NAME: **HONORS CHEMISTRY**

SECTION: Pairs/Check: The Activity Series

Directions:

1. Take turns solving the problems--one partner completes the odd problems, while the other partner completes the even problems.
   1. Use the activity series to determine if the reaction can occur.
   2. If the reaction DOES occur, write the complete, balanced equation.
   3. If the reaction DOES NOT occur, explain why not.
2. After each problem, discuss the answer with your partner. If both partners agree on the answer, both students initial the answers. If an agreement can’t be reached, both partners raise their hands to get the teacher’s attention.
3. Ni(s) + Al2(SO4)3(aq) 🡪
4. Ba(s) + Fe(NO3)3(aq) 🡪
5. Cl2(g) + KI(aq)🡪
6. Cu(s) + Mn(C2H3O2)2(aq) 🡪
7. Br2(g)+ CaF2(aq) 🡪
8. Zn(s) + PbCl2(aq) 🡪
9. Work on this question together.

An iron nail placed in a beaker with a solution of silver nitrate will cause pure silver to collect on the bottom of the beaker.

1. Write a balanced equation for the reaction that occurs.
2. Explain why the reaction occurs.
3. Using your activity series, list three other elements that can also produce pure silver from a solution of silver nitrate.
4. Using your activity series, identify an element that would NOT react with the solution of silver nitrate.
5. After the iron nail had caused silver to come out of the solution first described, iron ions would be present in the solution. Which of the elements in your answer to part c would cause the iron to come out of the solution? Why?
6. Complete the self evaluation.

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

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| Did I: | Circle the appropriate response: |
| Clearly identify the errors? | 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 |

Comments: