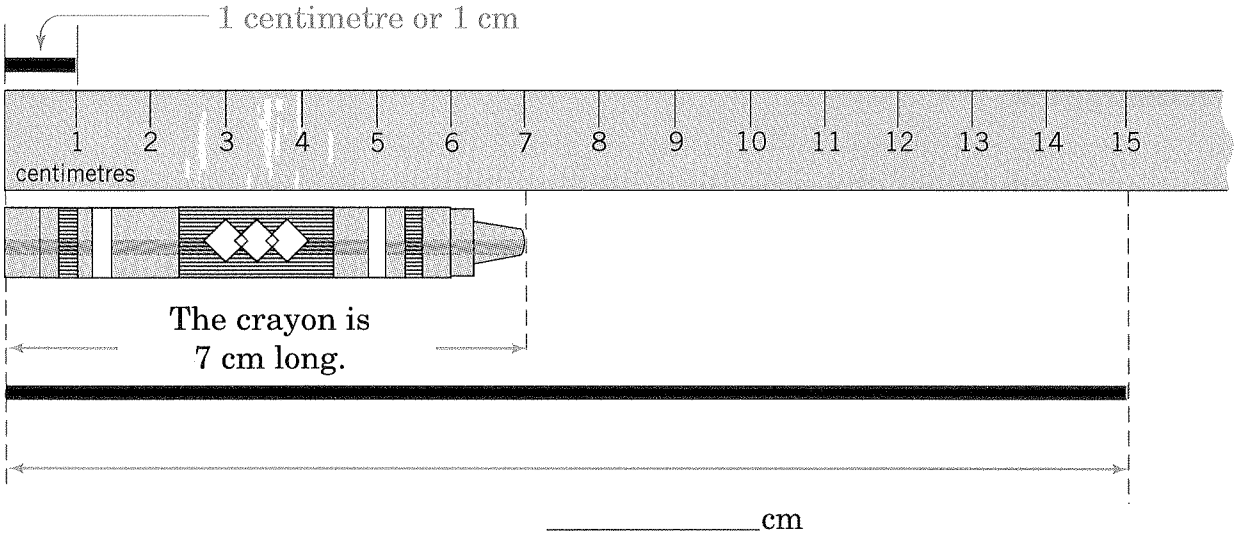
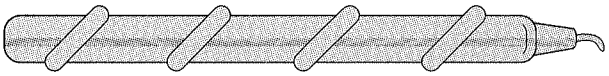
NAME _____

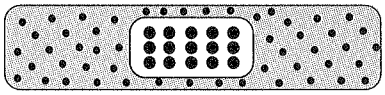
Lesson 1 Measuring (centimetres)

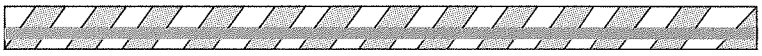


_____cm

Find the length of each object to the nearest centimetre.

1. _____ cm 

2. _____ cm 

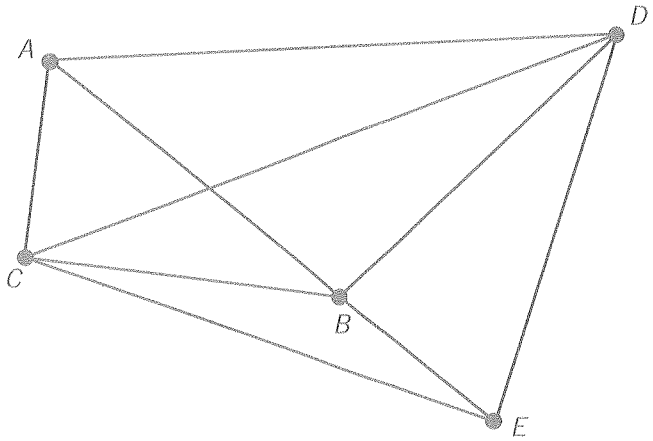
3. _____ cm 

4. _____ cm 

5. _____ cm 

Complete the table to the nearest centimetre.

