

CHAPTER
11**Metric Length, Mass,
and Volume****Lesson 11.1 Meters and Centimeters****Write in centimeters.**

1. 6 m 80 cm = _____ cm
2. 5 m 43 cm = _____ cm
3. 8 m 6 cm = _____ cm
4. 12 m 35 cm = _____ cm
5. 15 m 7 cm = _____ cm
6. 28 m 12 cm = _____ cm

$$1 \text{ m} = 100 \text{ cm}$$

**Write in meters and centimeters.**

7. 185 cm = _____ m _____ cm
8. 312 cm = _____ m _____ cm
9. 708 cm = _____ m _____ cm
10. 936 cm = _____ m _____ cm
11. 1,203 cm = _____ m _____ cm

Name: _____

Date: _____

**Read the description. Write the name and height of each student.
Then fill in the blanks.**

12.

Mary: 1 meter 52 centimeters

Lucy: 137 centimeters

Eric: 143 centimeters

Ken: 1 meter 60 centimeters



Lucy _____ _____ _____

137 cm _____ cm _____ cm _____ cm

13. _____ is the tallest.

14. _____ is the shortest.

15. Mary is _____ centimeters taller than Eric.

Name: _____

Date: _____

Lesson 11.2 Kilometers and Meters

Write in meters.

1. $8 \text{ km} = \underline{\hspace{2cm}} \text{ m}$

2. $4 \text{ km } 350 \text{ m} = \underline{\hspace{2cm}} \text{ m}$

3. $7 \text{ km } 900 \text{ m} = \underline{\hspace{2cm}} \text{ m}$

4. $5 \text{ km } 10 \text{ m} = \underline{\hspace{2cm}} \text{ m}$

5. $2 \text{ km } 95 \text{ m} = \underline{\hspace{2cm}} \text{ m}$

6. $7 \text{ km } 9 \text{ m} = \underline{\hspace{2cm}} \text{ m}$

7. $3 \text{ km } 5 \text{ m} = \underline{\hspace{2cm}} \text{ m}$

$1 \text{ km} = 1,000 \text{ m}$



Write in kilometers and meters.

8. $5,000 \text{ m} = \underline{\hspace{2cm}} \text{ km}$

9. $6,340 \text{ m} = \underline{\hspace{2cm}} \text{ km } \underline{\hspace{2cm}} \text{ m}$

10. $1,896 \text{ m} = \underline{\hspace{2cm}} \text{ km } \underline{\hspace{2cm}} \text{ m}$

11. $2,065 \text{ m} = \underline{\hspace{2cm}} \text{ km } \underline{\hspace{2cm}} \text{ m}$

12. $7,080 \text{ m} = \underline{\hspace{2cm}} \text{ km } \underline{\hspace{2cm}} \text{ m}$

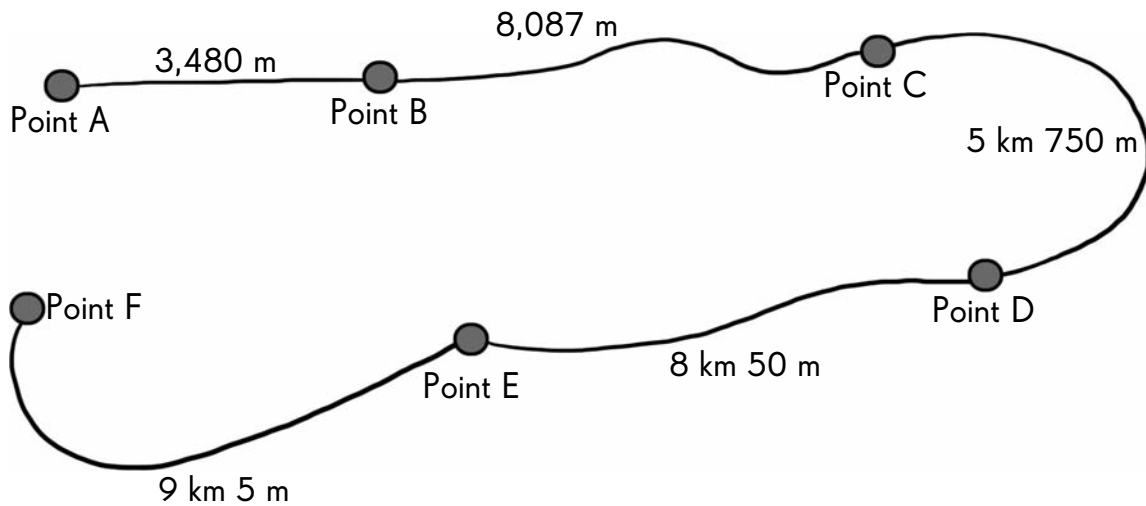
13. $4,002 \text{ m} = \underline{\hspace{2cm}} \text{ km } \underline{\hspace{2cm}} \text{ m}$

