

Noble gas notation practice sheet  
Write the noble gas electron configuration for the following elements

1. P \_\_\_\_\_
2. Fe \_\_\_\_\_
3. Sn \_\_\_\_\_
4. Ni \_\_\_\_\_
5. Ag \_\_\_\_\_
6. Co \_\_\_\_\_
7. Sb \_\_\_\_\_
8. Bi \_\_\_\_\_
9. Ra \_\_\_\_\_

Determine what elements are denoted by the following configurations

- \_\_\_\_\_ 10.  $1s^2 2s^2 2p^6 3s^2 3p^4$
- \_\_\_\_\_ 11.  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^8$
- \_\_\_\_\_ 12.  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^6 6s^2 4f^{14} 5d^{10} 6p^3$
- \_\_\_\_\_ 13.  $[\text{Xe}] 6s^2 4f^{14} 5d^{10} 6p^6$
- \_\_\_\_\_ 14.  $[\text{Kr}] 5s^2 4d^{10}$

Explain what is wrong in the following electron configurations.

15.  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 4d^{10} 4p^6$  \_\_\_\_\_  
\_\_\_\_\_
16.  $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10}$  \_\_\_\_\_  
\_\_\_\_\_
17.  $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6 4d^{10} 4f^{14} 5s^2$  \_\_\_\_\_  
\_\_\_\_\_