

Chemistry

Worksheet on Electron Configurations (Long)

<u>Name</u>
<u>Date</u>

1) Write the electron configurations in long form

a) P

b) Cd

c) Li

d) Sc

e) W

f) Ti^{+4}

g) O^{-2}

2) Write the atom that has the long electron configuration

a) $1s^2, 2s^2, 2p^6, 3s^2, 3p^6, 4s^2, 3d^3$

b) $1s^2, 2s^2, 2p^6, 3s^2, 3p^5$

c) $1s^2, 2s^2, 2p^6, 3s^2, 3p^6, 4s^2, 3d^{10}, 4p^6, 5s^2, 4d^5$

d) $1s^2, 2s^2$

e) $1s^2, 2s^2, 2p^6, 3s^2, 3p^6, 4s^2, 3d^{10}, 4p^6, 5s^2, 4d^{10}, 5p^6, 6s^2, 4f^{14}, 5d^8$

f) $1s^2, 2s^2, 2p^6, 3s^2, 3p^4$

g) $1s^2, 2s^2, 2p^6$