 inches. What is the volume of the filing cabinet in cubic feet?

$39\frac{1}{4}$ cubic feet

A shipping box has dimensions of 15 inches, 10 inches, and 1.5 feet. What is the volume of the box in cubic inches?

2,250 cubic inches

A shipping box has dimensions of 2 feet, 20 inches, and 0.5 yards. What is the volume of the box in cubic inches?

8,640 cubic inches

A box of candy has dimensions of 14 centimeters, 0.25 meters, and 20 centimeters. What is the volume of the box in cubic centimeters?

7,000 cubic centimeters

A box of candy has dimensions of 0.20 meters, 18 centimeters, and 12 centimeters. What is the volume of the box in cubic centimeters?

4,320 cubic centimeters

Draw a rectangular prism with a volume of 30 cubic centimeters.

Answers will vary.

State a metric measurement that is equal to 200 centimeters.

Answers will vary.

Create a T-chart that shows the relationship between centimeters and meters, for 5 measurements.

Answers will vary.

Create a T-chart that shows the relationship between inches and yards, for 5 measurements.

Answers will vary.

Amy states, "To convert a smaller metric unit of measurement to a larger metric unit of measurement, you multiply." Is she correct? If so, explain why. If not, provide a counterexample.

Sample answer: No. You must divide to convert a smaller measurement to a larger measurement. For example, 12 inches equals 1 foot.

State another customary measurement that is equivalent to 7,040 yards.

Answers will vary.

Find the length of a rectangle that has an area of 288 square inches and a width of 1.5 feet.

16 inches

State a customary measurement that is equal to 8 gallons.

Answers will vary.

Draw a solid figure that is composed of two non-overlapping rectangular prisms. Label the dimensions and find the volume.

Answers will vary.

A gift box has a base area of 24 square centimeters and a volume of 168 cubic centimeters. What is the height of the box?

7 centimeters

Ainsley has 312 inches of ribbon. She uses 16 inches of ribbon for each present. If she wraps 18 presents, how many feet of ribbon does she have left?

2 feet

Robert brought 2 gallons of water with him on a hiking trip. He drank 2 pints this morning. How many quarts does he have left?

7 quarts