CHEM 1364  
Thursday Quiz #2  
Spring 2013 (Buckley)

Administration instructions: When you have completed the quiz, leave it face down at your place and leave. I will gather them up after the last one is done.

1. (4 points) Circle the **LARGER** measurement in each pair below.
   a. 4 m or 4 cm  
   b. 4 mg or 4 kg  
   c. 4 cm or 4 dm  
   d. 4 mL or 4 kL

2. (4 points) Circle the **SMALLER** measurement in each pair below.
   a. 17 cm or 50 mm  
   b. 80 L or 500 mL  
   c. 56 cm or 85 g  
   d. 54 cm³ or 60 mL

3. (2 points) The density of a substance is 10 g/mL. What volume of the substance is required to obtain 200 g of it? Show your work.

\[
? \text{ mL} = \frac{200 \text{ g}}{1 \text{ g}} \times \frac{1 \text{ mL}}{10 \text{ g}} = \frac{200 \times 1 \text{ mL}}{1 \times 10} = 20 \text{ mL}
\]

m → milli- → 10⁻³  
c → centi- → 10⁻²  
d → deci- → 10⁻¹  
k → kilo- → 10³  
M → Mega- → 10⁶
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1. (4 points) Circle the **SMALLER** measurement in each pair below.
   a. 4 m or 4 cm    b. 4 kg or 4 mg    c. 4 cm or 4 dm    d. 4 mL or 4 kL

2. (4 points) Circle the **LARGER** measurement in each pair below.
   a. 17 cm or 50 mm  b. 80 mL or 500 L  c. 56 cg or 85 g  e. 54 cm³ or 60 mL

3. (2 points) The density of a substance is 10 g/mL. What volume of the substance is required to obtain 300 g of it? Show your work.

\[
? \text{ mL} = \frac{300 \text{ g}}{10 \text{ g mL}} = \frac{300 \times 1}{1 \times 10} \text{ mL} = 30 \text{ mL}
\]

m → milli- → 10⁻³   c → centi- → 10⁻²   d → deci- → 10⁻¹
k → kilo- → 10³   M → Mega- → 10⁶