|  |  |  |
| --- | --- | --- |
| *RATIOS of IONS in a concentration*CλeMis+ry: http://genest.weebly.com Stop in for help every day at lunch and Tues &Thurs after school! |  | Name\_\_\_\_\_\_\_\_\_\_\_\_\_Period\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 1. A 0.04661 mole sample of potassium nitrate is dissolved in enough water to make 225 mL of solution. Determine the molar concentration of the potassium nitrate.
2. Find the molarity of a solution made from 275 g of CuSO4 dissolved in enough water to make 4.25 L.
 | 1. An alcoholic iodine solution (“tincture” of iodine) is prepared by dissolving 5.15 g of iodine crystals in enough alcohol to make a volume of 225 mL. Calculate the molarity of iodine in the solution.
2. From memory, what is the formula of each

sulfuric acid \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_carbonic acid \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_phosphoric acid\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |  |
| --- | --- |
| 1. Draw a particle diagram of each of these ionic substances in solution. Then calculate the molarity of **each** ion present in each of the following solutions.

a. 0.25 M AlCl3(aq) particle picture:calculate the concentration of Al3+(aq) in the solutioncalculate the concentration of Cl-(aq) in the solutionb. 0.375 M Na2CrO4particle picture:calculate the concentration of Na+(aq) in the solutioncalculate the concentration of CrO42-(aq) in the solution | c. 0.0020 Ca(OH)2particle picture:calculate the concentration of Ca2+(aq) in the solutioncalculate the concentration of OH-(aq) in the solution |