Name $\qquad$ Date $\qquad$

1. Convert using an equation with an exponent.
a. 3 meters to centimeters $\qquad$ $=$ $\qquad$ cm
b. 900 centimeters to meters $\qquad$ $=$ $\qquad$ m
c. $\quad 8.1$ liters to milliliters $\qquad$ $=$ $\qquad$ mL
d. 537 milliliters to liters $\qquad$ $=$ $\qquad$ L
e. 90.5 kilometers to meters $\qquad$ $=$ $\qquad$ m
f. Convert 23 meters to kilometers.
g. 0.4 kilograms to grams
h. 80 grams to kilograms
$\qquad$ $=$ $\qquad$ km
i. Circle the conversion factor in each equation above. Explain why converting from meters to centimeters uses a different conversion factor than converting from liters to milliliters, kilometers to meters, and kilograms to grams.
2. Read each aloud as you write the equivalent measures.
a. $\quad 3.5 \mathrm{~km}=$ $\qquad$ km $\qquad$ m
b. $\quad 1.23 \mathrm{~L}=$


L $\qquad$ mL
c. $\quad 2.002 \mathrm{~kg}=$

$\qquad$ g
d. $3 \mathrm{~mL}=$ $\qquad$ L
e. $3012 \mathrm{~g}=$ $\qquad$ kg
f. $\qquad$ $\mathrm{m}=$
2.10 cm
3. The length of the bar for a high jump competition must always be 4.75 m . Express this measurement in millimeters. Explain your thinking using an equation that includes an exponent.
4. A honey bee's length measures 1 cm . Express this measurement in meters.
a. Explain your thinking using a place value chart.
b. Explain your thinking using an equation that includes an exponent.
5. James drinks 800 mL of water each day during his workout. Henry drinks 600 mL daily during his workout. If James works out 3 days each week, and Henry works out 5 days each week, how many liters do the boys drink in all each week while working out?
6. Katrina needs to tie ribbons around 10 flower arrangements for a party. Each arrangement requires 1.2 m of ribbon. She also needs 325 cm of ribbon to tie to the balloons for the party. If Katrina buys 15 m of
ribbon, will she have enough? If so, how much ribbon (in meters) will she have left? If not, how many more meters of ribbon will she need to buy?
$\qquad$

1. Convert:
a. 2 meters to centimeters
$2 \mathrm{~m} \times$ $\qquad$ $=$ $\qquad$ cm
b. 40 milliliters to liters
$40 \mathrm{~mL} \div$ $\qquad$ $=$ $\qquad$ L
2. Read each aloud as you write the equivalent measures.
a. $4.37 \mathrm{I}=$ $\qquad$ L $\qquad$ mL
b. $\quad 81.62 \mathrm{~kg}=$ $\qquad$ kg $\qquad$ g

Name $\qquad$ Date $\qquad$

1. Convert:
a. 5 meters to centimeters
b. 60 centimeters to meters
$5 \mathrm{~m} \times$ $\qquad$ = $\qquad$ cm
$60 \mathrm{~cm} \div$ $\qquad$ = $\qquad$ m
c. 2300 milliliters to liters.
 $=$ $\qquad$ L
d. 0.462 liters to milliliters
$0.462 \mathrm{~L} \times$ $\qquad$ $=$ $\qquad$ mL
e. 80.4 kilometers to meters $\qquad$ $=$ $\qquad$ m
f. 0.725 kilometers to meters $\qquad$ $=$ $\qquad$ m
g. 456 grams to kilograms $\qquad$ $=$ $\qquad$ kg
h. 0.3 kilograms to grams $\qquad$ = $\qquad$
2. Read each aloud as you write the equivalent measures.
a. $\quad 2.7 \mathrm{~km}=$ $\qquad$ km $\qquad$ m
b. $3.46 \mathrm{~L}=$


L
 mL
c. $\quad 5.005 \mathrm{~kg}=$ $\qquad$ kg $\qquad$ g
d. $8 \mathrm{~mL}=$ $\qquad$ L
e. $4079 \mathrm{~g}=$ $\qquad$
3. A dining room table measures 1.78 m long. Express this measurement in millimeters.
a. Explain your thinking using a place value chart.
b. Explain your thinking using an equation that includes an exponent.
4. Eric and YiTing commute to school every day. Eric walks 0.81 km and YiTing walks 0.65 km . How far did each of them walk in meters? Explain your answer using an equation that includes an exponent.
5. There were 9 children at a birthday party. Each child drank one 200 mL juice box. How many liters of juice did they drink altogether? Explain your answer using an equation that includes an exponent.

