Chemistry 115 Name

Dr. Cary Willard

Quiz 7A (20 points) March 30, 2009

1. (2 points) How many protons are in the nucleus or a molybdenum (Mo) atom.
2. (3 points) What is the major difference between an orbital and a Bohr orbit?
3. (3 points) Show the orbital diagram for an atom of nitrogen.
* ⬜ ⬜ ⬜ ⬜

 1s 2s 2p

1. (3 points) Write the complete electron configuration for an atom of sulfur.
2. (3 points) Write the shorthand electronic configuration (as predicted by the periodic table) for an atom of vanadium.
3. (3 points) How many valence electrons does an atom of bromine have?
4. (3 points) What do the electron structures of the alkali metals have in common?

Chemistry 115 Name

Dr. Cary Willard

Quiz 7B (20 points) March 30, 2009

1. (2 points) How many protons are in the nucleus or a zirconium (Zr) atom.
2. (3 points) What is the major difference between an orbital and a Bohr orbit?
3. (3 points) Show the orbital diagram for an atom of oxygen.
* ⬜ ⬜ ⬜ ⬜

 1s 2s 2p

1. (3 points) Write the complete electron configuration for an atom of silicon.
2. (3 points) Write the shorthand electronic configuration (as predicted by the periodic table) for an atom of titanium.
3. (3 points) How many valence electrons does an atom of arsenic have?
4. (3 points) What do the electron structures of the alkali metals have in common?