Name: _____ Date: _____

Using Measurements to Describe Objects

Goal Use logical reasoning to choose measurements.
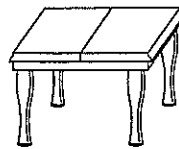
You will need a ruler marked in millimetres.

Fill in the blanks with the correct measurements.

1. Anna's kitchen table seats _____ people.

   It is _____ cm wide, _____ m long,

   and _____ mm high.

1.5	750	6	90

2. Tilo can cycle _____ km in one hour. The library is 5 km from his

   home. It will take Tilo about _____ min to cycle from home to the

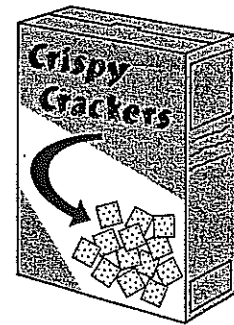   library. The speed limit for cars on city streets is _____ km/h.

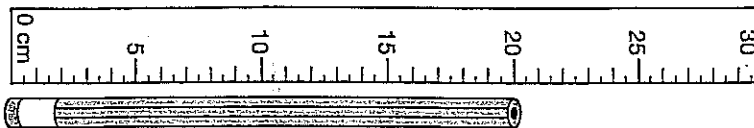   This is _____ times Tilo's speed.

5	10	50	30

   MAXIMUM
   50
   km/h

3. A box of crackers is _____ m high, _____ cm deep, and

   _____ mm wide. The box holds about _____ crackers.

0.18	70	140	6

   Crispy Crackers

4. A new pencil is _____ m long and _____ mm wide.

   The eraser is _____ cm long.

0.2	0.5	7

Metric Conversion (B)

Convert each measurement to the unit indicated.

8.2 km to m

889 km to m

80.9 km to cm

4.7 m to cm

1.6 km to cm

0.9 cm to mm

3740.9 mm to cm

0.6 mm to km

0.7 mm to m

9.5 m to cm

6.6 m to cm

9.1 km to m

0.3 cm to mm

1 km to m

706.8 km to m

9255.1 cm to m

0.4 km to m

711.9 m to mm

0.2 km to mm

7 mm to m

7137.8 m to mm

20.5 m to cm

0.6 m to km

3.7 m to km

Metric Conversion (D)

Convert each measurement to the unit indicated.

5 cm to mm

1.5 m to mm

3.3 m to km

0.5 km to m

2.8 mm to cm

262.1 cm to km

554.6 cm to m

7.5 mm to m

9.2 cm to km

7094.8 cm to km

90.1 cm to m

0.5 cm to km

20.2 km to mm

80.5 m to km

898.3 mm to cm

3.4 mm to cm

8911.5 m to km

0.6 m to km

4 km to mm

29.7 km to cm

817.4 km to cm

0.2 cm to m

6.3 mm to km

2.9 cm to mm

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Name: _____

CONVERTING UNITS of MEASUREMENT

1. 392 mm = _____ cm

2. 5.62 km = _____ m

3. 3517 m = _____ km

4. 817 cm = _____ m

5. 592 cm = _____ mm

6. 58 m = _____ cm

7. 897 m = _____ km

8. 401 mm = _____ cm

9. 97 cm = _____ m

10. 8430 m = _____ km

11. 703 cm = _____ mm

12. 6.85 cm = _____ mm

13. 90574 mm = _____ m

CHALLENGE!!

14. 35 m = _____ km

15. 0.2 m = _____ cm

16. 492 m = _____ km

17. 83 mm = _____ cm

18. 92 cm = _____ m

19. 560 cm = _____ m

20. 560 m = _____ km

Measuring Units Worksheet

Convert.

1 a. 397 m = _____ km

1 b. 271 cm = _____ m

2 a. 2.7 km = _____ m

2 b. 972 cm = _____ m

3 a. 139 m = _____ km

3 b. 2.351 km = _____ m

4 a. 10.2 km = _____ m

4 b. 9 cm = _____ m

5 a. 213 cm = _____ m

5 b. 3.2 m = _____ cm

6 a. 16,876 m = _____ km

6 b. 14 cm = _____ m

7 a. 362 m = _____ km

7 b. 0.09 m = _____ cm

8 a. 11.8 m = _____ cm

8 b. 187 cm = _____ m

9 a. 0.2 m = _____ cm

9 b. 1.1 m = _____ cm

10 a. 1,133 m = _____ km

10 b. 2.318 km = _____ m

Metric Conversions Word Problems

1. Jack's house is 1240 metres away from the bowling alley. He also knows that he is 1.3 km away from the grocery store. Which place is he closer to? How do you know?

2. Chase measured a line for his art project. It is 200 millimeters long. How many centimeters is the line?

3. Cheryl is moving to a new house. Her old house is 3 kilometers from her new house. How many meters is the old house from the new house?

