Redox Practice WS

Assign the oxidation number to each atom in each of the following. Write the number directly above the symbols in each formula.

1. Ag 2. CO 3. CO2 4. CaCO3 5. Na2SO3

6. K2Cr2O7 7. Cr2(SO4)3 8. Na2S2O3 9. KIO4 10. MnO2

11. Identify the reactant that is oxidized and the reactant that is reduced.

S2O82- + Pb → 2SO42- + Pb2+

Oxidation:

Reduction:

TeO32- + N2O4  → Te + NO3-

Oxidation:

Reduction:

12. Write the half reactions for the following, include electrons:

Cu2+ + Pb 🡪 Pb2+ + Cu

Oxidation:

Reduction:

O2 + 2 Zn 🡪 2O2- + 2 Zn2+

Oxidation:

Reduction:

13. Write the half reactions for each of the following, include electrons. Add half reactions together.

Fe (s) + Ag+(aq) → Ag (s) + Fe2+ (aq)

Al(s) + O2 (g) → Al2O3 (s)