**Post-Video Quiz Module #8 (Chapter 14.2, 17.1: Redox Reactions)**

**Show complete work for all questions, then check your work with the video!**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Define oxidation and reduction in terms of electron transfer.
2. Given the reaction below, identify which species is oxidized and which is reduced, then identify the oxidizing agent and the reducing agent.

Zn(s) + Cu2+ 🡪 Zn2+ + Cu(s)

1. Assign oxidation states to all elements in the following reaction, then balance the reaction. How many TOTAL electrons are lost by the oxidized species? How many TOTAL electrons are gained by the reduced species?

2 Fe(s) + 3 Cl2(g) 🡪 2 FeCl3(s)

1. Balance the following redox reaction using the half-reaction method in an acidic solution:

MnO4- + Fe2+ 🡪 Mn2+ + Fe3+