

CHEM Electron Configuration Practice #2

For each **question**:

- Write the element name.
- Write out the *complete* electron configuration and *underline* the *valence* parts.
- Write out the *condensed* electron configuration.
- Rewrite the valence configuration.
- Write *how many electrons* are in the valence shell.
- 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

- carbon
- $1s^2 \underline{2s^2 2p^2}$
- $[\text{He}] \underline{2s^2 2p^2}$
- $2s^2 2p^2$
- 4
- 6

EX2) Br

- bromine
- $1s^2 2s^2 2p^6 3s^2 3p^6 \underline{4s^2 3d^{10} 4p^5}$
- $[\text{Ar}] \underline{4s^2 3d^{10} 4p^5}$
- $4s^2 4p^5$
- 7
- 35

QUESTIONS

- Cl
- Sc
- F
- Pd
- Te
- Cs
- Zr
- Pb
- Am
- Ga
- Ra
- Ar
- He
- Mt
- N