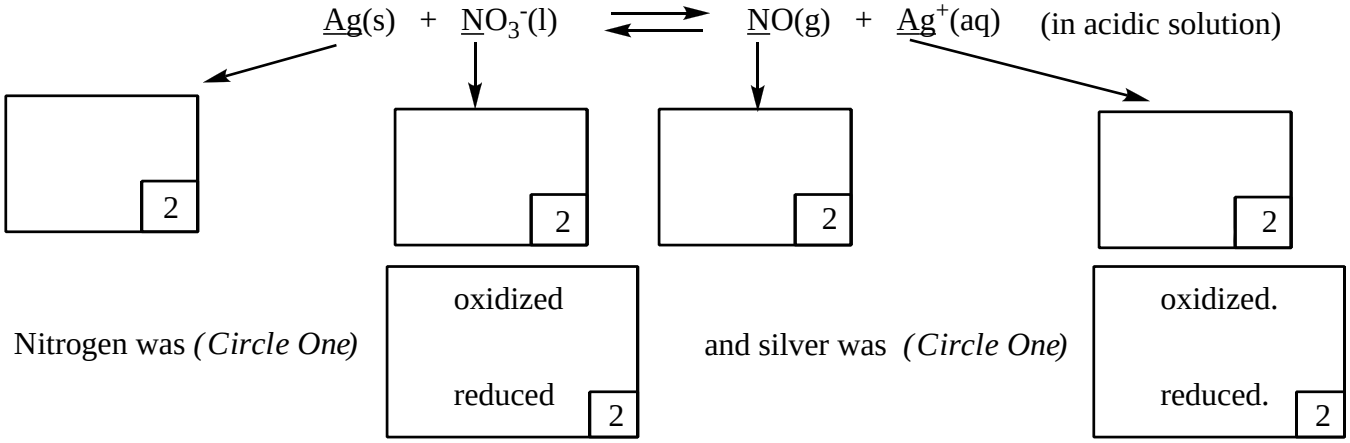
Problem of the Day 41 **CHEM 1252**

Suggest Book Problems for Chapter 20: 19, 23, 29, 31, 45, 59, 61, 85, 89

NOTE: You may need to use Appendix E when working the PODs for Chapter 20.

1. (a) Assign oxidation numbers to all atoms that are underlined. Place your answer in the appropriate box.



(b) Balance the reduction half reaction here. You must show your work.

5

(c) Balance the oxidation half reaction here. You must show your work.

5

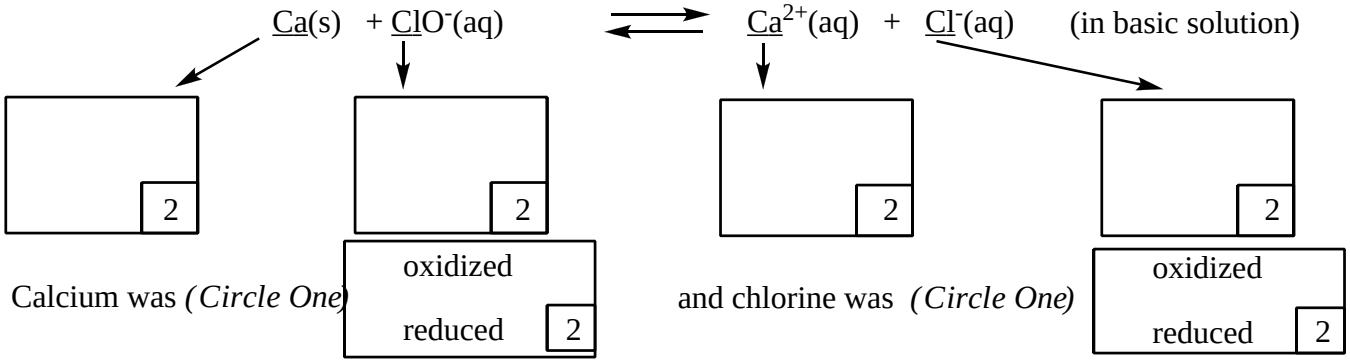
(d) Write the overall balanced reaction. You must show your work.

5

(e) What is $E°_{cell}$ for this reaction?

3

2. (a) Assign oxidation numbers to all atoms that are underlined. Place your answer in the appropriate box.



(b) Balance the half reaction that occurs at the anode. You must show your work.

5

(c) Balance the half reaction that occurs at the cathode. You must show your work.

5

(d) Write the overall balanced reaction.

5

(e) Is this reaction spontaneous under standard conditions? You must show your work.

5