

CONDENSED Electron Configuration Practice - #3 of 4

For each **question**:

- a) Write the element name.
- b) Write out the *complete* electron configuration and *underline* the *valence* parts.
- c) Write out the *condensed (abridged, Noble Gas)* electron configuration.
- d) Rewrite the valence configuration.
- e) Write *how many electrons* are in the valence shell.
- f) How many electrons are in the entire electron configuration? (Add up the superscripts: this will match the atomic number for the element).

EXAMPLES

EX1) C

- a) carbon
- b) $1s^2 \underline{2s^2} 2p^2$
- c) [He] $2s^2 2p^2$
- d) $2s^2 2p^2$
- e) 4
- f) 6

EX2) Br

- a) bromine
- b) $1s^2 2s^2 2p^6 3s^2 3p^6 \underline{4s^2} \underline{3d^{10}} \underline{4p^5}$
- c) [Ar] $4s^2 3d^{10} 4p^5$
- d) $4s^2 4p^5$
- e) 7
- f) 35

QUESTIONS

- 1) Cl
- 2) Sc
- 3) F
- 4) Pd
- 5) Te
- 6) Cs
- 7) Zr
- 8) Pb
- 9) Am
- 10) Ga

Optional questions for more practice...

- 11) Ra
- 12) Ar
- 13) He
- 14) Mt
- 15) N