Chemistry Worksheet
Ch 4&5 Atomic Structure

Name _____
date _____ period _____

1. Write the electron configurations (ex/ $1s^2$ …) of the following elements:
Do NOT use the noble gas core

$_{4}Be$

$_{25}Mn$

$_{49}In$

2. Rewrite the configurations for the above elements in Q#1, this time use the noble gas core and only show the outer configurations.

$_{4}Be$

$_{25}Mn$

$_{49}In$

3. For the same elements write the orbital diagrams (the "arrow thing") of the outer sublevels (after the last noble gas)

$_{4}Be$

$_{25}Mn$

$_{49}In$

4. For each of the same elements answer the following questions:
a. How many **full** main energy levels does it have?

b. How many **full** sublevels?

c. How many **full** orbitals?

d. How many unpaired electrons?

e. How many electrons are in each main energy level in each atom?

f. How many valence electrons?