

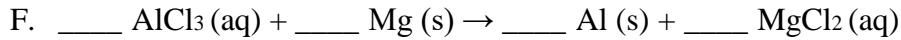
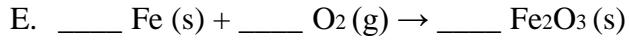
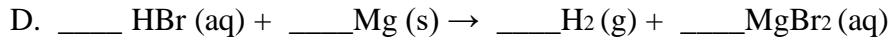
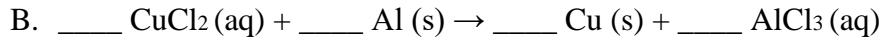
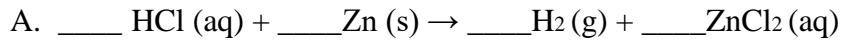
CHM 130:

Redox Practice Problems

1. Determine the charge for each of the following:

- | | | | | | |
|-------------------------------------|----------|----------------------|-----------------------|----------|---------|
| a. O ₂ : | O: ____ | g. NH ₃ : | N: ____ | H: ____ | |
| b. Al ₂ S ₃ : | Al: ____ | S: ____ | h. PbO ₂ : | Pb: ____ | O: ____ |
| c. P ₄ : | P: ____ | i. HBr: | H: ____ | Br: ____ | |
| d. Cd ₃ N ₂ : | Cd: ____ | N: ____ | j. K(s): | K: ____ | |
| e. MgCl ₂ : | Mg: ____ | Cl: ____ | k. H ₂ S: | H: ____ | S: ____ |
| f. Na(s): | Na: ____ | l. I ₂ : | I: ____ | | |

2. For each of the following, Balance the equation, Identify the reactant oxidized and the reactant reduced.



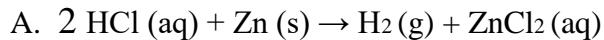
CHM 130:

Redox Practice Problems Key

1. Determine the charge for each of the following:

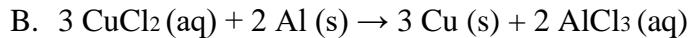
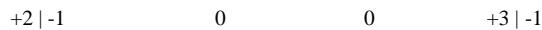
- | | | | | | |
|-------------------------------------|--------|----------------------|-----------------------|--------|-------|
| a. O ₂ : | O: 0 | g. NH ₃ : | N: -3 | H: +1 | |
| b. Al ₂ S ₃ : | Al: +3 | S: -2 | h. PbO ₂ : | Pb: +4 | O: -2 |
| c. P ₄ : | P: 0 | i. HBr: | H: +1 | Br: -1 | |
| d. Cd ₃ N ₂ : | Cd: +2 | N: -3 | j. K: | K: 0 | |
| e. MgCl ₂ : | Mg: +2 | Cl: -1 | k. H ₂ S: | H: +1 | S: -2 |
| f. Na: | Na: 0 | l. I ₂ : | I: 0 | | |

2. For each of the following, Balance the equation, Identify the reactant oxidized and the reactant reduced.



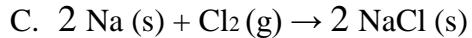
H^{+1} in $\text{HCl}(\text{aq})$ is the reactant reduced.

$\text{Zn}(\text{s})$ is the reactant oxidized.



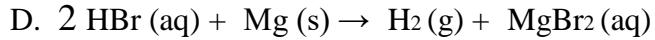
Cu^{2+} in $\text{CuCl}_2(\text{aq})$ is the reactant reduced.

$\text{Al}(\text{s})$ is the reactant oxidized.



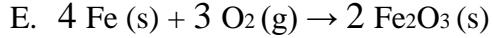
$\text{Cl}_2(\text{g})$ is the reactant reduced.

$\text{Na}(\text{s})$ is the reactant oxidized.



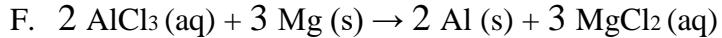
H^{+1} in $\text{HBr}(\text{aq})$ is the reactant reduced.

$\text{Mg}(\text{s})$ is the reactant oxidized.



$\text{O}_2(\text{g})$ is the reactant reduced.

$\text{Fe}(\text{s})$ is the reactant oxidized.



Al^{3+} in $\text{AlCl}_3(\text{aq})$ is the reactant reduced.

$\text{Mg}(\text{s})$ is the reactant oxidized.