	From	*Length*
6.	*A* to *B*	_____ cm
7.	*A* to *C*	_____ cm
8.	*B* to *D*	_____ cm
9.	*B* to *E*	_____ cm
10.	*A* to *D*	_____ cm

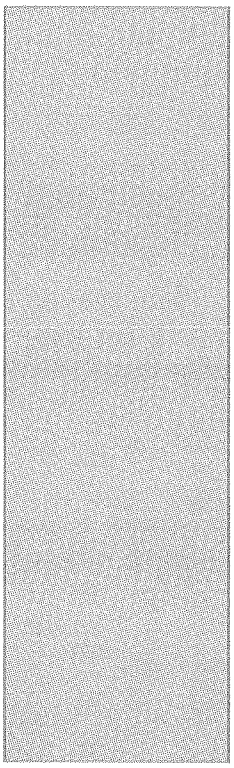


CHAPTER 14

Lesson 1 Problem Solving

Solve each problem.

1. Find the length and the width of this book to the nearest centimetre.



It is _____ cm long.

It is _____ cm wide.

2. Find the length of the blue rectangle.

It is _____ cm long.

3. Find the width of the blue rectangle.

It is _____ cm wide.

4. The rectangle is how much longer than it is wide?

It is _____ cm longer than it is wide.

5. Find the distance around the blue rectangle.

The distance is _____ cm.

6. Draw a line from *R* to *S*, from *S* to *T*, and from *T* to *R*. Then find the length of each side of the triangle.

Side *RS* is _____ cm long.

Side *ST* is _____ cm long.

Side *TR* is _____ cm long.

7. Find the distance around the triangle you drew.

The distance is _____ cm.

NAME _____

Lesson 2 Units of Length

3 m = ? cm
Since 1 m = 100 cm, then

↓	↓
1	100
×3	×3
3	300
↓	↓

3 m = 300 cm

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

5000 m = ? km
Since 1000 m = 1 km, then

$$1000\overline{)\,5000} \quad 5$$

5000 m = 5 km

Complete the following.

	a	*b*
1.	6 m = _____ cm	8 m = _____ cm
2.	3 m = _____ cm	8 m = _____ cm
3.	1 m = _____ mm	2 m = _____ mm
4.	200 cm = _____ m	100 cm = _____ m
5.	5 m = _____ mm	14 m = _____ mm
6.	3 cm = _____ mm	3 m = _____ mm
7.	7 m = _____ cm	9 cm = _____ mm
8.	800 cm = _____ m	11 m = _____ cm
9.	9 m = _____ mm	5 cm = _____ mm
10.	7 cm = _____ mm	300 cm = _____ m
11.	6 m = _____ cm	4000 m = _____ km
12.	400 cm = _____ m	10 m = _____ cm

CHAPTER 14

Lesson 2 Problem Solving

Solve each problem.

1. Teresa bought 2 m of ribbon for a dress. How many centimetres of ribbon did she buy?

Teresa bought _____ cm of ribbon.

1.

2. Myron bought a jump rope that was 1 m long. How long was the jump rope in centimetres?

The jump rope was _____ cm long.

2.

3. Mark has a rope that is 3 m long. How long is the rope in millimetres?

It is _____ mm long.

3.

4. In problem **3,** how long is the rope in centimetres?

It is _____ cm long.

4.

5. Preston has a piece of wire 5 m long. How long is the wire in centimetres?

It is _____ cm long.

5.

6. The distance between two walls is 600 cm. What is this distance in metres?

It is _____ m.

6.

7. Pam's driveway is 500 cm wide. How wide is the driveway in metres?

It is _____ m wide.

7.

8. A fence post is 2 m high. How high is the fence post in centimetres?

It is _____ cm high.

8.

