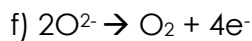
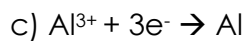
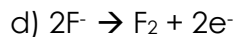
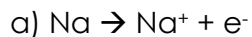


## SRP Table Worksheet

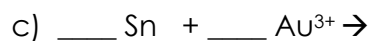
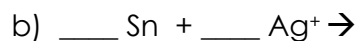
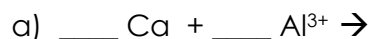
Name:

Date:

1. Describe the following reaction as oxidation or reduction.



2. Complete and balance the following reactions:

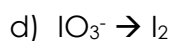
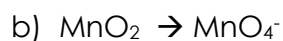
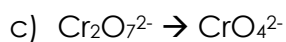
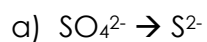


3.  $\text{Ni}^{2+}$  reacts with Mn, however,  $\text{Al}^{3+}$  does not react with Mn. Rank the oxidizing agents in order of decreasing strength. Rank the reducing agents in order of decreasing strength.

4.  $\text{Cl}_2$  reacts with Ag, however, Ag does not react with  $\text{Mg}^{+2}$ . Rank the oxidizing agents in order of decreasing strength. Rank the reducing agents in order of decreasing strength.

5.  $\text{Ni}^{2+}$  reacts with Mn, however,  $\text{Al}^{3+}$  does not react with Mn. Rank the reducing agents in order of decreasing strength. Rank the oxidizing agents in order of decreasing strength.

6. Classify as oxidation, reduction or neither.



7. Given the following lab data

$\text{SnCl}_2$	&	Ni	Spontaneous
$\text{Ni}(\text{NO}_3)_2$	&	Fe	Spontaneous
$\text{Cr}(\text{NO}_3)_3$	&	Fe	Non spontaneous.

i) Write three balanced equations.

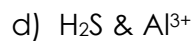
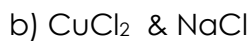
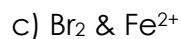
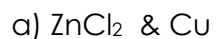
ii) Rank the oxidizing agents in decreasing order of strength.

iii) Rank the reducing agents in decreasing order of strength.

iv) Will  $\text{SnCl}_2$  react with Cr? Explain.

v) Will  $\text{Fe}^{2+}$  react with Sn? Explain.

8. Describe as spontaneous or non-spontaneous. Use your reduction potential chart.



9. Can you keep HCl in a Zn container?

What about an Au container?