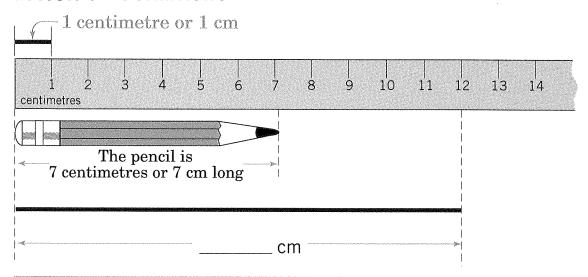
Lesson 1 Centimetre



Estimate how long each object is in centimetres.

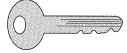
Then find the length of each object to the nearest centimetre.

1. Estimate: ____ cm



Length: ____ cm

2. Estimate:_____ cm



Length: _____ cm

3. Estimate:_____ cm



Length: ____ cm

4. Estimate: cm



Length: cm

5. Estimate: cm



Length: ____ cm

6. Estimate:_____ cm

Length: ____ cm

Lesson 1 Problem Solving

Solve each problem. 1. Find the length of this book to the nearest 1. 2.centimetre. It is _____ cm long. 2. Find the width of this book to the nearest centimetre. It is _____ cm wide. **3.** This book is how much longer than it is wide? 3. 4. It is _____ cm longer than it is wide. 4. How many centimetres is it across a nickel? It is cm across. 5. How many centimetres would it be across eight 5. 6. nickels laid in a row? It would be _____ cm across. **6.** Find the length of your shoe to the nearest centimetre. It is _____ cm long. Use a tape measure or string to find the following to the nearest centimetre. 7. the distance around your wrist 8. the distance around your waist 9. the distance

cm

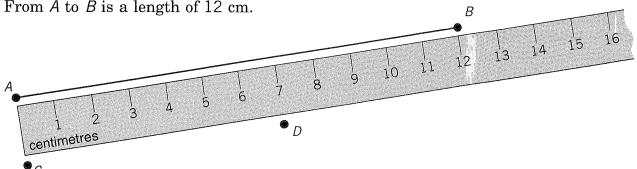
10. the distance

around your head

around your ankle

Lesson 2 Measuring (centimetres)

From A to B is a length of 12 cm.



Draw a line from C to D. It is _____ cm long.

1. Draw a line from *E* to *F*.

The length is ____ cm.

2. Draw a line from *G* to *H*.

The length is _____ cm.

3. Draw a line from J to K.

The length is _____ cm.

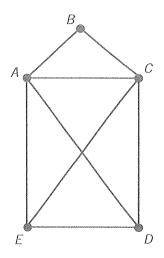
Complete the table.

	From	Length
4.	A to B	cm
5.	B to C	cm
6.	C to D	cm
7.	D to E	cm
8.	E to A	cm
9.	A to D	cm
10.	C to E	cm





H



Lesson 2 Problem Solving

Solve each problem.

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

It is cm long.

It is cm wide.

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

It is _____ cm longer than it is wide.

3. Find the distance around the rectangle.

The distance is _____ cm.

4. Draw lines from A to B, from B to C, and from C to A. Then find the length of each side of the triangle you just drew.

A •

 $C \bullet$

Side AB is _____ cm long.

Side BC is _____ cm long.

Side CA is cm long.

5. Side *CA* is how much longer than side *BC*?

Side CA is _____ cm longer.

6. Find the distance around the triangle.

The distance is _____ cm.

7. One side of a square is 8 cm long. What is the distance around the square? (All four sides of a square are the same length.)

The distance is _____ cm.

B

Lesson 3 Litre

A large bottle of pop contains 2 litres (L).

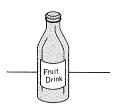


Answer Yes or No.

- You can measure the amount of water in an aquarium using litres.
- You can measure the amount of medicine in a spoon using litres. 2.

How many litres would each container hold? Underline the best answer.

3.

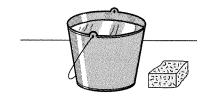


1 L

8L

45 L

5.



1 L

10 L

50 L

7.



4 L

16 L

80 L

4.

6.

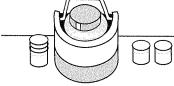


1 L

9 L

25 L



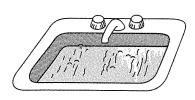


8L

28 L

64 L





1 L

4 L

20 L

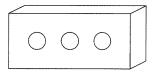
Lesson 3 Problem Solving

So	lve each problem.		
1.	The tank in Mr. Sumner's truck can hold 85 L. It took 37 L of gasoline to fill the tank. How many litres were in the tank before it was filled?	1.	2.
	L were in the tank.		
2.	Mr. Sumner can drive 5 km on each litre of gasoline. How far could he drive on a full tank (85 L) of gasoline?		
	He could drive km on a full tank.		,
3.	Ms. Gray uses 17 L of gasoline to drive to and from work each day. How many litres does she use in 6 days?	3.	4.
	She uses L in 6 days.		
4.	Evan bought 12 L of paint. The paint was in three cans of the same size. How many litres of paint were in each can?		
	L of paint were in each can.		
5.	Chelsea used 56 L of water to fill eight empty fishbowls. The same amount of water was in each bowl. How many litres were in each fishbowl?	5.	
	L of water were in each fishbowl.		
6.	A cafeteria serves 95 L of milk each day. How much milk is served in 5 days?	6.	7.
	L of milk is served in 5 days.		
7.	Heidi uses 2 L of gasoline to mow a lawn. She mowed the lawn 16 times this year. How much gasoline did she use to mow the lawn this year?	·	
	Heidi used L this year.		

