Grade 7

Measurement – Metric Conversion

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Play **Metric Millionaire** first.
Click on *http://www.quia.com/rr/30535.html* to play.
You can go to *www.wiredmath.ca* for the links.

Metric Prefixes

- Mega- (M-) = 1 000 000
- Kilo- (k-) = 1000
- Centi- (c-) = 0.01
- Deci- (d-) = 0.1
- Milli- (m-) = 0.001
- Micro- (μ-) = 0.000001

1. Indicate the best metric unit to measure the:

a. length of a mitten _____ b. amount of water in an aquarium _____

c. length of a transport truck _____ d. thickness of a textbook _____

e. mass of a filing cabinet _____ f. capacity of a water bottle _____

g. distance to the moon _____ h. thickness of a telephone wire _____

2. Complete each blank.

a. 87 m =_____ cm b. 3400 mL = ____ L c. 98 mm = _____dm

d. 900 g = _____ kg e. 12 km = _____ m f. 2.1 m =_____mm

g. 140 mg =_____ kg h. 3700 m = _____ km i. 0.72 L = _____mL

j. 937 µm = _____ m k. 8000 cm = _____ km l. 21.3 mm = _____cm

m. 4130 mL =_____ L n. 3.52 m =_____ µm o. 9.23 kg = _____mg

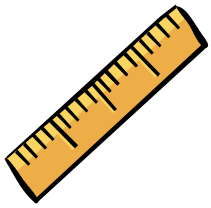
3. Complete each blank.

a. 7 cm + 9 mm =_____ mm b. 1300 mL + 4 L =_____ L

c. 12 m + 87 cm =_____ cm d. 4 g + 800 mg = _____ mg

e. 0.4 km + 400 m = _____ cm f. 1.1 L + 14 mL = _____ mL

g. 69 g + 0.4 kg = _____ mg h. 70 cm + 0.01 km =_____ m



4. Place these measurements, in the boxes, in order from smallest to largest.

9.4 m	18 cm	470 mm	12 mm	2 km	0.2 m	0.01 km	1 cm	113.2 m

5. Complete each blank.

a. 3 decades = _____ years = _____ months

b. 1 millennium = _____ years = _____ centuries

c. 200 years = _____ decades = _____ centuries

6. Complete each blank.

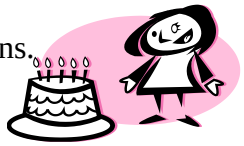
a. 140 cm^3 = _____ L b. 3 L = _____ cm^3 c. 8700 cm^3 = _____L d. 980 cm = _____m

e. 4 mL = _____ cm^3 f. 9300 cm^3 = _____ L g. 41cm =_____km h. 73 000 cm^3 =_____L

Did You Know?

To make 1 kg of honey, bees must visit about 4 000 000 flowers.
During these visits, the distance travelled is equivalent to four times around the earth.

7. Rosa is baking muffins. A two-kilogram package of cake mix makes 125 muffins. How many grams of cake mix does Rosa need to bake 12 muffins?



8. A car is travelling at 90 km/h. Find the distance, in metres, it travels in fifteen seconds.

Don't forget to try these math drills now! Go to www.wiredmath.ca for the links.

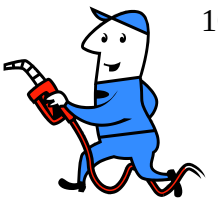
TRY THESE!

Convert the Metric Length Units
http://www.aaamath.com/mea69-metric-meter.html

Comparing Metric Mass
http://www.aaastudy.com/mea69_x4.htm

CHALLENGE YOURSELF!

9. Two towns are 76 000 m apart. Josephine wants to drive from one town to the other in exactly one hour. For the first 20 minutes she drives at a constant speed of 66 km/h. At what constant rate must she drive for the remainder of the hour to accomplish her goal?



10. Mike's car uses about a litre of fuel to travel 16 km. He plans to drive 525 m to meet Natalie and then another 16 km to pick up Nikki. Next, the three of them will drive 8475 m to their favourite restaurant. Afterwards, they will travel 311 km to visit their friends. Right now, Mike's instrument panel displays that he can travel 240 km more until empty. A litre of fuel costs $1.10. How much will the extra fuel needed for this trip cost?