Electron Configurations Worksheet

Write the complete ground state electron configurations for the following:

1) lithium _____

2) oxygen _____

3) calcium _____

4) titanium _____

5) rubidium _____

6) lead _____

7) erbium _____

Write the abbreviated ground state electron configurations for the following:

8) helium _____

9) nitrogen _____

10) chlorine _____

11) iron _____

12) zinc _____

13) barium _____

14) polonium _____

Electron Configurations Worksheet - Answers

Write the complete ground state electron configurations for the following:

1) lithium **$1s^2 2s^1$**

2) oxygen **$1s^2 2s^2 2p^4$**

3) calcium **$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2$**

4) titanium **$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^2$**

5) rubidium **$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^1$**

6) lead **$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^6 6s^2 4f^{14} 5d^{10} 6p^2$**

7) erbium **$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^6 6s^2 4f^{12}$**

Write the abbreviated ground state electron configurations for the following:

8) helium **$1s^2$ (this one cannot be abbreviated)**

9) nitrogen **[He] $2s^2 2p^3$**

10) chlorine **[Ne] $3s^2 3p^5$**

11) iron **[Ar] $4s^2 3d^6$**

12) zinc **[Ar] $4s^2 3d^{10}$**

13) barium **[Xe] $6s^2$**

14) polonium **[Xe] $6s^2 4f^{14} 5d^{10} 6p^4$**