14. $2,008 \text{ m} = \underline{\hspace{2cm}} \text{ km } \underline{\hspace{2cm}} \text{ m}$

Name: _____

Date: _____

Look at the map. Then fill in the blanks.



15. Point A is _____ kilometers _____ meters from Point B.
16. Point B is _____ kilometers _____ meters from Point C.
17. Point C is _____ meters from Point D.
18. Point D is _____ meters from Point E.
19. Point E is _____ meters from Point F.

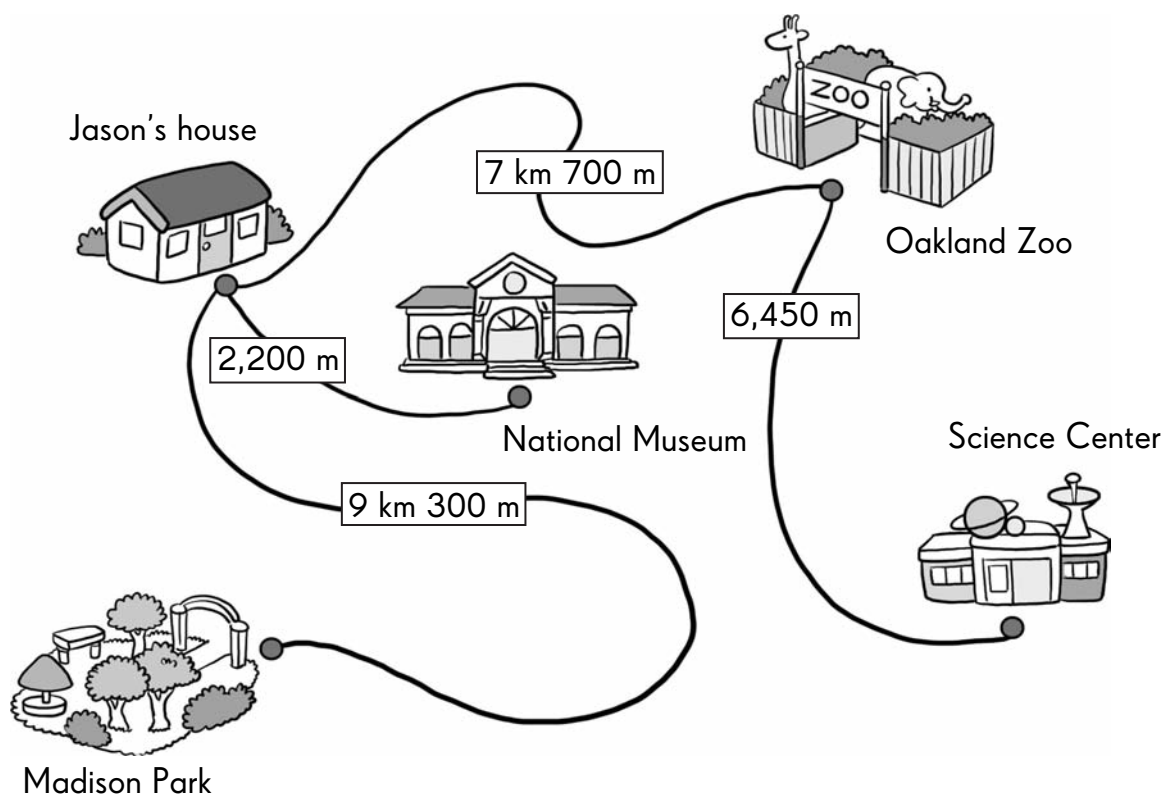
1 km = 1,000 m



Name: _____

Date: _____

