

# Warm Up

What volume of 0.900M  $\text{KNO}_3$  is needed to prepare 750. mL of a 0.450M solution?

$$\begin{aligned}V_i &= ? \\C_i &= 0.900\text{M} \\V_f &= 750.\text{mL} \\C_f &= 0.450\text{M}\end{aligned}$$

$$\begin{aligned}V_i C_i &= V_f C_f \\V_i (0.900\text{M}) &= (750.\text{mL})(0.450\text{M}) \\V_i &= \frac{(750.\text{mL})(0.450\text{M})}{(0.900\text{M})}\end{aligned}$$

$$V_i = 375\text{mL}$$

$$C = \frac{n}{V}$$

g/ml

g/v/v

$$V_i C_i = V_F C_F$$

# **Dilution Worksheet**

# Solutions Test

- Net Ionic Equations
- Solubility
- Concentration
- Dilutions

**p. 347 #53-55**

**p. 499 #42, 44, 45, 48, 51-55**