NAME: **HONORS CHEMISTRY**

SECTION: Pairs Check/Share: Molarity

Directions:

1. Put both names on the paper.
2. Review the molarity formula here:
3. The older partner does the even problems. The younger partner does the odd problems. Take turns answering the questions. As you work, explain how you are doing the problem while your partner listens.
4. After each problem, discuss the answer with your partner. If both partners agree on the answer, the solver initials the answer. If an agreement can’t be reached, both partners raise their hands to get the teacher’s attention.
5. When all the questions have been answered, compare your answers with those of another group. If both pairs agree on the answers, circle the final answers.
6. Complete the self-assessment and sign both papers.

Complete the following problems.

1. How many milliliters of 0.560 M solution of sodium thiosulfate, Na2S2O3, contains .275 mol of Na2S2O3?
2. How many grams of KMnO4 are needed to prepare 675 mL of a 0.020M solution?
3. What is the molarity of a solution containing 102 g of silver nitrate in a final volume of 850 mL?
4. How many milliliters of a 2.00M solution can be prepared using 80.0g of sodium hydroxide?
5. How many grams of solute are dissolved in a 250. mL sample of 2.00M potassium sulfate?
6. Calculate the molarity of a solution prepared from 49.3 g of calcium chloride, brought to a final volume of 750 mL.

Explain the mistakes made by the following students in making molar solutions.

1. Sam, needing a 0.4000 M solution of NaBr, measures out 0.4000 g of NaBr and then adds 1 L of water.
2. Katy needs a 0.0300 M solution of KI. She first calculates that she will need 3.00g of KI for 0.03 mol. She determines the mass of this solid and puts it in a 1.00L volumetric flask. She then fills the flask to the 1.00L mark.

The purpose of this assignment was to: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| Did I: | Circle the appropriate response: |
| Explain how I did the problems? | Always Sometimes Rarely |
| Listen while my partner explained? | Always Sometimes Rarely |
| Give my partner positive support? | Always Sometimes Rarely |
| Stay on task during the assignment? | Always Sometimes Rarely |
| Use encouraging and polite words? | Always Sometimes Rarely |
| Record my work on the paper? | Always Sometimes Rarely |
| Demonstrate an understanding of the material? | Yes No |

Signatures:

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Comments: