Name:_____

Electron Configuration Practice

Fill-in the following table with the requested information

Element	Element Symbol	Total Number of Electrons	Electron Configuration
Lithium			
Oxygen			
Calcium			
Phosphorus			
Potassium			
Chlorine			
Hydrogen			
Copper			
Neon			
Nitrogen			
Sodium			
Bromine			

Fill-in the following table with the requested information

Element	Element Symbol	Total Number of Electrons	Abbreviated Electron Configuration
Helium			
Nitrogen			
Chlorine			
Iron			
Zinc			
Barium			
Bromine			
Magnesium			
Fluorine			
Aluminum			
Silver			
Sulfur			
Argon			

Fill-in the table with the requested information

Ion Symbol	Total Number of Electrons	Electron Configuration
F^{1-}		
O^{-2}		
Na^{1+}		
Ca^{+2}		
Al^{+3}		
N^{3-}		
S^{2-}		
Cl^{1-}		
K^{1+}		
Br^{1-}		
Mg^{2+}		

Determine what elements are denoted by the following electron configurations:

1. $1s^2 2s^2 2p^6 3s^2 3p^4$ _____
2. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^1$ _____
3. [Kr] $5s^2 4d^{10} 5p^3$ _____
4. [Xe] $6s^2 4f^{14} 5d^6$ _____
5. [Rn] $7s^2 5f^{11}$ _____

Determine which of the following electron configurations are not valid and explain why:

6. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 4d^{10} 4p^5$ _____

_____

7. $1s^2 2s^2 2p^6 3s^3 3d^5$ _____

_____

8. [Ra] $7s^2 5f^8$ _____

_____

9. [Kr] $5s^2 4d^{10} 5p^5$ _____

_____

10. [Xe] _____

_____