Look at the map. Then fill in the blanks.



- 20.** The distance between Jason's house and Madison Park is _____ meters.
- 21.** Jason travels _____ meters from his house to Oakland Zoo.
- 22.** The distance between Oakland Zoo and the Science Center is _____ kilometers _____ meters.
- 23.** Jason's house is _____ kilometers _____ meters away from the National Museum.

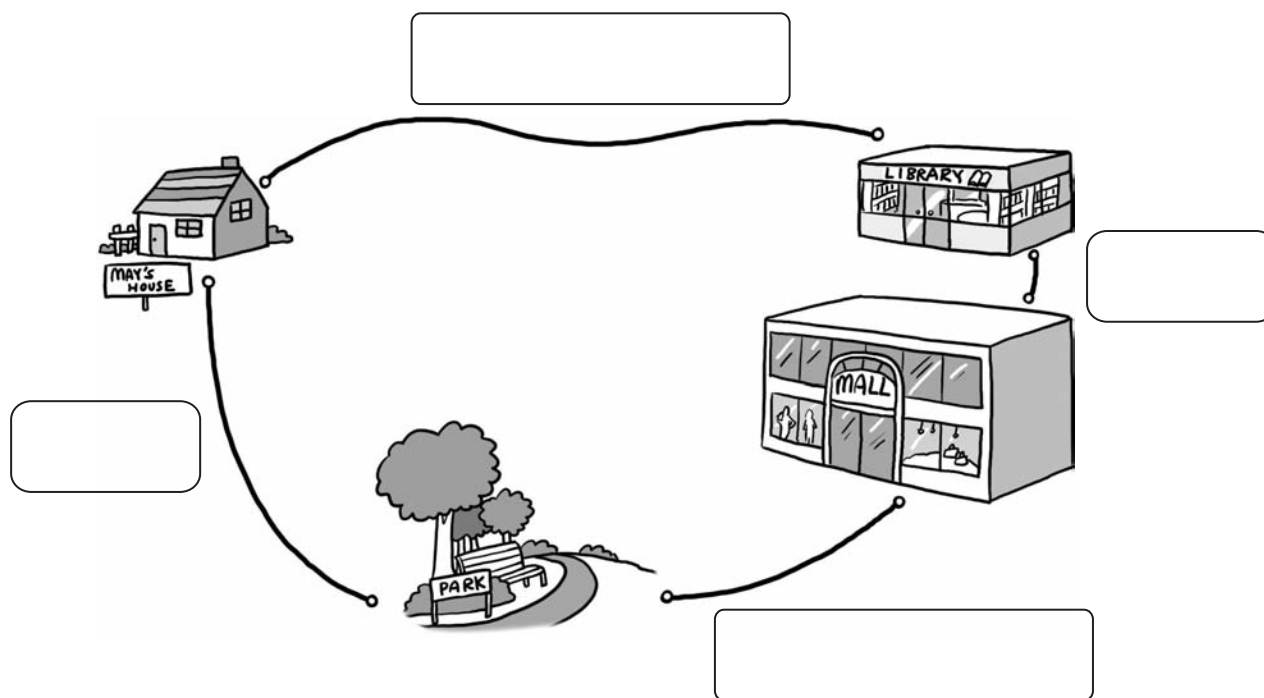
Name: _____

Date: _____

Read the story. Complete the map. Then check (✓) the correct statement.

