Mr. Bracken
AP Chemistry

Name _____
Period _____

Molarity Madness Introductory Problems

1. What are the final molarities of each ion if 57 grams of solid Na_2SO_4 is dissolved in 320 mL of water?

$[Na^{1+}]$ = _____

$[SO_4^{2-}]$ = _____

2. What is the final molarity if 75 mL of water is added to a beaker containing 220 mL of 3.0 M KCl?

[KCl] = _____

$[K^{+}]$ = _____

$[Cl^{1-}]$ = _____

3. What are the final concentrations if 60. mL of 0.50 M $CaCl_2$ is mixed with 40. mL of 1.0 M Na_2CO_3 ?

$CaCl_2 + Na_2CO_3 \rightarrow CaCO_3 + 2\ NaCl$

$[Ca^{2+}]$ = _____

$[CO_3^{2-}]$ = _____

$[Na^{1+}]$ = _____

$[Cl^{1-}]$ = _____