

**Name:**

**5.MD.1**

Directions: Solve each problem.

**Convert each measurement.**

5 kilometers = \_\_\_\_\_ meters

3 meters = \_\_\_\_\_ centimeters

70 millimeters = \_\_\_\_\_ centimeters

**Convert each measurement.**

8 feet = \_\_\_\_\_ inches

2 miles = \_\_\_\_\_ feet

5,280 yards = \_\_\_\_\_ miles

**Jack ran 4 kilometers each day for 3 days. How many meters did Jack run in 3 days?**

**Bella is 4 feet tall, and her brother is 5 feet tall. How many inches tall are Bella and her brother combined?**

**Convert each measurement.**

3 kilograms = \_\_\_\_\_ grams

6 meters = \_\_\_\_\_ centimeters

7,000 milliliters = \_\_\_\_\_ liters

2 pounds = \_\_\_\_\_ ounces

4 tons = \_\_\_\_\_ pounds

96 inches = \_\_\_\_\_ feet

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

## Converting Measurements - Customary Capacity

CCSS: 5.MD.1

I can convert standard measurement units within a given measurement system.

Fill in each blank.

### Capacity Conversions

1 cup = 8 fluid ounces

1 pint = 2 cups

1 quart = 2 pints

1 quart = 4 cups

1 gallon = 4 quarts

1 gallon = 16 cups

1 ) 8 qt = \_\_\_\_\_ pt

2 ) \_\_\_\_\_ qt = 7 gal

3 ) 12 c = \_\_\_\_\_ pts

4 ) \_\_\_\_\_ gal = 24 pt

5 ) \_\_\_\_\_ c = 40 fl oz

6 ) 32 c = \_\_\_\_\_ qt

7 ) 44 qt = \_\_\_\_\_ gal

8 ) \_\_\_\_\_ qt = 18 pt

9 ) 15 pt = \_\_\_\_\_ c

10 ) 7 c = \_\_\_\_\_ fl oz

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

## Converting Measurements - Customary Length

CCSS: 5.MD.1

I can convert standard measurement units within a given measurement system.

Fill in each blank.

### Length Conversions

1 foot = 12 inches

1 yard = 36 inches

1 yard = 3 feet

1 mile = 5,280 feet

1 mile = 1,760 yards

1 ) 36 in. = \_\_\_\_\_ ft

2 ) \_\_\_\_\_ ft = 11 yd

3 ) 3 mi = \_\_\_\_\_ ft

4 ) 63 ft = \_\_\_\_\_ yd

5 ) \_\_\_\_\_ ft = 60 in.

6 ) 180 in. = \_\_\_\_\_ ft

7 ) 12,000 ft = \_\_\_ mi \_\_\_ ft

8 ) 117 in. = \_\_\_ ft \_\_\_ in.

9 ) 2 mi = \_\_\_\_\_ yd

10 ) 6 yd 2 ft = \_\_\_\_\_ ft

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

## Converting Measurements - Customary Weight

CCSS: 5.MD.1

I can convert standard measurement units within a given measurement system.

Fill in each blank.

### Weight Conversions

1 pound = 16 ounces

1 ton = 2,000 pounds

1 ) 4 T. = \_\_\_\_\_ lb.

2 ) \_\_\_\_\_ oz. = 7 lb.

3 ) 15 lb. = \_\_\_\_\_ oz.

4 ) 224 oz. = \_\_\_\_\_ lb.

5 ) \_\_\_\_\_ T. = 14,000 lb.

6 ) 13 T. = \_\_\_\_\_ lb.

7 ) 336 oz. = \_\_\_\_\_ lb.

8 ) \_\_\_\_\_ oz. = 12 lb.

9 ) 5,000 lb. = \_\_\_\_\_ T.

10 ) 17,000 lb. = \_\_\_\_\_ T.

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

## Converting Customary Measurements - Word Problems

CCSS: 5.MD.1

I can convert standard measurement units within a given measurement system.

Solve each problem.

1) Alice drank 2.5 pints of milk. How many cups of milk did Alice drink?

2) Nathan ran three miles. How many feet did Nathan run?

