Honors Chemistry Hour\_\_\_\_\_ Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Extra Test Study Questions

Which of the following orbitals cannot exist? Circle all that apply.  
A. 2s  
B. 3p  
C. 2d  
D. 3f  
E. 5p  
F. 6p

Write the electron configuration for Neon and the Mg2+ ion. Compare them.

Draw an abbreviated orbital diagram for technecium. How many valence electrons does it have?

Draw an abbreviated orbital diagram for sulfur. How many valence electrons does it have? How many unpaired valence electrons does it have?