SPH3U0 **Lesson Converting Units** Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

We often need to convert measured quantities into different units. For example, you may need to convert a volume from quarts to litres when baking. If you are training for a marathon, you may need to convert a running pace from km/h to m/s to determine your race time. As we use the metric system in Canada, we will often need to convert measurements involving metric quantities.

By cancelling UNITS, you can confirm that you will always make the correct conversion!

**We will use a three step process:**

**1. Determine the conversion factor**

**2. Multiply by the conversion factor to cancel the unit you don’t want**

**3. Simplify the converted value, keeping sig digs the same!**

Sample Questions

a) 0.000025 Gg = ? kg

**Checklist:** Identified prefix Wrote conversion factor

Wrote number in fraction form

Multiplied by conversion factor

Cancelled units

Simplified answer (keeping sig digs)

b) 1 560 µm = ? cm

c) 1470000 cm3 = ? m3

d) 75.8 km/h = ? m/s