

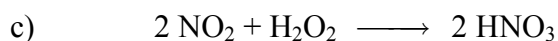
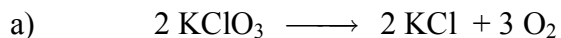
REVIEW QUESTIONS

Chapter 17

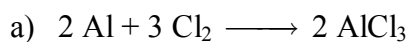
1. In the compounds below, assign oxidation numbers to each element:



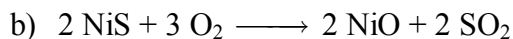
2. Determine if each reaction below is a redox reaction or not. Explain your choice.



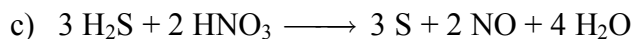
3. For each reaction shown below, identify the oxidizing and reducing agent:



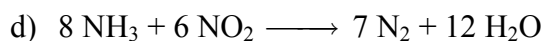
oxidizing agent _____ reducing agent _____



oxidizing agent _____ reducing agent _____

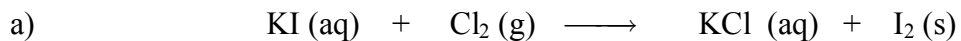


oxidizing agent _____ reducing agent _____



oxidizing agent _____ reducing agent _____

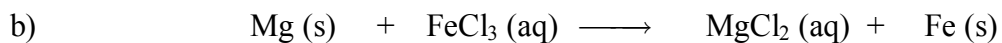
4. Write oxidation and reduction half-reactions for each of the following redox equations and balance the equation by adding the half-reactions.



oxidation:

reduction:

overall:

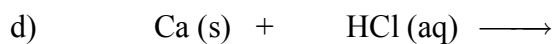
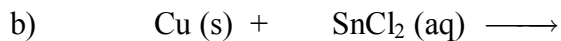


oxidation:

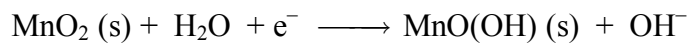
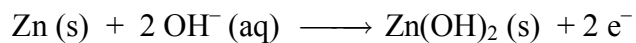
reduction:

overall:

5. Use the activity series to complete and balance each reaction below. If no reaction occurs, write "No Reaction" after the arrow.

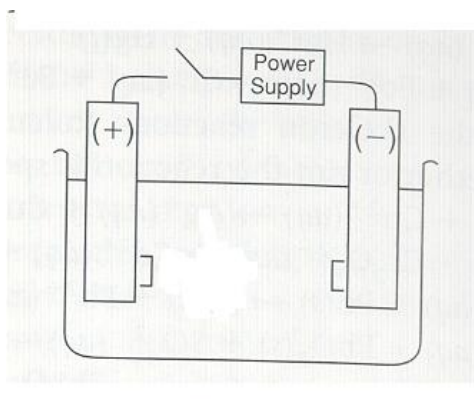


6. In an alkaline battery the following reactions occur:



- Which reaction occurs at the anode?
- Which reaction occurs at the cathode?
- Write the balanced overall reaction.

7. An electrolytic cell, similar to one shown below, is used to decompose CaO.



- Identify the cathode and the anode.
- Write half-reactions for each electrode.
- Write overall reaction for the electrolysis.

8. In the voltaic cell shown below, (a) write the overall reaction, (b) identify the anode and cathode, and (c) write half-reaction for each electrode.

