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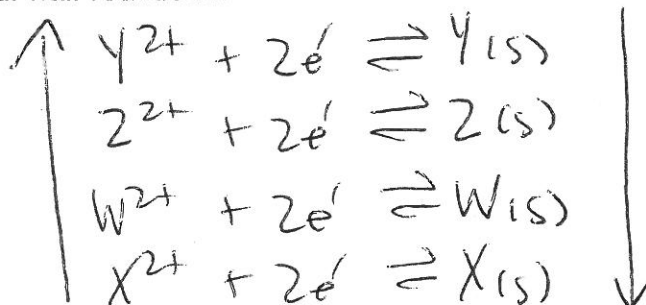
Chemistry 12
 Electrochem Lesson #9 Worksheet
 STANDARD REDUCTION POTENTIALS

In an electrochemical cell the half-reaction that occurs at the ANODE is OXIDATION while at the CATHODE there is REDUCTION. A helpful memory aid to remember these is "AN OX CARED"

1. The four metals W(s), X(s), Y(s) and Z (s) in 1.0 M solutions of W^{2+} , X^{2+} , Y^{2+} and Z^{2+} respectively were tested in a laboratory. The following results were found when some of the half reactions were connected:

CATHODE (red)	ANODE (ox)	CELL VOLTAGE
Y^{2+}	W (s)	0.65
Z^{2+}	W (s)	0.39
Z^{2+}	X (s)	0.51

Construct a standard reduction Potentials table showing the relative position of the four half reactions.



2. The five metals C(s), D(s), E(s), F(s) and G(s) in 1.0 M solutions of C^{3+} , D^{3+} , E^{3+} , F^{3+} and G^{3+} , respectively, were tested in a laboratory. The following results were found when some of the half reactions were connected:

CATHODE (red)	ANODE (ox)	CELL VOLTAGE
E^{2+}	G (s)	0.20
F^{2+}	D (s)	0.18
C^{2+}	E (s)	1.51
F^{2+}	E (s)	0.65

Construct a standard reduction Potentials table showing the relative position of the four half reactions.