3) Ruth's puppy weighs 11 pounds. How many ounces does her puppy weigh?

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

## Converting Customary Measurements - Word Problems

CCSS: 5.MD.1

I can convert standard measurement units within a given measurement system.

Solve each problem.

1) Kim drank two quarts of juice, and Alice drank two pints of juice. How many cups of juice did they drink altogether?

2) Kyle ran two miles every day for a week. How many yards did Kyle run in one week?

3) Henry's pumpkin weighed four pounds, and Todd's pumpkin weighed five pounds. How many ounces did their pumpkins weigh altogether?

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

## Converting Measurements - Metric Capacity

CCSS: 5.MD.1

I can convert standard measurement units within a given measurement system.

Fill in each blank.

### Metric Capacity Conversions

1 liter = 1,000 milliliters

1 ) 6 L = \_\_\_\_\_ mL

2 ) \_\_\_\_\_ L = 8,000 mL

3 ) 150 mL = \_\_\_\_\_ L

4 ) 200 mL = \_\_\_\_\_ L

5 ) \_\_\_\_\_ mL = 1.1 L

6 ) 4 L = \_\_\_\_\_ mL

7 ) \_\_\_\_\_ L = 3,000 mL

8 ) 1700 mL = \_\_\_\_\_ L

9 ) 14 L = \_\_\_\_\_ mL

10 ) 5.8 L = \_\_\_\_\_ mL

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

## Converting Measurements - Metric Length

CCSS: 5.MD.1

I can convert standard measurement units within a given measurement system.

Fill in each blank.

### Metric Length Conversions

1 centimeter = 10 millimeters

1 meter = 100 centimeters

1 kilometer = 1,000 meters

1 ) 3 km = \_\_\_\_\_ m

2 ) \_\_\_\_\_ km = 5,000 m

3 ) 800 cm = \_\_\_\_\_ m

4 ) 700 m = \_\_\_\_\_ km

5 ) \_\_\_\_\_ cm = 2 m

6 ) 13 km = \_\_\_\_\_ m

7 ) \_\_\_\_\_ km = 9,000 m

8 ) 1,400 cm = \_\_\_\_\_ m

9 ) 12 m = \_\_\_\_\_ cm

10 ) 6.3 km = \_\_\_\_\_ m



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

## Converting Measurements - Metric Mass

CCSS: 5.MD.1

I can convert standard measurement units within a given measurement system.

Fill in each blank.

### Mass Conversions

1 kilogram = 1,000 grams

1 gram = 1,000 milligrams

1 ) 4 kg = \_\_\_\_\_ g

2 ) \_\_\_\_\_ kg = 7,000 g

3 ) 140 mg = \_\_\_\_\_ g

4 ) 300 g = \_\_\_\_\_ kg

5 ) \_\_\_\_\_ mg = 6 g

6 ) 9 kg = \_\_\_\_\_ g

7 ) \_\_\_\_\_ kg = 3,000 g

8 ) 1500 mg = \_\_\_\_\_ g

9 ) 11 g = \_\_\_\_\_ mg

10 ) 4.8 kg = \_\_\_\_\_ g

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

## Converting Metric Measurements - Word Problems

CCSS: 5.MD.1

I can convert standard measurement units within a given measurement system.

Solve each problem.

1) Bessie the cow drank 34 liters of water. How many milliliters did Bessie drink?

2) Jim biked 3,000 meters to the library. How many kilometers did Jim bike?

3) Melissa's bunny weighs 1,800 grams. How many kilograms does her bunny weigh?

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

## Converting Metric Measurements - Word Problems

CCSS: 5.MD.1

I can convert standard measurement units within a given measurement system.

Solve each problem.

1) An elephant can drink 190 liters of water each day. How many milliliters of water could four elephants drink in one day?

2) Mary drove 24 kilometers to the mall. How many meters will she have driven by the time she returns home?

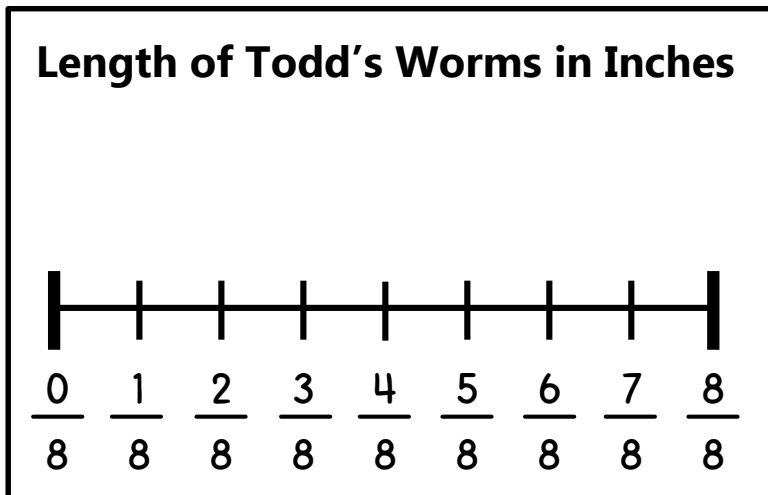
3) Joe orders three pizzas that each weigh 900 grams. How many kilograms do all of Joe's pizzas weigh?

**Name:**

**5.MD.2**

Directions: Complete the line plot and answer each question.

Length of Todd's Worms in Inches		
$\frac{2}{8}$	$\frac{1}{2}$	$\frac{1}{8}$
$\frac{7}{8}$	$\frac{6}{8}$	$\frac{5}{8}$
$\frac{3}{8}$	1	$\frac{7}{8}$



1. Plot each measurement on the line plot.
2. What is the most common length of worm? \_\_\_\_\_
3. How many worms measured  $\frac{1}{2}$  inch or less? \_\_\_\_\_
4. If all the worms measuring  $\frac{7}{8}$  inches were added together, what would the total length be? \_\_\_\_\_
5. What is the total length of all of the worms? \_\_\_\_\_
6. What is the average length of the worms? \_\_\_\_\_

(Hint: Divide the total length of all worms by 9.)

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

## Line Plots to Display Data

CCSS: 5.MD.2

I can make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{8}$ ).

On Tuesday morning, the middle-school track team held practice. The table below shows the distance each runner ran. Plot the distances on the line plot.

Runner's Name	Miles Run
Blake	$\frac{1}{4}$
Noah	$\frac{1}{8}$
Joseph	$\frac{5}{8}$
Olivia	$\frac{1}{2}$
Emma	$\frac{1}{8}$
Abby	$\frac{3}{8}$



1. How far did girls run altogether?
2. What is the average distance that the girls ran?
3. How far did the entire team run altogether?
4. What is the average distance that the entire team ran?

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

## Line Plots to Display Data

CCSS: 5.MD.2

I can make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{8}$ ).

On Tuesday morning, the middle-school cross country team went on a run. The table below shows the distance each runner ran. Plot the distances on the line plot.

Runner's Name	Miles Run
Blake	$2 \frac{1}{4}$
Noah	$2 \frac{3}{4}$
Joseph	$2 \frac{5}{8}$
Olivia	$1 \frac{1}{2}$
Emma	$1 \frac{1}{8}$
Abby	$1 \frac{1}{2}$



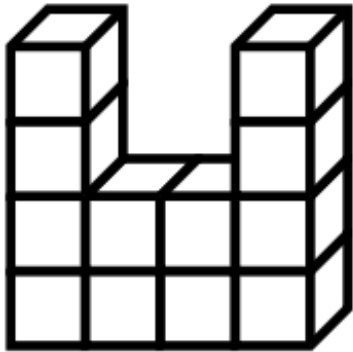
1. How far did girls run altogether?
2. What is the average distance that the girls ran?
3. How far did the entire team run altogether?
4. What is the average distance that the entire team ran?

**Name:**

**5.MD.3**

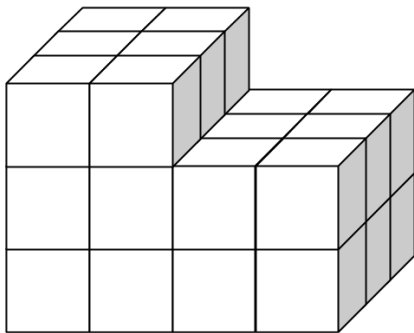
Directions: Solve each problem.