NAME _____

Lesson 3 Units of Capacity

5 L = ? mL

Since 1 L = 1000 mL, then

1 ↓ 1000 ↓

×5 ×5

5 5000

↓ ↓

5 L = 5000 mL

1 kL = 1000 L

1 L = 1000 mL

2000 L = ? kL

Since 1000 L = 1 kL, then

2000 L = _____ kL

5000 mL = ? L

Since 1000 mL = 1 L, then

5000 mL = _____ L

Complete the following.

	a	*b*
1.	7 L = _____ mL	3 kL = _____ L
2.	8000 L = _____ kL	18 000 mL = _____ L
3.	5 kL = _____ L	2 L = _____ mL
4.	24 000 mL = _____ L	36 000 mL = _____ L
5.	2000 L = _____ kL	7 kL = _____ L
6.	8 L = _____ mL	5000 L = _____ kL
7.	8 kL = _____ L	6000 mL = _____ L
8.	7000 L = _____ kL	9 kL = _____ L
9.	7000 mL = _____ L	9 L = _____ mL

CHAPTER 14

Lesson 3 Problem Solving

Solve each problem.

1. Mrs. Collins bought 12 L of milk last week. How many millilitres of milk was this?

It was _____ mL.

1.

2. Greg used 80 kL of water to fill a pool. How many litres was this?

It was _____ L.

2.

3. Mr. Murphy used 24 L of paint to paint his house. He bought paint in 4-L cans. How many cans of paint did he use?

He used _____ cans of paint.

3.

4. Mr. Johnson sold 8000 mL of milk yesterday. How many litres of milk was this?

It was _____ L of milk.

4.

5. Dominic made 7000 mL of lemonade for a party. How many litres of lemonade did he make?

He made _____ L of lemonade.

5.

6. Patrick drank 10 000 mL of milk one week. How many litres of milk did he drink?

He drank _____ L of milk.

6.

7. Ms. Carlow used 4 L of paint. How many millilitres of paint did she use?

She used _____ mL of paint.

7.

8. How many 500-mL glasses could be filled from 8 L of juice?

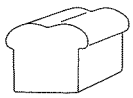
_____ mL glasses could be filled.

8.

NAME _____

Lesson 4 Units of Mass

Kilograms and grams are measures of mass. 1 kilogram (kg) = 1000 grams (g)



A dime has a mass of about 2 g. A loaf of bread has a mass of about 700 g.

Use the diagrams above to answer questions **1–6**.

1. Which is less, a kilogram or a gram? _____

2. Which is more, 1 kg or 100 g? _____

3. Which has a greater mass, 1000 g of lunchmeat or 1 kg of lunchmeat? _____

4. Which is more, 1500 g of cheese or 1 kg of cheese? _____

5. Would a football be more likely to have a mass of 2 g or 2 kg? _____

6. Would a bear be more likely to have a mass of 90 g or 90 kg? _____

CHAPTER 14

Tell whether you would use grams or kilograms to measure each of the following.

	a	*b*	*c*
7.	a paper clip _____	a bicycle _____	a piece of paper _____
8.	a dollar bill _____	a math book _____	a dog _____

Lesson 4 Problem Solving

Solve each problem.

1. A page of notebook paper from Timmy's has a mass of about 2 g. If he has 70 pages, how much is their mass?

Seventy pages have a mass of _____ g.

1.

2. A dog has a mass of 31 kg with his collar on. The collar has a mass of 1 kg. How much is the dog's mass without its collar?

Without its collar, the dog's mass is _____ kg.

2.

3. There are 10 croquet balls in a bag. Each ball has a mass of 1 kg. What is the mass of all 10 balls?

Ten balls have a mass of _____ kg.

3.

4. Alicia has 600 g of cheese. She eats 210 g of the cheese. How much cheese is left?

There are _____ g of cheese left.

4.

5. Each small soap has a mass of 60 g. If Mandy has 12 small soaps, how many grams of soap does she have?

Mandy has _____ g of soap.

5.

6. Tommy had a mass of 39 kg. After being ill for a week, he lost 1 kg. What is Tommy's mass now?

Tommy's mass is _____ kg now.

6.

