NAME: **HONORS CHEMISTRY**

SECTION: Pairs Check/Share: Mole Problems

Directions:

1. Put both names on the paper.
2. 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.
3. 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.
4. 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.
5. Complete the self-assessment and sign both papers.

Complete the following problems. Use factor label and show your work.

1. How many atoms are present in a 0.056 mol sample of osmium?
2. How many moles are present in a sample containing 5.68 x 1021 atoms of chromium?
3. Calculate the molar mass of iron(II) hydroxide. (Hint: write the formula first)
4. Calculate the molar mass of gold(III) cyanide. (Hint: write the formula first)
5. How many moles are present in a 4.97 g sample of iron(II) hydroxide?
6. What is the mass in grams of a .28 mole sample of gold(III) cyanide?
7. Calculate the mass of a sample of iron(II) hydroxide which contains 8.36 x 1023 formula units of iron(II) hydroxide.
8. How many formula units (i.e., representative particles) of gold(III) cyanide are present in a 10.76 g sample of gold(III) cyanide?

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: