WKS

Name_____

Electron Configs (using periodic table)

Period _____ Date _____

1) What elements are composed of atoms having the following electron configurations? Also determine # valance electrons and number of unpaired electrons for each.

	Element	# of Valance electrons	# of unpaired electrons
a) $1s^2 2s^2 2p^6 3s^2 3p^3$			
b) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^5$			
c) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^4$			
d) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^6$			

2) Write the electron configuration for vanadium (#23) (Use noble gas config) _____

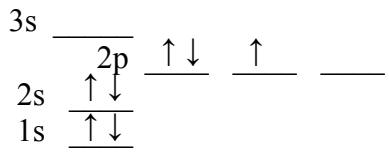
3) Write the electron configuration for tellurium (#52) (Use noble gas config) _____

4) Write the electron configuration for platinum (#78) (Use noble gas config) _____

5) Why does the 4s sublevel fill with electrons before electrons are found in the 3d sublevel?

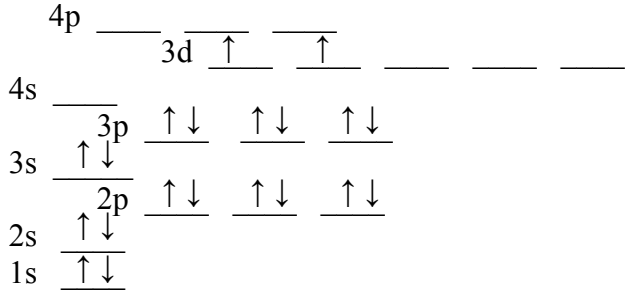
6) Shown here are arrow diagrams for the elements named. Each diagram is incorrect in some way. Explain the error in each and correct each diagram.

a) Element: **Nitrogen**



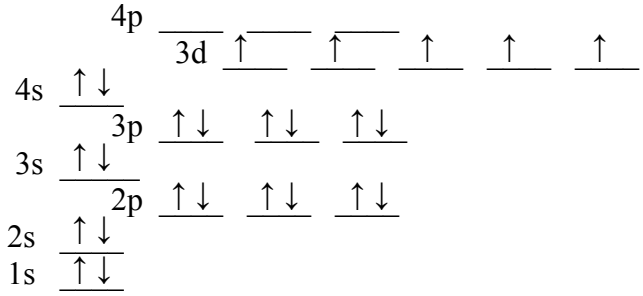
Explain error:

b) Element: **calcium**



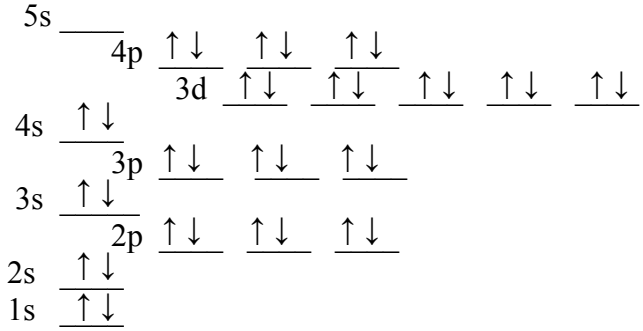
Explain error:

c) Element: **Iron**



Explain Error:

d) Element: **bromine**



Explain Error: