NAME _____

Lesson 1 Length

1 cm	= 10 mm
1 m	= 100 cm
1 m	= 1000 mm
1 km	= 1000 m

4.5 cm = ___?___ mm

4.5 cm = (4.5 × 10) mm

4.5 cm = ___45___ mm

8.1 km = ___?___ m

8.1 km = [(8.1 × 1000)] m

8.1 km = ___8100___ m

Convert the following.

	a	*b*	*c*
1.	8 m = _____ cm	6 km = _____ m	9 m = _____ mm
2.	6.2 cm = _____ mm	2 km = _____ m	14 cm = _____ mm
3.	18 cm = _____ mm	4.5 km = _____ m	5 m = _____ cm
4.	9.5 m = _____ mm	5.25 m = _____ mm	10.5 cm = _____ mm
5.	1.7 cm = _____ mm	4.2 km = _____ m	3.2 km = _____ cm
6.	5.8 cm = _____ mm	4.6 m = _____ cm	22.6 m = _____ cm

CHAPTER 9

Solve each problem.

7. The distance from home plate to first base on a professional baseball diamond is 27 m. Is this more or less than 2800 cm?

It is _____ than 2800 cm.

7.

8. Josh won the 50-m dash in gym class. How many centimetres was this race?

The race was _____ cm.

8.

NAME _____

Lesson 2 Units of Length

This table shows how to change a mesurement from one customary unit of **length** to another.

To change	to millimetres	to centimetres	to metres	to kilometres
millimetres		÷ 10	÷ 1000	÷ 1 000 000
centimetres	× 10		÷ 100	÷ 100 000
metres	× 1000	× 100		÷ 1000
kilometres	× 1 000 000	× 100 000	× 1000	

72 mm = ___?___ cm
72 mm = (72 ÷ 10) cm
72 mm = ___7.2___ cm

7920 m = ___?___ km
7920 m = (7920 ÷ 1000) km
7920 m = ___7.92___ km

Complete the following:

	a	*b*	*c*
1.	54 mm = _____ m	3500 m = _____ km	160 mm = _____ cm
2.	396 mm = _____ m	6.5 cm= _____ mm	3 km = _____ mm
3.	22 000 m = _____ km	18 m = _____ cm	790 mm = _____ m
4.	6100 m = _____ km	1476 mm = _____ cm	17.5 cm = _____ mm
5.	350 mm = _____ cm	10 200 m = _____ km	42 000 cm = _____ km
6.	66 mm = _____ cm	260 cm = _____ m	7400 m = _____ km

Solve.

7. Suzie says that she is 270 cm tall. Mitchell says that he is 2 m tall. Kung says that he is 170 cm tall. One of them gave an unlikely measurement for his or her height. What is the name of the student?

_____ gave an unlikely measurement.

7.

NAME _____

Lesson 3 Capacity

1000 mL = 1 L
1000 L = 1 kL

7 L = ___?___ mL

7 L = (7 × 1000) mL

7 L = ___7000___ mL

1600 L = ___?___ kL

1600 L = (1600 ÷ 1000) kL

1600 L = ___1.6___ kL

Complete the following.

	a	*b*
1.	24 L = _____ kL	5 L = _____ mL
2.	16 mL = _____ L	320 L = _____ kL
3.	180 mL = _____ L	40 mL = _____ L
4.	7.5 kL = _____ L	4.4 mL = _____ L
5.	1500 L = _____ kL	8.5 kL = _____ L
6.	7 L = _____ mL	4800 mL = _____ L
7.	280 mL = _____ L	14 L = _____ mL
8.	3600 L = _____ kL	165 L = _____ kL
9.	9 L = _____ mL	1300 L = _____ L
10.	270 L = _____ kL	350 mL = _____ L

Lesson 3 Problem Solving

Solve each problem.

1. Maya has a juice pitcher that holds 2 L. How many millilitres would this be? How many kilolitres would this be?

This would be _____ mL.

This would be _____ kL.

1.

2. Calvin's fish tank holds 15 kL of water. How many millilitres would this be? How many litres would this be?

This would be _____ mL.

This would be _____ L.

2.

3. Joy is making a pitcher of lemonade. She has a mix that calls for 6 L of water. How many millilitres would this be? How many kilolitres would this be?

This would be _____ mL.

This would be _____ kL.

3.

4. Tyler and D.J. have a swimming pool in their backyard. It holds up to 175 kL of water. How many litres would this be? How many millilitres would this be?

This would be _____ L.

This would be _____ mL.

4.

5. Mrs. Wrigley bought 12 L of gas at the Gas Mart. The gas cost $0.79 per litre. How much money did Mrs. Wrigley spend on gas?

Mrs. Wrigley spent _____ on gas.

5.

