

**Solutions to Electrochemistry questions that might be on
the Chemistry Midterm in addition to
possible quiz questions from Chapters 8-13**

1. (8 points) Name 4 industrial applications/problems that involve electrochemistry (do not include combustion):
 - a. batteries
 - b. electrolysis
 - c. electroplating
 - d. corrosion

2. (4 points) Electrochemistry involves the conversion between atoms and their ions.

3. (2 points) When we created hydrogen and oxygen from water, we were using the electrochemical process called electrolysis.

4. (2 points) What happened when we placed an iron nail into a CuSO_4 solution?

It became coated with a thin layer of copper.

5. (4 points) The rusting of iron requires water/moisture and oxygen/air.

6. (2 points) Batteries are made from electrodes made of different conducting materials surrounded by an electrolyte.