**Find the volume.**



**Use unit cubes to draw a figure that has a volume of 9 unit cubes.**

**Find the volume.**



**Use unit cubes to draw a figure that has a volume of 15 unit cubes.**

**How many unit cubes would you need to make a rectangular prism that is 7 units tall, 2 units wide, and 3 units long?**

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

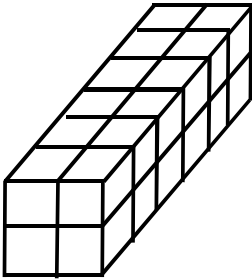
# Measuring Volume

CCSS: 5.MD.3 & 4

I can recognize and measure volume as a cubic unit.

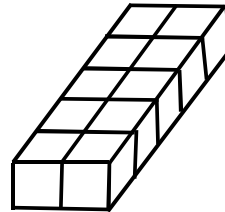
Find the volume of each figure.

1)



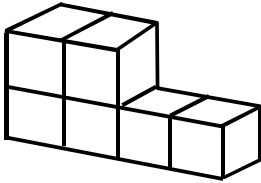
V = \_\_\_\_\_ cubic units

2)



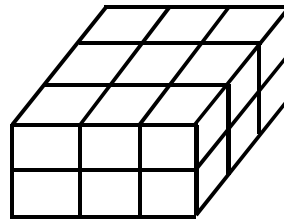
V = \_\_\_\_\_ cubic units

3)



V = \_\_\_\_\_ cubic units

4)



V = \_\_\_\_\_ cubic units



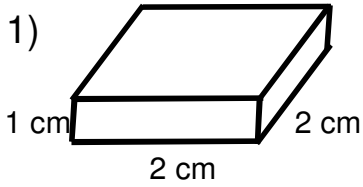
Name: \_\_\_\_\_

# Measuring Volume

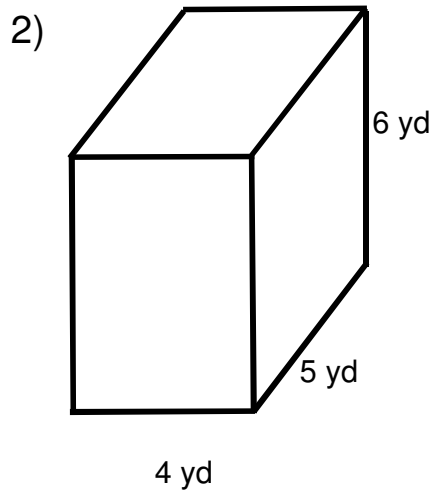
CCSS: 5.MD.3

I can apply the formulas  $V = l \times w \times h$  and  $V = b \times h$  for rectangular prisms to find volumes of right rectangular prisms

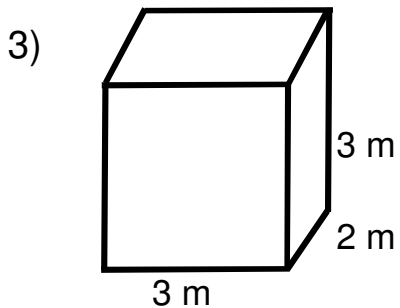
Find the volume of each figure.