NAME _____

Lesson 4 Mass

1 kg = 1000 g 1 tonne (t) = 1000 kg

A feather has a mass of about **1** g.

A dictionary has a mass of about **1** kg.

A compact car weighs about **1** t.

To change	to grams	to kilograms	to tonnes
grams		÷ 1000	÷ 1 000 000
kilograms	× 1000		÷ 1000
tonnes	× 1 000 000	× 1000	

2.5 kg = ___?___ g

2.5 kg = (2.5 × 1000) g

2.5 kg = ___2500___ g

9000 kg = ___?___ t

9000 kg = (9000 ÷ 1000) t

9000 kg = ___9___ t

CHAPTER 9

Complete the following.

	a	*b*
1.	8 kg = _____ g	80 g = _____ kg
2.	0.5 t = _____ kg	16 kg = _____ g
3.	1100 g = _____ kg	5000 kg = _____ t
4.	25 kg = _____ g	130 g = _____ kg
5.	3.5 kg = _____ g	360 g = _____ kg
6.	128 000 g = _____ t	0.25 kg = _____ g
7.	5700 g = _____ kg	10.75 kg = _____ g
8.	5 t = _____ kg	6 kg = _____ g
9.	18 t = _____ kg	59 kg = _____ g
10.	3200 g = _____ kg	13 000 kg = _____ t

Lesson 4 Problem Solving

Solve each problem.

1. Mr. Carlton is a truck driver. When his truck is completely full, it has a mass of 2.25 t. What is the mass of Mr. Carlton's truck in kilograms when it is completely full?

Mr. Carlton's truck has a mass of _____ kg when it is completely full.

1.

2. The blue whale is the largest animal in the world. It has a mass of about 190 t. How many kilograms is this?

A blue whale weighs about _____ kg.

2.

3. Gen's suitcase has a mass of 19 300 g. How many kilograms is this?

Gen's suitcase has a mass of _____ kg.

3.

4. When Annie was born her mass was 3.3 kg. How many grams is this?

Annie had a mass of _____ g when she was born.

4.

5. Mrs. Lee bought a 5.6-kg turkey. How many grams of turkey did she buy?

Mrs. Lee bought _____ g of turkey.

5.

6. A 398 mL can of peaches costs $1.79. A 800 mL can of peaches costs $3.29. Which can of peaches is a better buy? *Hint: Find the cost per kilogram for each can, then compare.*

The _____ can of peaches is a better buy.

6.

NAME _____

Lesson 5 Time

60 seconds (s) = 1 minute (min)
60 min = 1 hour (h)
24 h = 1 day

To change	to seconds	to minutes	to hours	to days
seconds		÷ 60	÷ 3600	÷ 86 400
minutes	× 60		÷ 60	÷ 1440
hours	× 3600	× 60		÷ 24
days	× 86 400	× 1440	× 24	

15 min = ? h

15 min = (15 ÷ 60) h

15 min = 0.25 h

1 min 12 s = ? s

1 min 12 s = (60 + 12) s

1 min 12 s = 72 s

CHAPTER 9

Complete the following.

	a	*b*
1.	5 days = _____ h	2700 s = _____ min
2.	12 h = _____ day	90 min = _____ h
3.	1620 s = _____ min	360 min = _____ h
4.	495 min = _____ s	3 days = _____ min
5.	33 h = _____ s	915 s = _____ min
6.	$6\frac{1}{3}$ h = _____ min	$\frac{1}{3}$ day = _____ s
7.	68 400 s = _____ h	7920 min = _____ days
8.	3.75 h = _____ min	$10\frac{1}{3}$ h = _____ min
9.	6 h 20 min = _____ min	7 days 11 h = _____ h
10.	266 h = ____ days ____ h	583 min = ____ h ____ min

Lesson 5 Problem Solving

Solve each problem.

1. Mike works 16 h each week at his part-time job. How many minutes does Mike work each week?

Mike works _____ min each week.

1.

2. The Jacobson family went camping for 4 days. How many hours did the Jacobsons spend camping?

The Jacobsons spent _____ h camping.

2.

3. Savannah spent 180 min preparing dinner for her family. How many hours did Savannah spend preparing dinner?

Savannah spent _____ h preparing dinner.

3.

4. Drake worked 867 min last week. How many complete hours did Drake work last week?

Drake worked _____ complete hours last week.

4.

5. Derrick started babysitting at 4:20 P.M. He babysat for 270 min. How many hours did Derrick babysit? What time was Derrick finished babysitting?

Derrick babysat _____ h.

Derrick was finished babysitting at _____.

5.

6. Kristen put a roast in the oven at 2:15 P.M. It needs to cook for 190 min. How many hours does the roast need to cook? At what time will the roast be done?

The roast needs to cook for _____ h.

The roast will be done at _____.

6.

NAME _____

CHAPTER 9 PRACTICE TEST
More Metric Measurement

Complete the following:

	a	*b*
1.	7 m = _____ cm	18 mL = _____ L
2.	3.5 L = _____ mL	420 min = _____ h
3.	800 g = _____ kg	6.5 t = _____ kg
4.	120 cm = _____ m	1100 L = _____ kL
5.	7500 L = _____ kL	137 kg = _____ t
6.	6500 kg = _____ t	6 days = _____ h
7.	15 min = _____ s	7 km = _____ m
8.	6.7 m = _____ cm	2700 g = _____ kg
9.	900 mL = _____ L	2700 min = _____ h
10.	2 m = _____ cm	9.9 kg = _____ g
11.	1200 g = _____ kg	155 h = _____ days _____ h

Solve each problem.

12. Wendy's bedroom is 3.7 m by 4.4 m. What are the dimensions of Wendy's bedroom in centimetres?

Wendy's bedroom is _____ cm by _____ cm.

12.

13. A clam chowder recipe calls for 2 L of milk. How many millilitres of milk is this?

The recipe calls for _____ mL of milk.

13.

14. All the students going to Westerville High School had to take an entrance exam. The exam began at 8:15 A.M. and lasted for 210 min. How many hours was the exam? What time was the exam completed?

The exam was _____ h.

The exam was completed at _____.

14.

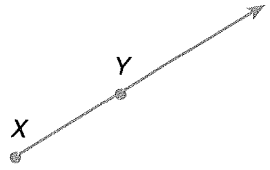
NAME _____

CHAPTER 10 PRETEST
Geometry

Name each figure below as shown.

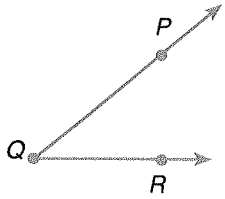
1.

a



$\overrightarrow{XY}$

b



$\angle PQR$ or $\angle RQP$

c

$\overline{ST}$

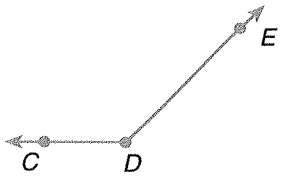
d

$\overleftrightarrow{MN}$

2.

_____

_____



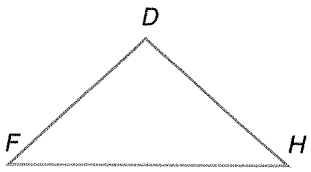
_____

_____

Use a ruler to compare the lengths of the sides of each triangle. Then tell whether it is a *scalene*, an *isosceles*, or an *equilateral* triangle.

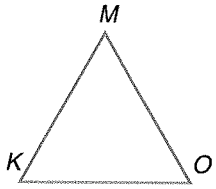
3.

a



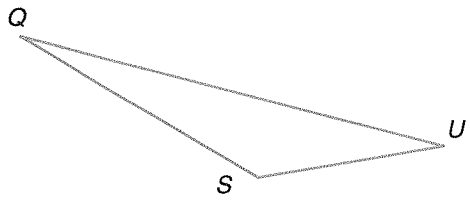
_____ triangle

b



_____ triangle

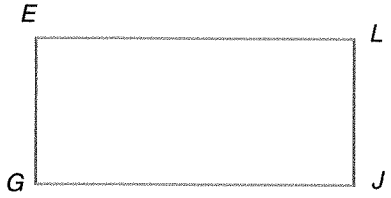
c

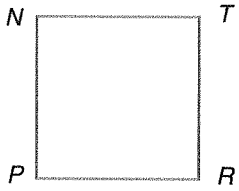


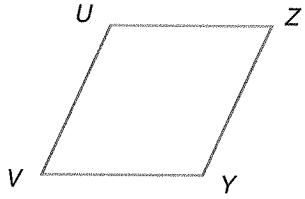
_____ triangle

Write an *R* in each rectangle below. Write an *S* in each square. Write an *X* in each rhombus.

4.

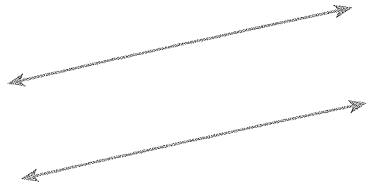




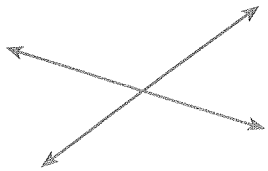


Tell whether the following are *parallel lines* or *intersecting lines*.

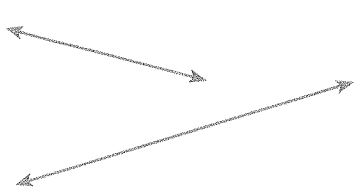
5.



_____



_____



_____