**Gold Recovery assignment**

Include your name and date (3 pts)

(100 points possible)

Background

You have come across several truckloads of discarded electronic circuit boards which you suspect contain sizeable amounts of Gold wiring and plating. They are destined for the landfill. You suddenly have a great business idea! How can you use chemistry and a bit of creativity to recover the valuable Gold?!

Instructions

1. Do Internet research (search “recover gold from electronics” or “recover precious metals from circuit boards”, etc) and research the steps you would use to recover the Gold, including the chemicals needed, tanks & vats, piping, pumps, etc.

You will need to think about how to separate the plastic and other waste, how many tanks or vats you need, what chemicals you need, how to separate and collect the Gold in the tanks, and how to dispose of the waste. This isn't too difficult; you just need to do a little research and use your creativity.

1. Prepare a professional-looking sketch of your “gold recovery system” which can handle, say, 3 large garbage-cans of electronics per day. You can use whatever materials and chemicals are necessary. You may use more than one sketch if needed to show what’s going on. On your sketches, label all the components, list all the chemicals used, and show the workflow using arrows.
2. Turn-in your completed work as an email attachment by the due date.

