

Name : ..... Date : .....

## Electron Configuration and Orbital Diagram

1. Write the complete electron configuration and orbital diagram for each element.

a) Phosphorous,  $Z = 15$

b) Selenium,  $Z = 34$

c) Rubidium,  $Z = 37$

d) Silver,  $Z = 47$

e) Iodine,  $Z = 53$

2. Show the noble gas electron configuration of the elements in problem 1.

a) Phosphorous:

b) Selenium:

c) Rubidium:

d) Silver:

e) Iodine:

3. Find the valence level and the number of valence electrons for each element in problem 1.

a) Phosphorous:            Valence level (VL) =            Number of valence electrons (VE) =

b) Selenium:            VL =            VE =

c) Rubidium:            VL =            VE =

d) Silver:            VL =            VE =

e) Iodine:            VL =            VE =

