**Dilution Problems- Hon Chem Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ # \_\_\_\_\_**

**M1V1 = M2V2 or C1V1 = C2V2**

**1:** If you dilute 0.1 L of a 1.6 M solution of LiCl to 1.0 L, determine the new concentration of the solution.

**2:** If you dilute 175 mL of a 1.6 M solution of LiCl to 1.0 L, determine the new concentration of the solution. \*Watch your units

**3:** You need to make 10.0 L of 1.2 M KNO3. What molarity would the potassium nitrate solution need to be if you were to use only 2.5 L of it?

4: A stock solution of 1.00 M NaCl is available. How many milliliters are needed to make 100.0 mL of 0.750 M sol’n?

5. What volume of 0.250 M KCl is needed to make 100.0 mL of 0.100 M solution?

6. Concentrated H2SO4 is 18.0 M. What volume is needed to make 2.00 L of 1.00 M solution?

7. Concentrated HCl is 12.0 M. What volume is needed to make 200 mL of 1.00 M solution?