Name:_____

Section:_____ Date:_____

Preliminary Report
Experiment 4: Cyclic Voltammetry
Cyclic voltammetry of redox reactions

1. Write down half-reactions, for the reduction of Fe(III) in potassium ferricyanide followed by the re-oxidation of Fe(II) to Fe(III) in the cyanide complex?

2. What does SCE stand for?

3. What is the working electrode used for?

4. For a reversible reaction, what is the position of the half-wave potential, $E_{1/2}$, relative to the peak anodic and peak cathodic currents.

5. How much potassium ferrocyanide is needed to prepare 50 mL of 10 mM solution? Show your calculation, (the molecular weight of $K_4Fe(CN)_6$ is 422.41 g/mol).