<u>Math 310 - Dr. Miller - Activity #19: Reference Units</u>

1. Circle the most reasonable measurement and include extra labels or explanations that helped your thinking in each case:

   (a) Temperature outside today:

   $$60^oC \qquad\qquad 18^oF \qquad\qquad 18^oC$$

   (b) Temperature of hot coffee that's just cool enough to drink:

   $$120^oC \qquad\qquad 120^oF \qquad\qquad 100^oC$$

   (c) Length of your index finger:

   $$8cm \qquad\qquad 8mm \qquad\qquad 8km$$

   (d) Width from side to side of your classroom chair:

   $$18inches \qquad\qquad 18cm \qquad\qquad 1.8m$$

   (e) Weight of a cell phone:

   $$10-20g \qquad\qquad 1.0-2.0g \qquad\qquad 10-20kg \qquad\qquad 100-200g$$

   (f) Volume of the waterfall at the Smith Center:

   $$2.5L \qquad\qquad 2.5kL \qquad\qquad 2.5mL \qquad\qquad 2.5gal$$

2. For each number, place a decimal point to create the most reasonable measurement:

   (a) Your desktop is about 2 5 0 0 centimeters thick.

   (b) It's about 5 0 0 0 kilometers from this classroom to the stadium.

   (c) A snack-size bag of potato chips weighs about 5 2 0 0 grams.

   (d) A typical outdoor trash can in a park can hold about 2 0 0 0 kiloliters of water.

   (e) A typical dumpster can hold about 2 0 0 0 kiloliters of water.

3. Circle the larger/higher measurement in each horizontal row:

   (a) 5 meters   5 yards   5 feet

   (b) 2 gallons   2 liters   2 quarts

   (c) 6° C   refrigerator temperature 32° F

   (d) 15 ounces   15 grams   15 milligrams

   (e) 8 pound   8 kilograms   8 ounces

   (f) 12 miles   1.2 kilometers   12 meters

4. Name one English/customary unit AND one metric unit that would be suitable for measuring each attribute below:

   (a) The height of our classroom

   (b) The weight of your car

   (c) The weight of a baby bird

   (d) The volume of a swimming pool

   (e) The distance from SRU to Pittsburgh

   (f) The volume of your closet

   (g) The volume of a picnic cooler/basket

   (h) The length of an eyelash