4. Jessica's shoebox is 20 centimeters long and 10 centimeters wide. How many more millimeters is the length of the shoebox than the width?

5. Stan walks 2.7 kilometers a day. How many meters does he walk in five days if he keeps up the same pace?

6. Carlos has a 1.2 meter long piece of wood. He wants to cut it into 3 equal lengths. How long should each piece be in millimeters?

7. There are so many speed skating races, each covering different distances, that it is hard to keep track. It is your task to convert each distance to the indicated unit.

Keep in mind, most actual Olympic events are measured in one or two of these units (you will determine which one in part b).

Distance	Converted Unit
men & women's 50 000 cm race	_____ mm
women's 300 000 cm race	_____ m
men's 10 000 m race	_____ km
men & women's 1 000 000 mm race	_____ m
men & women's 500 m race	_____ cm

b) Which is the standard unit of measurement that these races are actually stated in (km, m, cm, mm)? Explain how you know.
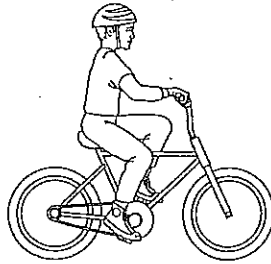
6

Solve Problems Using Tables

Goal Use tables to solve distance problems.

1. Tom cycles 150 m in one minute. He multiplies this by 10 then makes a table of his distances and times.

Distance (m)	Time (min)
1500	10
3000	20
4500	30

Complete the table to estimate how long it will take Tom to cycle 8 km.

It will take Tom about _____ to cycle 8 km.

2. Rosa can paddle her kayak at the rate of 1 km every 5 minutes. At this rate how far will she paddle in 1 hour? Make a table to help you.

3. Tamara skates 120 m in one minute. Emma skates 1 km in 10 minutes. Create 2 tables to find out which girl can skate farther in 30 minutes. How much farther?

Name: _____

Elapsed Time - A

Use a strategy of your choice to solve the following elapsed time problems. Use your notebook for extra space. .

1. Start time: 9:44 am   End time: 10:50 am   Elapsed time _____

2. Start time: 7:22 pm   End time: 11:45 pm   Elapsed time _____

3. Start time: 8:16 am   End time: 9:45 am   Elapsed time _____

4. Start time: 1:23 pm   End time: 7:00 pm   Elapsed time _____

5. Start time: 2:33 am   End time: 4:20 am   Elapsed time _____

6. Start time: 10:36 pm   End time: 11:55 pm   Elapsed time _____

7. Start time: 5:18 am   End time: 9:25 am   Elapsed time _____

8. Start time: 8:34 pm   End time: 10:10 pm   Elapsed time _____

9. Start time: 8:34 am   End time: 4:15 pm   Elapsed time _____

10. Start time: 7:38 am   End time: 8:45 pm   Elapsed time _____

How Much Time Has Elapsed ?

1)   2:40 P.M.   to   7:21 P.M.   _____

2)   7:00 A.M.   to   8:23 A.M.   _____

3)   2:00 P.M.   to   4:38 P.M.   _____

4)   1:40 P.M.   to   5:34 P.M.   _____

5)   7:20 A.M.   to   9:49 A.M.   _____

6)   5:20 P.M.   to   7:47 P.M.   _____

7)   11:40 P.M. to   2:18 A.M.   _____

8)   8:40 A.M.   to   10:19 A.M.   _____

9)   1:40 A.M.   to   3:34 A.M.   _____

10) 4:00 A.M.   to   8:33 A.M.   _____

11) 12:00 A.M. to   1:20 A.M.   _____

12) 5:20 A.M.   to   8:04 A.M.   _____

13) 11:20 P.M. to   2:33 A.M.   _____

14) 5:40 A.M.   to   9:04 A.M.   _____

15) 11:40 P.M. to   1:20 A.M.   _____

Measurement Review

4.3cm = _____ km
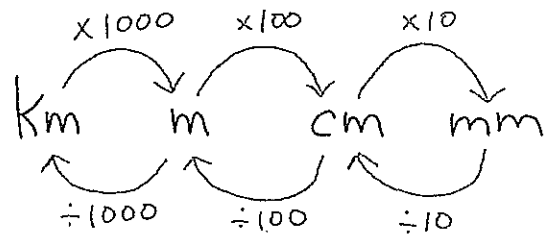
682 mm = _____ km

1.8cm = _____ m

903 m = _____ mm

Rosa can paddle her kayak at the rate of 1 km every 5 minutes. At this rate, how far will she paddle in 1 hour? Make a table to solve this problem.

Tamara skates 120 m in one minute. Emma skates 1 km in 10 minutes. Create two tables to find out which girl can skate farther in 20 minutes.

Estimate, then calculate the time elapsed.

Start time	End time	Elapsed time
6:21am	8:28am	
1:34am	8:49am	
8:53am	1:54pm	
* 6:34am	12:11pm	