Name:_____

Electron Configuration Practice Worksheet

In the space below, write the electron configurations of the following elements:

1) Magnesium _____
2) Aresenic _____
3) Iodine _____
4) Iridium _____
5) Berkelium _____

In the space below, write the electron configurations of the following elements:

6) Germanium _____
7) Indium _____
8) Mercury _____
9) Barium _____
10) Rhenium _____

Determine what elements are denoted by the following electron configurations:

11) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^7$ _____
12) $1s^2 2s^2 2p^6 3s^2 3p^5$ _____
13) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^9$ _____
14) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^6 6s^2 4f^{14} 5d^8$ _____
15) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^6 6s^2 4f^{14} 5d^{10} 6p^6 7s^2 5f^3$ _____

Determine which of the following electron configurations are not valid:

16) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 3p^5$ _____
17) $1s^2 2s^2 2p^6 3s^2 3d^5$ _____
18) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^6 6s^2 5d^{10} 4f^{14} 7s^3 5f^8$ _____
19) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^5$ _____
20) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^6 6s^2 4f^{14} 7s^2 5d^{10} 5f^{11}$ _____