The library is 2 kilometers 350 meters from May's house. She cycles to the library every Saturday morning. Then, she goes to the mall to have lunch. The mall is 600 meters from the library.

After lunch, May cycles to a park that is 1 kilometer 65 meters from the mall. In the evening, she cycles 1,800 meters home from the park.



24. The library is nearer to May's house than the park is.

☐

25. The distance from the park to May's house is farther than the distance from the park to the mall.

☐

26. The mall is nearer to the park than to the library.

☐

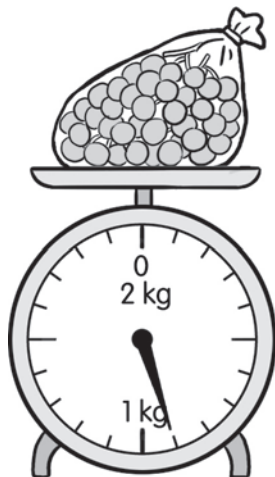
Name: _____

Date: _____

Lesson 11.3 Kilograms and Grams

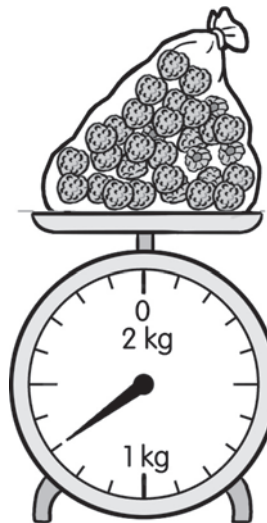
Read the scales. Write the mass.

1.



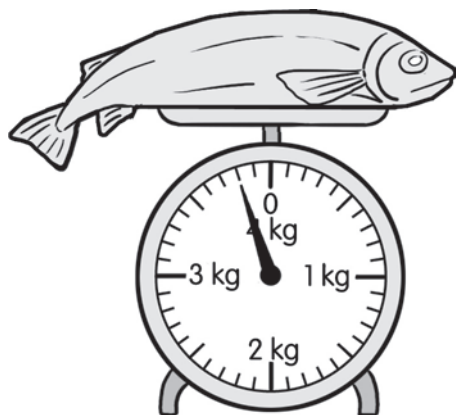
_____ g

2.



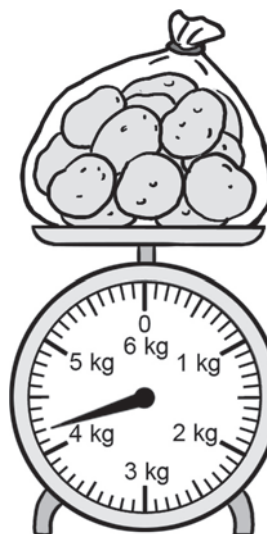
_____ kg _____ g

3.



_____ kg _____ g

4.



_____ kg _____ g

Name: _____

Date: _____

Write in grams.

5. 6 kg = _____ g 6. 3 kg 438 g = _____ g
7. 8 kg 260 g = _____ g 8. 2 kg 370 g = _____ g
9. 4 kg 50 g = _____ g 10. 5 kg 90 g = _____ g
11. 7 kg 5 g = _____ g 12. 9 kg 8 g = _____ g

Write in kilograms and grams.

13. 3,000 g = _____ kg
14. 2,850 g = _____ kg _____ g
15. 5,643 g = _____ kg _____ g
16. 1,865 g = _____ kg _____ g
17. 3,080 g = _____ kg _____ g
18. 7,055 g = _____ kg _____ g
19. 8,005 g = _____ kg _____ g
20. 9,018 g = _____ kg _____ g

1 kg = 1,000 g



Name: _____

Date: _____

Look at the pictures. The mass of each item is listed on its packaging. Then complete the table and fill in the blanks for Exercises 21 to 25.



cheese



baked beans



rice



peaches



detergent



veggie chips



cereal



milk formula



crabs



cherries

21.

