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| *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\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| 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\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| 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 solution    calculate the concentration of Cl-(aq) in the solution  b. 0.375 M Na2CrO4 particle picture:  calculate the concentration of Na+(aq) in the solution    calculate the concentration of CrO42-(aq) in the solution | c. 0.0020 Ca(OH)2  particle picture:  calculate the concentration of Ca2+(aq) in the solution    calculate the concentration of OH-(aq) in the solution |