

## electron alternate additional points (Homework)

For help with these problems

[www.tutor-homework.com](http://www.tutor-homework.com)

Be sure to mention the filename:

Chemistry\_Questions\_0126

[www.tutor-homework.com](http://www.tutor-homework.com) (for tutoring, homework help, or help with online classes)

1.

Write the full electron configuration ( $1s^2 2s^2$ , etc.) for each of the following elements. (Type your answer using the format  $1s^2 2s^2 2p^6$  for  $1s^2 2s^2 2p^6$ .)

(a) krypton,  $Z = 36$

(b) carbon,  $Z = 6$

(c) neon,  $Z = 10$

(d) chlorine,  $Z = 17$

2.

Using the symbol of the previous noble gas to indicate the core electrons, write the valence shell electron configuration for each of the following elements. (Type your answer using the format  $[Ne] 3s^2 3p^4$  for  $[Ne] 3s^2 3p^4$ .)

(a) vanadium,  $Z = 23$

(b) scandium,  $Z = 21$

(c) yttrium,  $Z = 39$

(d) calcium,  $Z = 20$

3.

How many  $3d$  electrons are found in each of the following elements?

(a) vanadium,  $Z = 23$

(b) iron,  $Z = 26$

(c) scandium,  $Z = 21$

(d) titanium,  $Z = 22$