Lesson 4 Mass

Ø





A grain of sand has a mass of about 1 milligram.

A paper clip has a mass of about 1 gram.

A brick has a mass of about 1 kilogram.

$$1 \text{ gram} = 1000 \text{ milligrams}$$
 $1 \text{ g} = 1000 \text{ mg}$

$$1000 \text{ grams} = 1 \text{ kilogram}$$

 $1000 \text{ g} = 1 \text{ kg}$

Use the diagrams above to answer questions 1–5.

1. What is the mass in grams of 10 paper clips?

The mass is _____ g.

2. What is the mass in grams of 1000 paper clips?

What is the mass in kilograms?

The mass is _____ g or ____ kg.

3. What is the mass in kilograms of 20 bricks?

The mass is _____ kg.

4. What is the mass in milligrams of 100 grains of sand?

The mass is _____ mg.

5. Find the mass in milligrams of 2000 grains of sand. What is the mass in grams?

The mass is _____ mg or ____ g.

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

 α

b

c

6. a person _____

a crayon _____

a crumb of bread _____

7. a granule of sugar_____

a car _____

a cherry _____

Lesson 4 Problem Solving

1.	A chocolate bar has 25 g of fat. If Randy eats four chocolate bars, how many grams of fat has he eaten?	1.
	Randy will eat g of fat.	
2.	Jose's vitamin tablets have a mass of 50 mg each. If there are five left in the bottle, how many milligrams is their mass?	2.
	Five tablets have a mass of mg.	
3.	Bob's mass was 50 kg at the beginning of the school year. He gained 4 kg by the end of the year. What was his mass at the end of the year?	3.
	Bob's mass was kg at the end of the year.	
4.	Tamisha had a pack of markers. Each marker had a mass of 32 g. There were six markers in the pack. How much was their mass in all?	4.
	The six markers had a mass of g.	
5.	Kelly's dog's mass is 12 kg. Julie's dog's mass is 10 kg. What is their dogs' mass altogether?	5.
	Altogether, their dogs' mass is kg.	
6.	Carlos had a bag of cookies in his lunch. Each cookie had a mass of 20 g. If there are four cookies in his bag, how much is their mass in all?	6.
	The cookies have a mass of g in all.	
7.	Kristin bought three computers for her house. They each had a mass of 35 kg. What is the total mass of the three computers?	7.
	kg is the total mass.	

CHAPTER 13 PRACTICE TEST

Metric Measurement

Find each length to the nearest centimetre.

1. cm

2. cm

Draw a line from *A* to *B*, from *B* to *C*, and from *C* to *A*. Then find each length to the nearest centimetre.

Bo

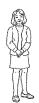
- **3.** From *A* to *B* is _____ cm.
- **4.** From B to C is cm.
- **5.** From *C* to *A* is _____ cm.

As

Would you use milligrams, grams, or kilograms to measure the mass of each of the following? Circle the best answer.

•C

6.



milligrams

grams

kilograms



milligrams

grams

kilograms

milligrams grams kilograms

Solve each problem.

7. A car can go 8 km on 1 L of gasoline. How far could | 7. the car go on 40 L?

The car could go km.

8. Joey had a pack of crayons in his desk. Each crayon had a mass of 5 g. If he had six crayons in his pack, how much was the crayons' mass in all? The crayons had a mass of g in all.

8.

9. Jenny drinks 2 L of water each day. How much water does she drink in 7 days?

Jenny drinks _____ L of water in 7 days.

CHAPTER 14 PRETEST

More Metric Measurement

Find the length of each object to the nearest centimetre.

1. _____ cm



2. _____ cm

3. ____ cm

Complete the following.

a

b

4.
$$1 L = mL$$

$$2L = mL$$

5.
$$8000 \,\mathrm{mL} = \mathrm{L}$$

$$6000 \,\mathrm{mL} =$$
 L

6.
$$1 \text{ kL} =$$
_____ L

$$3 \text{ kL} =$$
_____L

7.
$$8000 L = ___ kL$$

$$20\ 000\ L = kL$$

8.
$$1 \text{ m} = \underline{} \text{ cm}$$

$$3 m = \underline{\qquad} cm$$

9.
$$1 \text{ km} = m$$

$$1 \, \mathrm{km} = \underline{\hspace{1cm}} \mathrm{m}$$

$$1 h = \underline{\qquad} min$$

$$6 h = \underline{\qquad} min$$

12.
$$1 \text{ day} = h$$

$$2 \text{ days} = \underline{\hspace{1cm}} h$$

Solve.

13. Annette bought a board that is 3 m long. What is the length of the board in centimetres?

13.

The board is _____ cm long.