Less than 500 g	More than 500 g but less than 1 kg	From 1 kg to 1 kg 500 g	More than 1 kg 500 g
cheese			

Name: _____

Date: _____

Use the table on the previous page to complete the statements.

22. The _____ is the lightest.

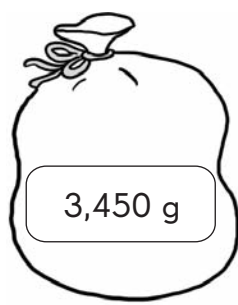
23. The _____ is the heaviest.

24. _____ items are lighter than a jar of cherries.

25. _____ items are heavier than a bag of crabs.

Complete.

26. Order the masses from heaviest to lightest.



heaviest

Name: _____

Date: _____

Lesson 11.4 Liters and Milliliters

Find the volume of water in each measuring cup.

1.



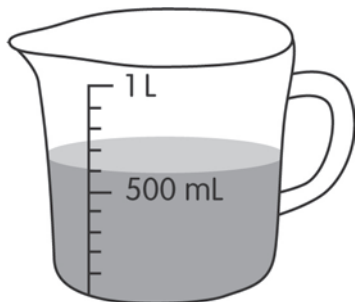
_____ mL

2.



_____ mL

3.



_____ mL

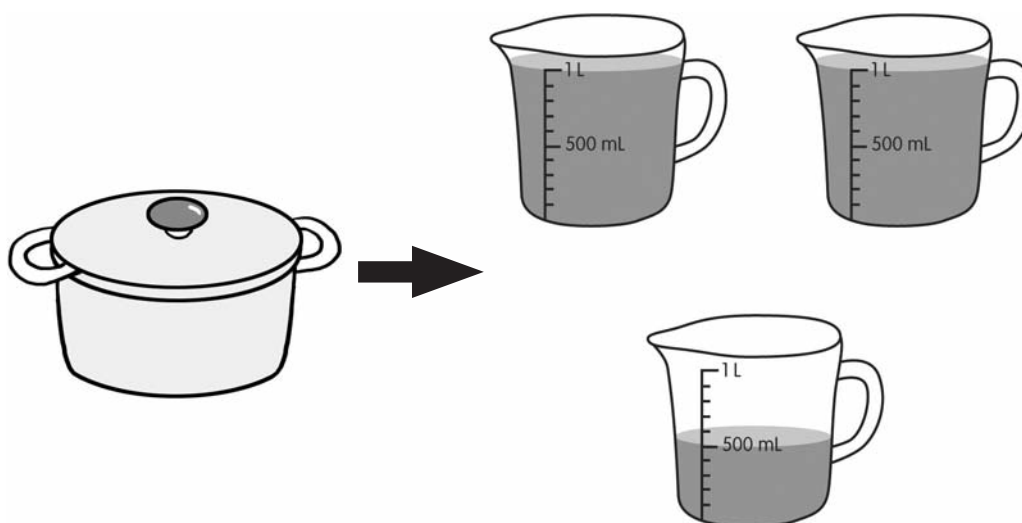
4.



_____ mL

Find the capacity of each container.

5.

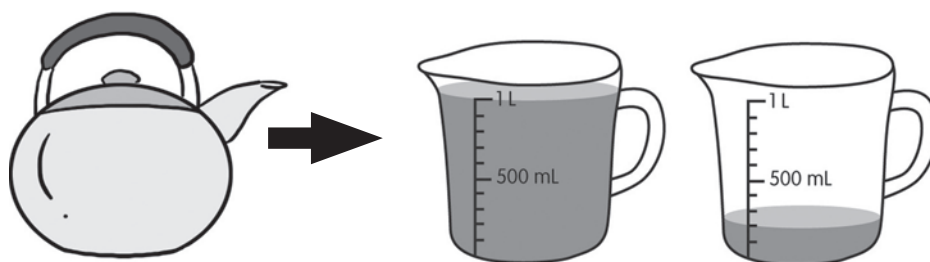


The capacity of the pot is _____ liters _____ milliliters.

