

## HONORS CHEMISTRY: DILUTION IS THE SOLUTION!

DATE: \_\_\_\_\_

Learning Activities: **SWBAT**...

...solve dilution problems and calculate new concentrations.

**DILUTION:** A method of lowering the concentration of a solution by adding water.

- The key to understanding dilution is that you ARE NOT changing the amount of solute.
- The moles of solute remain \_\_\_\_\_.
- What will change is \_\_\_\_\_ hence the concentration will also change.

Can set up the equation :

$$M_i V_i = M_f V_f$$

Where  $M_i =$

$V_i =$

$M_f =$

$V_f =$

Think about the units...

That should make sense...



Try this... 1000.0 mL of water is added to 300.0 mL of 5.00 M  $H_3PO_4$ . Determine the new conc.

*"There are more of them than us." ~ Herb Caen*