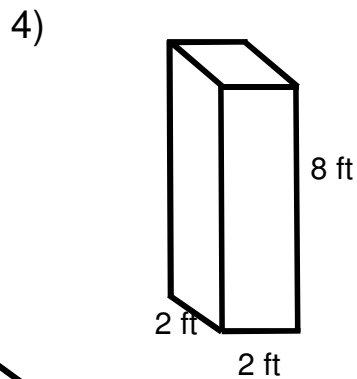
$V =$  \_\_\_\_\_



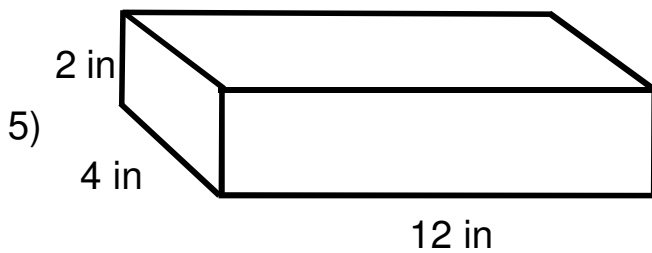
$V =$  \_\_\_\_\_



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



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



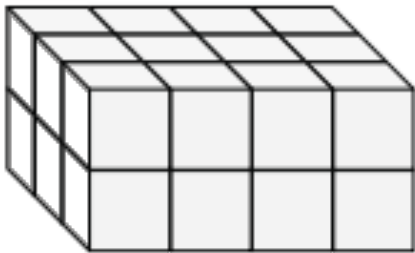
$V =$  \_\_\_\_\_

**Name:**

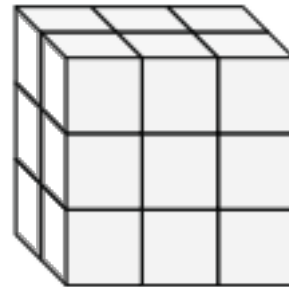
**5.MD.4**

Directions: Solve each problem.

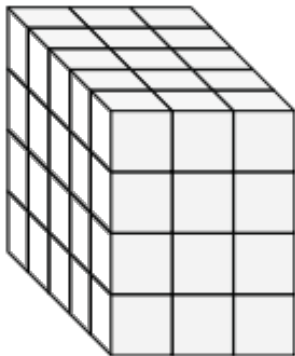
**Find the volume. Each cube has a volume of one cubic unit.**



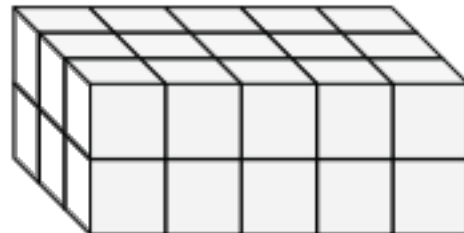
**Find the volume. Each unit equals one centimeter.**



**Find the volume. Each unit equals one inch.**



**Find the volume. Each unit equals one foot.**



**Ethan made a rectangular prism that has a volume of 16 cubic inches. What is one set of possible dimensions for Ethan's rectangular prism?**

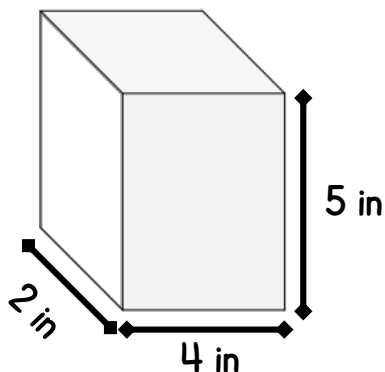
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**Name:**

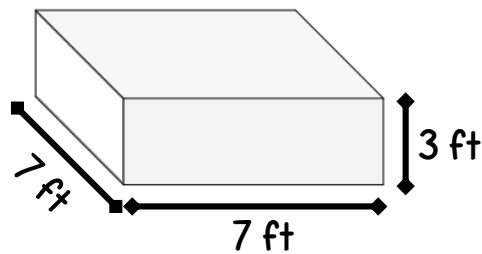
**5.MD.5**

Directions: Solve each problem.

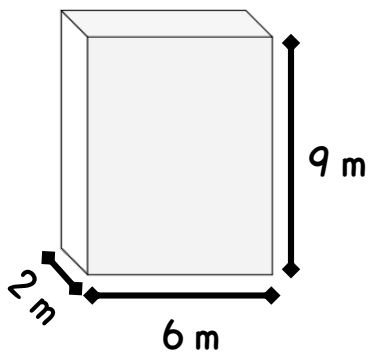
**Find the volume.**



**Find the volume.**



**Find the volume.**



**Cody's notebook is 3 centimeters tall, 10 centimeters wide, and 13 centimeters long. What is the volume of Cody's notebook?**

**Jill's closet is 7.5 feet tall, 5.5 feet wide, and 6 feet long. What is the volume of Jill's closet?**

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

## Volume Word Problems

CCSS: 5.MD.5

I can solve real-world problems involving volume of rectangular prisms.