Name: _____

Date: _____

6.



The capacity of the kettle is _____ liter _____ milliliters.

Write in milliliters.

7. $3\text{ L } 250\text{ mL} = \underline{\hspace{2cm}}\text{ mL}$

8. $4\text{ L } 600\text{ mL} = \underline{\hspace{2cm}}\text{ mL}$

9. $2\text{ L } 80\text{ mL} = \underline{\hspace{2cm}}\text{ mL}$

10. $6\text{ L } 70\text{ mL} = \underline{\hspace{2cm}}\text{ mL}$

11. $1\text{ L } 9\text{ mL} = \underline{\hspace{2cm}}\text{ mL}$

12. $5\text{ L } 6\text{ mL} = \underline{\hspace{2cm}}\text{ mL}$

$1\text{ L} = 1,000\text{ mL}$



Write in liters and milliliters.

13. $1,800\text{ mL} = \underline{\hspace{2cm}}\text{ L } \underline{\hspace{2cm}}\text{ mL}$

14. $2,130\text{ mL} = \underline{\hspace{2cm}}\text{ L } \underline{\hspace{2cm}}\text{ mL}$

15. $3,550\text{ mL} = \underline{\hspace{2cm}}\text{ L } \underline{\hspace{2cm}}\text{ mL}$

16. $4,090\text{ mL} = \underline{\hspace{2cm}}\text{ L } \underline{\hspace{2cm}}\text{ mL}$

17. $6,000\text{ mL} = \underline{\hspace{2cm}}\text{ L } \underline{\hspace{2cm}}\text{ mL}$

18. $5,008\text{ mL} = \underline{\hspace{2cm}}\text{ L } \underline{\hspace{2cm}}\text{ mL}$

Name: _____

Date: _____

Use the clues to answer Exercises 19 and 20.

CLUES

Container F has the largest capacity.

Container E has the smallest capacity.

Container A has a larger capacity than Container C.

Container B has a smaller capacity than Container D but a larger capacity than Container A.

Match.

19.



A

750 mL

3 L



B



C

1 L 500 mL

150 mL



D



E

2 L 500 mL

500 mL



F

Name: _____

Date: _____

Order the containers by capacity from smallest to largest.

20. smallest E

largest

Fill in the blanks with *more than*, *less than*, or *equal to*.

21. 2 L 360 mL is _____ 2,360 mL.

22. 4 L 400 mL is _____ 4,040 mL.

23. 7 L 362 mL is _____ 7,632 mL.

24. 8 L 5 mL is _____ 8,050 mL.

25. 9,389 mL is _____ 9 L 389 mL.

26. 10 L 580 mL is _____ 10 L 508 mL.

Name: _____

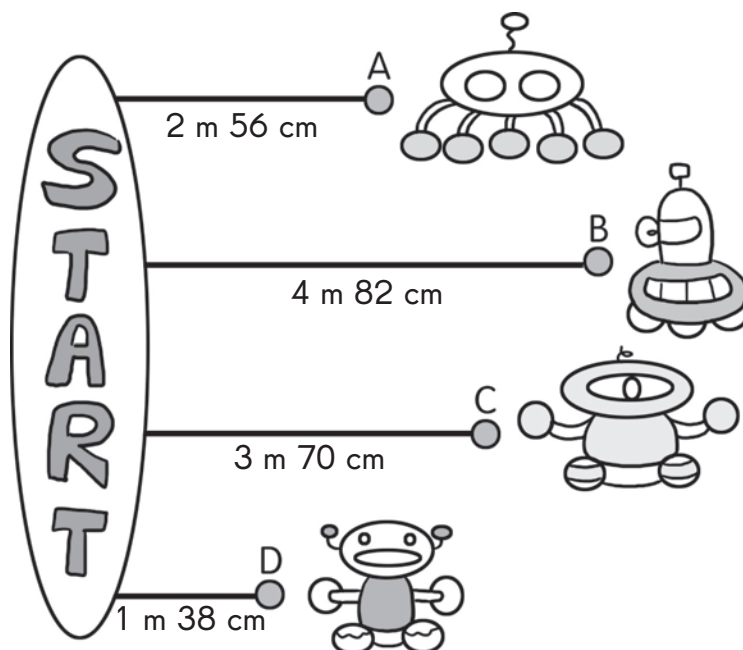
Date: _____



Put on Your Thinking Cap!

Complete.

The picture shows the distance traveled by each robot.

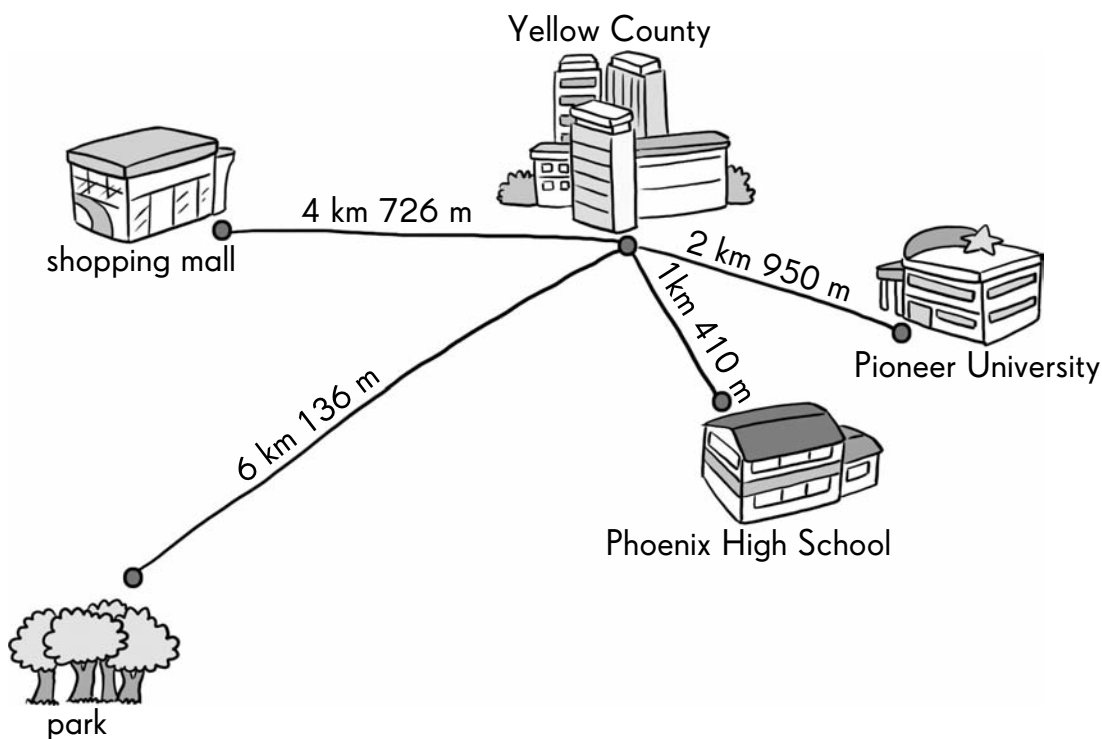


1. Robot C moves _____ centimeters more than Robot A.
2. Robot A moves _____ centimeters less than Robot B.
3. Robot _____ moves the longest distance.
4. Robot _____ moves the shortest distance.
5. The difference between the shortest distance and the longest distance is _____ centimeters.

Name: _____

Date: _____

Look at the picture. Then complete Exercises 6 to 9.



- 6.** John lives in Yellow County.
He travels _____ fewer meters to Phoenix High School
than to the shopping mall.
- 7.** The _____ is the farthest place from Yellow County.
- 8.** The _____ is the nearest place to Yellow County.
- 9.** The difference between the longest and shortest distances from
Yellow County is _____ meters.