Name:

Experiment 8 Post-Lab Sheet

Results

• Write the balanced net ionic equation for each reaction you observed (skip the combinations that didn't react.) Include correct states (s, l, g, aq) based on your observations!

• From the reactions that you observed actually went, write the activity series as you determined it from most active to least active metals, and including hydrogen. ("Most active" means greatest tendency to lose electron(s), i.e. most easily oxidizable.)

• What gas do you expect to observe in some reactions? Did you notice any *unexpected* gas formation in other reactions? If so, which reactions produced gas you can't easily explain?

Discussion

1. Compare your activity series to the activity series in the textbook or an online source like Wikipedia (make sure it contains H from acid). Are there any differences?

2. What might explain the differences, if there were any?

3. Which metals tested would be considered active metals? (What's the *precise, technical definition* of an active metal given in the introduction? Read carefully!)

4. Tin (Sn) dissolves in acid but does not react with aqueous zinc(II) sulfate. Where does it fit in your activity series? Can you locate it precisely based on your experimental data?

5. Extra Credit: what do you think the mystery gas is? (Produced during reactions without acid.)