Solve each problem.

1) Mr. Arthur's cabinet has a height of 6 feet, a width of 4 feet, and a length of 5 feet. What is the volume of Mr. Arthur's cabinet?

2) Kendra's suitcase is 24 inches tall, 16 inches wide, and 12 inches long. What is the volume of Kendra's suitcase?

3) A shipping container is 3 meters tall, 3 meters wide, and 15 meters long. What is the volume of the shipping container?

**Name:**

**MD Test**

**Measurement & Data Test**

**5.MD.1**

2 kilometers = \_\_\_\_\_ meters

7 meters = \_\_\_\_\_ centimeters

4 feet = \_\_\_\_\_ inches

3 miles = \_\_\_\_\_ feet

**5.MD.1**

Roger jumped 6 feet, and Ethan jumped 5 feet. How many total inches did the boys jump altogether?

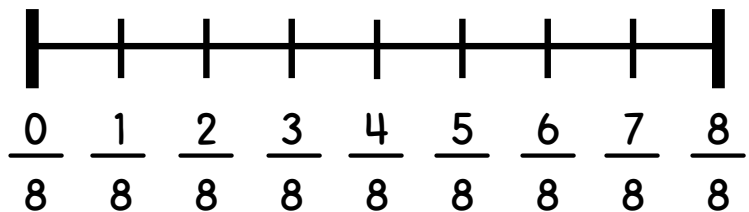
\_\_\_\_\_

**5.MD.2**

**Length of Jen's Grasshoppers in Inches**

$\frac{1}{4}$	$\frac{1}{2}$	$\frac{7}{8}$
$\frac{3}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
$\frac{1}{2}$	1	$\frac{5}{8}$

**Length of Jen's Grasshoppers in Inches**



1. Plot each measurement on the line plot.
2. What is the most common length of grasshopper? \_\_\_\_\_
3. How many grasshoppers measured  $\frac{1}{2}$  inch or less? \_\_\_\_\_
4. If all the grasshoppers measuring  $\frac{1}{4}$  inches were added together, what would the total length be? \_\_\_\_\_
5. What is the total length of all of the grasshoppers? \_\_\_\_\_
6. What is the average length of the grasshoppers? \_\_\_\_\_

(Hint: Divide the total length of all grasshoppers by 9.)

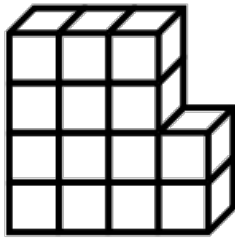
**Name:**

**MD Test**

**Measurement & Data Test**

**5.MD.3**

**Find the volume.**

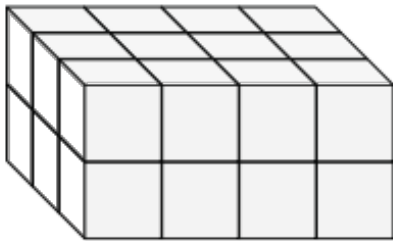


**5.MD.3**

**Use unit cubes to draw a figure that has a volume of 11 unit cubes.**

**5.MD.4**

**Find the volume. Each unit is equal to one cubic inch.**

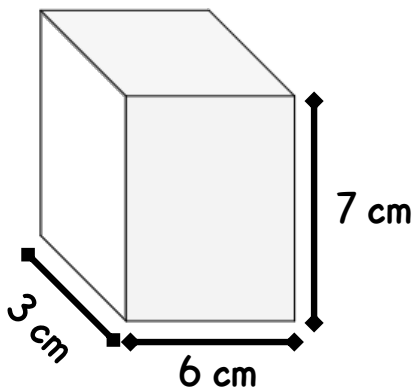


**5.MD.4**

**Abe made a rectangular prism that is 48 cubic inches. What is one set of possible dimensions for Abe's rectangular prism?**

**5.MD.5**

**Find the volume.**



**5.MD.5**

**Alex's room is 7 feet tall, 8 feet wide, and 9 feet long. What is the volume of Alex's room?**