7. A large bag of corn has a mass of 4 kg. What is the mass in grams?

It is _____ g.

7.

8. Jeffrey's mom bought 200 g of Salami. How many milligrams did she buy?

Jeffrey's mom bought _____ mg of Salami.

8.

NAME _____

Lesson 5 Units of Time

3 weeks = ? days

1 week = 7 days

↓ ×3 → 3

↓ ×3 → 21

3 weeks = 21 days

4 h = ? min

1 h = 60 min

4 h = _____ min

2 days = ? h

1 day = 24 h

2 days = _____ h

Complete the following.

	a	*b*
1.	2 weeks = _____ days	8 weeks = _____ days
2.	5 h = _____ min	7 h = _____ min
3.	6 days = _____ h	4 days = _____ h
4.	6 h = _____ min	9 weeks = _____ days
5.	6 weeks = _____ days	7 days = _____ h
6.	9 days = _____ h	3 h = _____ min
7.	9 h = _____ min	5 weeks = _____ days
8.	8 days = _____ h	7 weeks = _____ days

CHAPTER 14

Lesson 5 Problem Solving

Solve each problem.

1. Brad was at camp for 5 weeks. How many days was he at camp?

There are _____ days in one week.

He was at camp _____ weeks.

He was at camp _____ days.

1.

2. Tanya attends school 6 h every school day. How many minutes does she attend every school day?

There are _____ min in 1 h.

She attends school _____ h.

She attends school _____ min.

2.

3. Holly was in the hospital for 4 days. How many hours was she in the hospital?

There are _____ h in one day.

Holly was in the hospital _____ days.

She was in the hospital _____ h.

3.

4. The Cooke family has lived in their new apartment for 6 weeks. How many days have they lived in their new apartment?

They have lived there _____ days.

4.

5. Mackenzie was away from home for 1 week. How many hours was she away from home?

Mackenzie was away from home _____ h.

5.

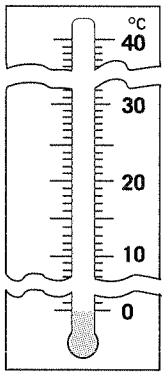
NAME _____

Lesson 6 Temperature

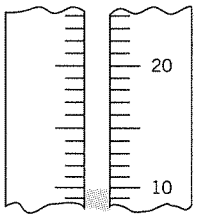
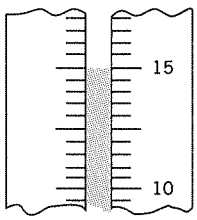
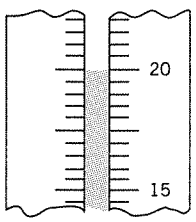
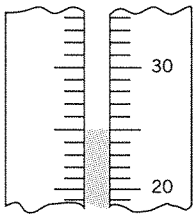
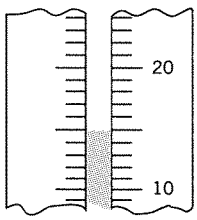
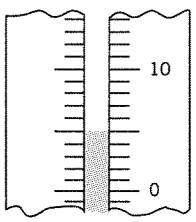
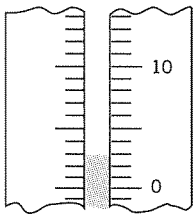
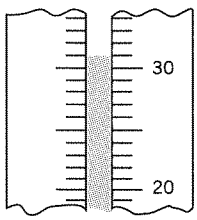
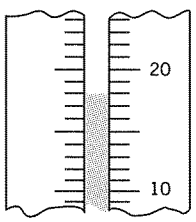
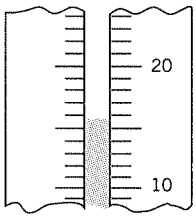
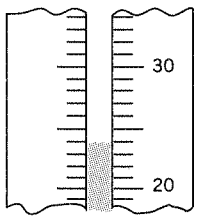
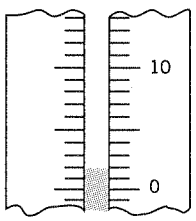
A thermometer measures the temperature in degrees Celsius.

