

Name _____ Per _____

Unit 4 Handout 4 (Honors Chemistry)

Rules for Writing the e- configuration for atoms and drawing the e- configuration.

Using your periodic chart, follow these short cut rules

s and p correspond to the row

d's are 1 behind row

f's are 2 behind row

Whole atom electron configuration practice:

Example: Fe (26) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^6$

F (9) _____

Si (14) _____

Ni (28) _____

Y (39) _____

Ag(47) _____

Xe (54) _____

Pt (78) _____

Ac (89) _____

Noble gas electron configuration practice (short cut):

Example: Fe (26) [Ar] $4s^2 3d^6$

S (16) _____

B (5) _____

Po (84) _____

As (33) _____

U (92) _____

Te (52) _____

Mo (42) _____

Mg (12) _____

Last Orbital electron configuration practice:

Example: Fe(26) $3d^6$

Number of Valence Electrons:

Example: Fe(26) 2

Ca(20) _____

N(7) _____

Ca(20) _____

N(7) _____

Br(35) _____

Xe (54) _____

Br(35) _____

Xe (54) _____

La (57) _____

Pb(82) _____

La (57) _____

Pb(82) _____

Pu(94) _____

Si (14) _____

Pu(94) _____

Si (14) _____

Valence Electron electron configuration practice:

Example: Fe(26) $4s^2$

Ca(20) _____

N(7) _____

La (57) _____

Pb(82) _____

Br(35) _____

Xe (54) _____

Pu(94) _____

Si (14) _____

Electron Dot Structures

Example: Fe(26)

Fe

Li(3)

Cl(17)

Cu(29)

Ge (32)

Tl (81)

I(53)

Rn (86)

Fr (87)

Name that Element Practice:

Example: $3d^6$

Fe which is Iron

$7s^1$ _____

$4p^5$ _____

$3d^9$ _____

DRAW Whole atom electron configuration practice:

Example: Fe (26) $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^6$

Fe (26)

K (19)

As (33)

Ag(47)

Xe (54)