

Transuranium Elements

- Elements with atomic number greater than 92 (uranium)
- Unstable
- Not found in nature

Noble Gas Notation

Argon:

To be completed in class!
(leave 1-2 lines for labeling below each)

Potassium:

Practice

Write electron configurations for the following elements using noble gas notation:

1. Si

2. Au

3. Ar

**To be completed in class!
(leave 1 line below each)**

Electron Configurations for Negative Ions

Negative ions have *gained* e^-

gained
 $1 e^-$

Cl (17 e^-)

Cl⁻ (18 e^-)

**To be completed in class!
(leave space on the right for
labeling)**

e^- are added to the highest energy level

Electron Configurations for Positive Ions

Positive ions have lost e⁻

lost
2 e⁻

Ca (20 e⁻)

Ca²⁺ (18 e⁻)

lost
2 e⁻

Fe (26 e⁻)

Fe²⁺ (24 e⁻)

**To be
completed in class!
(leave space on the right for
labeling)**

e⁻ are removed from the highest energy level

Practice

Write electron configurations for the following ions using noble gas notation:



**To be completed in class!
(leave 1 line below each)**

***Hint: Write the neutral configuration for positive ions and remove e^- from highest energy level.**