The temperature reading on this thermometer is 0 degrees **Celsius.**

This can be written as 0°C.



What is the temperature reading on each thermometer?

	a	*b*	*c*
1.	 _____ °C	 _____ °C	 _____ °C
2.	 _____ °C	 _____ °C	 _____ °C
3.	 _____ °C	 _____ °C	 _____ °C
4.	 _____ °C	 _____ °C	 _____ °C

CHAPTER 14

Lesson 6 Problem Solving

Solve each problem.

1. Water freezes at 0°C and boils at 100°C. What is the difference between these two temperatures?

The difference is _____ degrees.

1.

2. When Lin went to school in the morning, the temperature was 13°C. By the end of the school day the temperature had risen 11 degrees. What was the temperature at the end of the school day?

It was _____ °C at the end of the school day.

2.

3. While Kwan was ill, his temperature was 39°C. By the next morning his temperature was normal, 37°C. How much did his temperature go down?

His temperature went down _____ degrees.

3.

4. Rita is going swimming on a hot summer day. The temperature outside is 32°C. The water temperature is 25°C. What is the difference between the air temperature and the water temperature?

The difference is _____ degrees.

4.

5. The temperature outside was 30°C. A cold front blew through the area and the temperature dropped 17 degrees. What is the temperature now?

The temperature is _____ °C.

5.

6. Tat's refrigerator was set at 7°C. The electricity went off and the temperature rose 8 degrees. What is the temperature in the refrigerator now?

The temperature is _____ °C.

6.

7. Inside the air-conditioned house the temperature is 23°C. The temperature outside is 9 degrees warmer. What is the temperature outside?

The temperature outside is _____ °C.

7.

NAME _____

Lesson 7 Problem Solving

Solve each problem.

1. A piece of wire is 2 m long. How long is the wire in cm?

The wire is _____ cm long.

2. If you use 140 cm of the wire in problem **1**, how many centimetres are left?

There will be _____ cm left.

3. A football field is exactly 100 m long. How many centimetres is that?

A football field is _____ cm long.

4. How many millimetres long is a football field?

A football field is _____ mm long.

5. A container holds 8 L of liquid. How many millilitres does that container hold?

That container holds _____ mL.

6. A telethon lasted 2 days. How many hours did the telethon last?

The telethon lasted _____ h.

7. A television mini-series lasted 6 h. How many minutes did the mini-series last?

The mini-series lasted _____ min.

8. The Mohrs spent 3 weeks on their vacation trip. How many days was that?

The vacation trip took _____ days.

1.	**2.**
3.	**4.**
5.	**6.**
7.	**8.**

NAME _____

Lesson 8 Measurement Review

Find each length to the nearest centimetre.

1. _____ cm

2. _____ cm

3. _____ cm

4. _____ cm

Complete the following.

	a	*b*
5.	4 m = _____ cm	4000 mL = _____ L
6.	6 L = _____ mL	400 cm = _____ m
7.	8 kL = _____ L	9000 mm = _____ m
8.	9 m = _____ mm	9000 mL = _____ L
9.	6 weeks = _____ days	8 h = _____ min
10.	3 days = _____ h	8 weeks = _____ days

Solve each problem.

11. Kaylee has a rope 8 m long. How long is the rope in centimetres?

It is _____ cm long.

11.

12. Craig had 1 L of gasoline. He used 450 mL for the lawn mower. How many millilitres did he have left?

He had _____ mL left.

12.

13. James is 2 m tall. What is his height in centimetres?

His height is _____ cm.

13.

NAME _____

CHAPTER 14 PRACTICE TEST
More Metric Measurement

Find the length to the nearest centimetre.

