

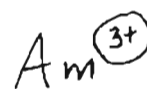
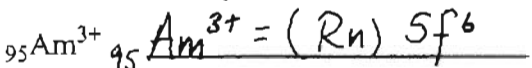
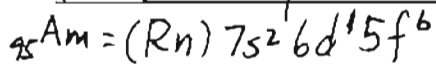
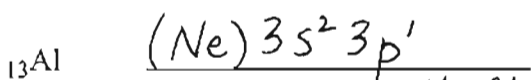
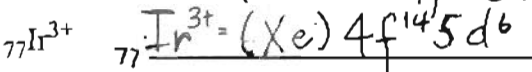
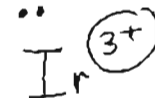
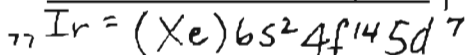
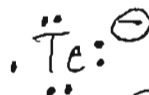
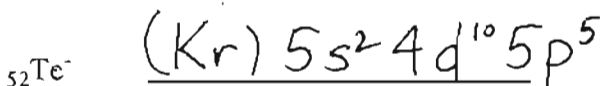
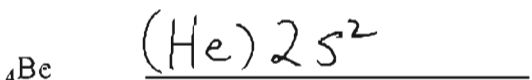
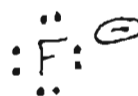
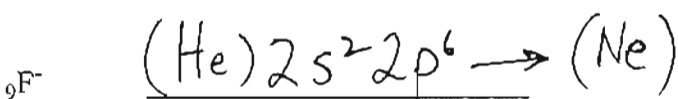
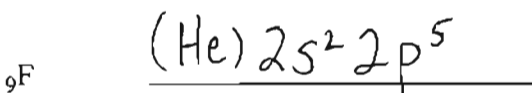
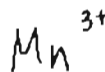
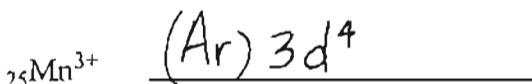
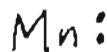
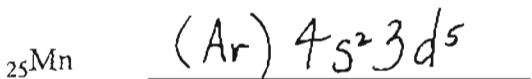
Recitation instructor: _____

Recitation time (circle): B hour E hour

I. Show how to represent the array of electrons (for these atoms or simple ions):

A. Give **SHORT-FORM ELECTRON CONFIG.**
(by "aufbau")

B. Give **ELECTRON DOT PICTURE**
(by "aufbau")



II. There are several exceptions to the aufbau. Unfortunately, four of them often wind up on MCAT's and GRE's. The four important exceptions are the atoms of Cr, Cu, Ag, and Au (note that these exceptions for the atoms can have consequences for the ions). Below, write the **PREDICTED AND ACTUAL** electron configurations.

EXAMPLE: $_{47}\text{Ag}$ (Kr) $5s^2 4d^9$ predicted

(Kr) $5s^1 4d^{10}$ actual

$_{29}\text{Cu}$ (Ar) $4s^2 3d^9$

(Ar) $4s^1 3d^{10}$

$_{29}\text{Cu}^+$ (Ar) $4s^1 3d^9$

(Ar) $3d^{10}$

NOTE!! On future quizzes or tests you may be asked these exceptions without being given a kindly alert to remember them!

PLEDGE: _____