1. _____ cm

2. _____ cm

3. _____ cm

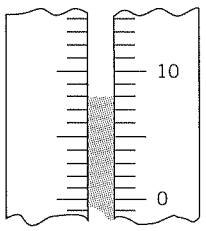
Complete the following.

	a	*b*
4.	5 cm = _____ mm	3000 mL = _____ L
5.	2000 L = _____ kL	200 cm = _____ m
6.	7 L = _____ mL	3 kg = _____ g
7.	8 km = _____ m	8000 L = _____ kL
8.	5 weeks = _____ days	9 h = _____ min
9.	4 days = _____ h	

What is the temperature reading on each thermometer?

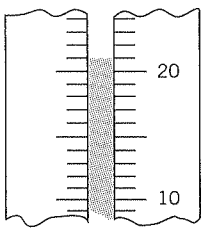
10.

a



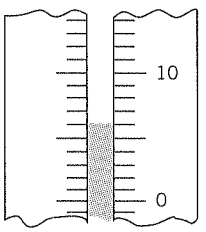
_____ °C

b



_____ °C

c



_____ °C

Solve each problem.

11. Carmen had 1 L of gasoline. She used 500 mL for the lawn mower. How many millilitres did she have left?

She had _____ mL left. **11.**

12. Mr. Carpenter's mailbox is 1 m high. How high is the mailbox in centimetres?

It is _____ cm high. **12.**

CHAPTER 14

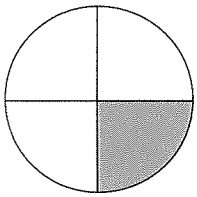
NAME _____

CHAPTER 15 PRETEST
Fractions

What fraction of the figure is shaded?

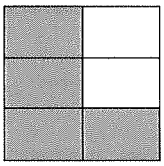
1.

a



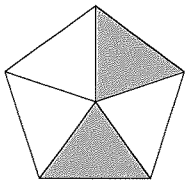
_____

b



_____

c

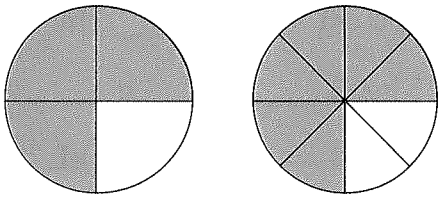


_____

Write an equivalent fraction.

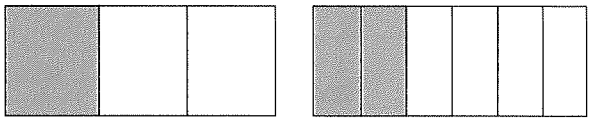
2.

a



$\frac{3}{4} = \frac{\quad}{8}$

b

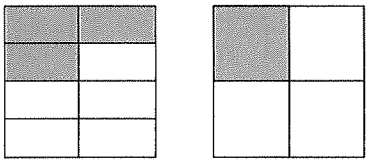


$\frac{1}{3} = \frac{\quad}{}$

Compare the fractions. Use >, <, or =.

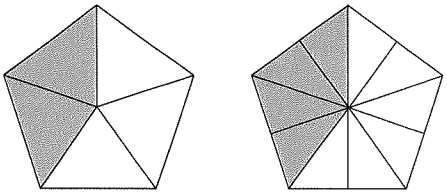
3.

a



$\frac{3}{8} \bigcirc \frac{1}{4}$

b

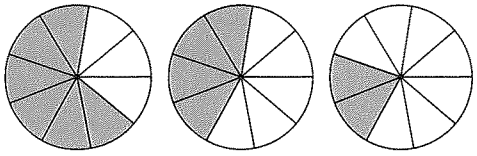


$\frac{2}{5} \bigcirc \frac{4}{10}$

Order from least to greatest.

4.

a



$\frac{6}{9}$ $\frac{4}{9}$ $\frac{2}{9}$

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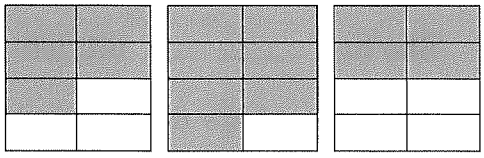
b



$\frac{5}{8}$ $\frac{7}{8}$ $\frac{4}{8}$

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